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## *Treaty Series*

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*Treaties and international agreements  
registered  
or filed and recorded  
with the Secretariat of the United Nations*

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VOLUME 1397

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## *Recueil des Traités*

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*Traités et accords internationaux  
enregistrés  
ou classés et inscrits au répertoire  
au Secrétariat de l'Organisation des Nations Unies*

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VOLUME 1397

1985

I. Nos. 23353-23364

TABLE OF CONTENTS

I

*Treaties and international agreements  
registered from 1 May 1985 to 21 May 1985*

	<i>Page</i>
<b>No. 23353. Multilateral (<i>continued</i>):</b>	
Convention concerning International Carriage by Rail (COTIF) (with Protocol on the Privileges and Immunities of the Intergovernmental Organisation for International Carriage by Rail (OTIF), appendices, annex IV, and official Arabic, Dutch, Italian, German and English translations of the Convention, Protocol, appendices and annex IV; with Final Act of 9 May 1980 of the Eighth Conference for reviewing the International Conventions concerning the carriage of goods (CIM) and of passengers and luggage by rail (CIV), Final Act of 17 February 1984 of the Diplomatic Conference convened to determine the entry into force of the Convention concerning International Carriage by Rail (COTIF), Protocol of 17 February 1984 established by the Diplomatic Conference convened for the entry into force of the Convention concerning International Carriage by Rail (COTIF) and annexes I, II and III). Concluded at Berne on 9 May 1980 .....	2
<i>(Only the official German and English translations registered under No. I-23353 are reproduced in this volume. The authentic French text and the official Arabic, Dutch and Italian translations appear in volume 1396.)</i>	
<b>No. 23354. Senegal:</b>	
Declaration recognizing as compulsory the jurisdiction of the International Court of Justice, in conformity with Article 36, paragraph 2, of the Statute of the International Court of Justice. Done at Dakar on 2 May 1985.....	639
<b>No. 23355. France and German Democratic Republic:</b>	
Agreement on cultural co-operation. Signed at Berlin on 16 June 1980.....	643
<b>No. 23356. France and German Democratic Republic:</b>	
Agreement concerning the statute and operational arrangements for the cultural centres established by the Agreement on cultural co-operation concluded between them. Signed at Berlin on 16 June 1980 .....	657



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I. N<sup>os</sup> 23353-23364

**TABLE DES MATIÈRES**

**I**

*Traités et accords internationaux  
enregistrés du 1<sup>er</sup> mai 1985 au 21 mai 1985*

**N° 23353. Multilatéral (suite) :**

*Pages*

Convention relative aux transports internationaux ferroviaires (COTIF) [avec Protocole sur les privilèges et immunités de l'Organisation intergouvernementale pour les transports internationaux ferroviaires (OTIF), appendices, annexe IV, et traductions officielles en arabe, en néerlandais, en italien, en allemand et en anglais de la Convention, du Protocole, des appendices et de l'annexe IV; avec Acte final du 9 mai 1980 de la huitième Conférence de révision des Conventions internationales concernant le transport par chemins de fer des marchandises (CIM) et des voyageurs et des bagages (CIV), Acte final du 17 février 1984 de la Conférence diplomatique réunie en vue de la mise en vigueur de la Convention relative aux transports internationaux ferroviaires (COTIF), Protocole établi par la Conférence diplomatique réunie en vue de la mise en vigueur de la Convention relative aux transports internationaux ferroviaires (COTIF) et annexes I, II et III]. Conclue à Berne le 9 mai 1980 .....

3

*(Seules les traductions officielles en allemand et en anglais enregistrées sous le numéro I-23353 sont reproduites dans le présent volume. On trouvera le texte authentique français et les traductions officielles en arabe, en néerlandais et en italien dans le volume 1396.)*

**N° 23354. Sénégal :**

Déclaration reconnaissant comme obligatoire la juridiction de la Cour internationale de Justice, conformément au paragraphe 2 de l'Article 36 du Statut de la Cour internationale de Justice. En date à Dakar du 2 mai 1985 .....

639

**N° 23355. France et République démocratique allemande :**

Accord de coopération culturelle. Signé à Berlin le 16 juin 1980. ....

643

**N° 23356. France et République démocratique allemande :**

Accord relatif au statut et aux modalités de fonctionnement des centres culturels institués par l'Accord de coopération culturelle conclu entre eux. Signé à Berlin le 16 juin 1980 .....

657

	<i>Page</i>
<b>No. 23357. United Nations and Tunisia:</b>	
Letter of agreement regarding the extraordinary session of the Special Committee of the Twenty-Four in connection with the observance of the twenty-fifth anniversary of the Declaration on the Granting of Independence to Colonial Countries and Peoples, to be held at Tunis from 13 to 17 May 1985. Tunis, 13 May 1985 .....	671
<b>No. 23358. United Nations and France:</b>	
Agreement regarding arrangements for the eleventh session of the World Food Council of the United Nations. Signed at Paris on 15 May 1985 .....	673
<b>No. 23359. China and Yugoslavia:</b>	
Agreement concerning co-operation in the fields of public health, medical science and pharmacy. Signed at Belgrade on 7 July 1984 .....	675
<b>No. 23360. China and Poland:</b>	
Consular Convention. Signed at Beijing on 14 July 1984 .....	685
<b>No. 23361. China and Anstralia:</b>	
Agreement relating to civil air transport (with schedule). Signed at Beijing on 7 September 1984 .....	769
<b>No. 23362. China and Bangladesh:</b>	
Long-term Trade Agreement (with schedules). Signed at Dhaka on 21 December 1984 .....	801
<b>No. 23363. United Nations and Union of Soviet Socialist Republics:</b>	
Agreement on the United Nations international seminar on satellite communications to be held in Moscow from 20 to 31 May 1985. Signed at New York on 17 May 1985 .....	815
<b>No. 23364. Multilateral:</b>	
Agreement establishing the Latin American Housing and Human Settlements Development Organization (OLAVI). Concluded at Quito on 14 January 1982 .....	817
 <b>ANNEX A. <i>Ratifications, accessions, prorogations, etc., concerning treaties and international agreements registered with the Secretariat of the United Nations</i></b>	
<b>No. 1342. Convention for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others. Opened for signature at Lake Success, New York, on 21 March 1950:</b>	
Accession by Afghanistan .....	846

	<i>Pages</i>
<b>N° 23357. Organisation des Nations Unies et Tunisie :</b>	
Lettre d'accord relative à la session extraordinaire du Comité spécial des Vingt-Quatre dans le cadre du vingt-cinquième anniversaire de la Déclaration sur l'octroi de l'indépendance aux pays et aux peuples coloniaux, devant avoir lieu à Tunis du 13 au 17 mai 1985. Tunis, 13 mai 1985 .....	671
<b>N° 23358. Organisation des Nations Unies et France :</b>	
Accord concernant les dispositions à prendre en vue de la onzième session du Conseil mondial de l'alimentation des Nations Unies. Signé à Paris le 15 mai 1985 .....	673
<b>N° 23359. Chine et Yougoslavie :</b>	
Accord relatif à la coopération dans les domaines de la santé publique, des sciences médicales et de la pharmacie. Signé à Belgrade le 7 juillet 1984 ..	675
<b>N° 23360. Chine et Pologne :</b>	
Convention consulaire. Signée à Beijing le 14 juillet 1984 .....	685
<b>N° 23361. Chine et Australie :</b>	
Accord relatif aux transports civils aériens (avec annexe). Signé à Beijing le 7 septembre 1984 .....	769
<b>N° 23362. Chine et Bangladesh :</b>	
Accord commercial à long terme (avec listes). Signé à Dacca le 21 décembre 1984 .....	801
<b>N° 23363. Organisation des Nations Unies et Union des Républiques socialistes soviétiques :</b>	
Accord relatif au séminaire international des Nations Unies sur les communications par satellites devant avoir lieu à Moscou du 20 au 31 mai 1985. Signé à New York le 17 mai 1985 .....	815
<b>N° 23364. Multilatéral :</b>	
Accord constitutif de l'Organisation latino-américaine du logement et du développement des établissements humains (OLAVI). Conclu à Quito le 14 janvier 1982 .....	817
 <b>ANNEXE A. Ratifications, adhésions, prorogations, etc., concernant des traités et accords internationaux enregistrés au Secrétariat de l'Organisation des Nations Unies</b>	
<b>N° 1342. Convention pour la répression de la traite des êtres humains et de l'exploitation de la prostitution d'autrui. Ouverte à la signature à Lake Success (New York), le 21 mars 1950 :</b>	
Adhésion de l'Afghanistan .....	846

	<i>Page</i>
<b>No. 4214. Convention on the International Maritime Organization. Done at Geneva on 6 March 1948:</b>	
Acceptance by Saudi Arabia of the amendments to the above-mentioned Convention, adopted by the Intergovernmental Maritime Consultative Organization Assembly by resolution A.450 (XI) of 15 November 1979 ...	847
<b>No. 7247. International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations. Done at Rome on 26 October 1961:</b>	
Accession by Peru.....	848
<b>No. 13444. Universal Copyright Convention as revised at Paris on 24 July 1971. Concluded at Paris on 24 July 1971:</b>	
Accessions by Peru to the above-mentioned Convention and to its annexed Protocols 1 and 2.....	849
<b>No. 14458. Convention on the Reduction of Statelessness. Concluded at New York on 30 August 1961:</b>	
Ratification by the Netherlands.....	850
<b>No. 14531. International Covenant on Economic, Social and Cultural Rights. Adopted by the General Assembly of the United Nations on 16 December 1966:</b>	
Accession by Greece.....	850
<b>No. 16899. Additional Convention to the International Convention concerning the carriage of passengers and luggage by rail (CIV) of 25 February 1961, relating to the liability of the railway for death of and personal injury to passengers. Concluded at Berne on 26 February 1966:</b>	
<b>No. 16900. International Convention concerning the carriage of goods by rail (CIM). Concluded at Berne on 7 February 1970:</b>	
<b>No. 16901. International Convention concerning the carriage of passengers and luggage by rail (CIV). Concluded at Berne on 7 February 1970:</b>	
Terminations.....	851
<b>No. 17949. Convention relating to the distribution of programme-carrying signals transmitted by satellite. Done at Brussels on 21 May 1974:</b>	
Accession by Peru.....	852
<b>No. 19487. Protocol to the Convention on the Contract for the International Carriage of Goods by Road (CMR). Concluded at Geneva on 5 July 1978:</b>	
Accession by Greece.....	852

	<i>Pages</i>
<b>N° 4214. Convention portant création de l'Organisation maritime internationale. Faite à Genève le 6 mars 1948 :</b>	
Acceptation par l'Arabie saoudite des amendements à la Convention susmentionnée, adoptés par l'Assemblée de l'Organisation maritime consultative intergouvernementale par la résolution A.450 (XI) du 15 novembre 1979 ..	847
<b>N° 7247. Convention internationale sur la protection des artistes interprètes ou exécutants, des producteurs de phonogrammes et des organismes de radiodiffusion. Faite à Rome le 26 octobre 1961 :</b>	
Adhésion du Pérou .....	848
<b>N° 13444. Convention universelle sur le droit d'auteur révisée à Paris le 24 juillet 1971. Conclue à Paris le 24 juillet 1971 :</b>	
Adhésions du Pérou à la Convention susmentionnée et à ses Protocoles annexes 1 et 2 .....	849
<b>N° 14458. Convention sur la réduction des cas d'apatridie. Conclue à New York le 30 août 1961 :</b>	
Ratification des Pays-Bas .....	850
<b>N° 14531. Pacte international relatif aux droits économiques, sociaux et culturels. Adopté par l'Assemblée générale des Nations Unies le 16 décembre 1966 :</b>	
Adhésion de la Grèce .....	850
<b>N° 16899. Convention additionnelle à la Convention internationale concernant le transport des voyageurs et des bagages par chemins de fer (CIV) du 25 février 1961, relative à la responsabilité du chemin de fer pour la mort et les blessures des voyageurs. Conclue à Berne le 26 février 1966 :</b>	
<b>N° 16900. Convention internationale concernant le transport des marchandises par chemins de fer (CIM). Conclue à Berne le 7 février 1970 :</b>	
<b>N° 16901. Convention internationale concernant le transport des voyageurs et des bagages par chemins de fer (CIV). Conclue à Berne le 7 février 1970 :</b>	
Abrogations .....	851
<b>N° 17949. Convention concernant la distribution de signaux porteurs de programmes transmis par satellite. Faite à Bruxelles le 21 mai 1974 :</b>	
Adhésion du Pérou .....	852
<b>N° 19487. Protocole à la Convention relative au contrat de transport international de marchandises par route (CMR). Conclu à Genève le 5 juillet 1978 :</b>	
Adhésion de la Grèce .....	852

	<i>Page</i>
<b>No. 21052. Agreement establishing the African Development Bank, as amended. Concluded at Lusaka on 7 May 1982:</b>	
Admission of China to membership in the Bank in accordance with the general rules governing participation of non-regional countries.....	853
<b>No. 21139. Sixth International Tin Agreement. Concluded at Geneva on 26 June 1981:</b>	
Ratification by Greece .....	853
<b>No. 23225. International Sugar Agreement, 1984. Concluded at Geneva on 5 July 1984:</b>	
Ratification by El Salvador and accession by Finland.....	854
<b>No. 23317. International Tropical Timber Agreement, 1983. Concluded at Geneva on 18 November 1983:</b>	
Ratification by Switzerland and acceptance by the Union of Soviet Socialist Republics.....	855
 <i>International Labour Organisation</i>	
<b>No. 594. Convention (No. 11) concerning the rights of association and combination of agricultural workers, adopted by the General Conference of the International Labour Organisation at its third session, Geneva, 12 November 1921, as modified by the Final Articles Revision Convention, 1946:</b>	
Ratification by Iraq.....	856
<b>No. 17906. Convention (No. 148) concerning the protection of workers against occupational hazards in the working environment due to air pollution, noise and vibration. Adopted by the General Conference of the International Labour Organisation at its sixty-third session, Geneva, 20 June 1977:</b>	
<b>No. 20691. Convention (No. 152) concerning occupational safety and health in dock work. Adopted by the General Conference of the International Labour Organisation at its sixty-fifth session, Geneva, 25 June 1979:</b>	
<b>No. 21608. Convention (No. 153) concerning hours of work and rest periods in road transport. Adopted by the General Conference of the International Labour Organisation at its sixty-fifth session, Geneva, 27 June 1979:</b>	
Ratifications by Iraq .....	858
<b>No. 22345. Convention (No. 155) concerning occupational safety and health and the working environment. Adopted by the General Conference of the International Labour Organisation at its sixty-seventh session, Geneva, 22 June 1981:</b>	
Ratification by Finland.....	860

Pages

- N° 21052. Accord portant création de la Banque africaine de développement, tel que modifié. Conclu à Lusaka le 7 mai 1982 :**  
Admission de la Chine en qualité de membre de la Banque conformément aux règles générales régissant la participation des pays non régionaux..... 853
- N° 21139. Sixième Accord international sur l'étain. Conclu à Genève le 26 juin 1981 :**  
Ratification de la Grèce..... 853
- N° 23225. Accord international de 1984 sur le sucre. Conclu à Genève le 5 juillet 1984 :**  
Ratification d'El Salvador et adhésion de la Finlande..... 854
- N° 23317. Accord international de 1983 sur les bois tropicaux. Conclu à Genève le 18 novembre 1983 :**  
Ratification de la Suisse et acceptation de l'Union des Républiques socialistes soviétiques..... 855
- Organisation internationale du Travail*
- N° 594. Convention (n° 11) concernant les droits d'association et de coalition des travailleurs agricoles, adoptée par la Conférence générale de l'Organisation internationale du Travail à sa troisième session, Genève, 12 novembre 1921, telle qu'elle a été modifiée par la Convention portant révision des articles finals, 1946 :**  
Ratification de l'Iraq..... 857
- N° 17906. Convention (n° 148) concernant la protection des travailleurs contre les risques professionnels dus à la pollution de l'air, au bruit et aux vibrations sur les lieux de travail. Adoptée par la Conférence générale de l'Organisation internationale du Travail à sa soixante-troisième session, Genève, 20 juin 1977 :**
- N° 20691. Convention (n° 152) concernant la sécurité et l'hygiène du travail dans les manutentions portuaires. Adoptée par la Conférence générale de l'Organisation internationale du Travail à sa soixante-cinquième session. Genève, 25 juin 1979 :**
- N° 21608. Convention (n° 153) concernant la durée du travail et les périodes de repos dans les transports routiers. Adoptée par la Conférence générale de l'Organisation internationale du Travail à sa soixante-cinquième session, Genève, 27 juin 1979 :**  
Ratifications de l'Iraq..... 859
- N° 22345. Convention (n° 155) concernant la sécurité, la santé des travailleurs et le milieu de travail. Adoptée par la Conférence générale de l'Organisation internationale du Travail à sa soixante-septième session, Genève, 22 juin 1981 :**  
Ratification de la Finlande..... 861

*Page*

**ANNEX C.** *Ratifications, accessions, prorogations, etc., concerning treaties and international agreements registered with the Secretariat of the League of Nations*

**No. 4319. International Convention concerning the Use of Broadcasting in the Cause of Peace. Signed at Geneva, September 23rd, 1936:**

Denunciation by Australia..... 864

---



*Pages*

**ANNEXE C.** *Ratifications, adhésions, prorogations, etc., concernant des traités et accords internationaux enregistrés au Secrétariat de la Société des Nations*

**N° 4319.** **Convention internationale concernant l'emploi de la radiodiffusion dans l'intérêt de la paix. Signée à Genève, le 23 septembre 1936 :**

Dénonciation de l'Australie..... 864

---

## NOTE BY THE SECRETARIAT

Under Article 102 of the Charter of the United Nations every treaty and every international agreement entered into by any Member of the United Nations after the coming into force of the Charter shall, as soon as possible, be registered with the Secretariat and published by it. Furthermore, no party to a treaty or international agreement subject to registration which has not been registered may invoke that treaty or agreement before any organ of the United Nations. The General Assembly, by resolution 97 (I), established regulations to give effect to Article 102 of the Charter (see text of the regulations, vol. 859, p. VIII).

The terms "treaty" and "international agreement" have not been defined either in the Charter or in the regulations, and the Secretariat follows the principle that it acts in accordance with the position of the Member State submitting an instrument for registration that so far as that party is concerned the instrument is a treaty or an international agreement within the meaning of Article 102. Registration of an instrument submitted by a Member State, therefore, does not imply a judgement by the Secretariat on the nature of the instrument, the status of a party or any similar question. It is the understanding of the Secretariat that its action does not confer on the instrument the status of a treaty or an international agreement if it does not already have that status and does not confer on a party a status which it would not otherwise have.

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Unless otherwise indicated, the translations of the original texts of treaties, etc., published in this *Series* have been made by the Secretariat of the United Nations.

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## NOTE DU SECRÉTARIAT

Aux termes de l'Article 102 de la Charte des Nations Unies, tout traité ou accord international conclu par un Membre des Nations Unies après l'entrée en vigueur de la Charte sera, le plus tôt possible, enregistré au Secrétariat et publié par lui. De plus, aucune partie à un traité ou accord international qui aurait dû être enregistré mais ne l'a pas été ne pourra invoquer ledit traité ou accord devant un organe des Nations Unies. Par sa résolution 97 (I), l'Assemblée générale a adopté un règlement destiné à mettre en application l'Article 102 de la Charte (voir texte du règlement, vol. 859, p. IX).

Le terme «traité» et l'expression «accord international» n'ont été définis ni dans la Charte ni dans le règlement, et le Secrétariat a pris comme principe de s'en tenir à la position adoptée à cet égard par l'Etat Membre qui a présenté l'instrument à l'enregistrement, à savoir que pour autant qu'il s'agit de cet Etat comme partie contractante l'instrument constitue un traité ou un accord international au sens de l'Article 102. Il s'ensuit que l'enregistrement d'un instrument présenté par un Etat Membre n'implique, de la part du Secrétariat, aucun jugement sur la nature de l'instrument, le statut d'une partie ou toute autre question similaire. Le Secrétariat considère donc que les actes qu'il pourrait être amené à accomplir ne confèrent pas à un instrument la qualité de «traité» ou d'«accord international» si cet instrument n'a pas déjà cette qualité, et qu'ils ne confèrent pas à une partie un statut que, par ailleurs, elle ne posséderait pas.

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Sauf indication contraire, les traductions des textes originaux des traités, etc., publiés dans ce *Recueil* ont été établies par le Secrétariat de l'Organisation des Nations Unies.

**I**

***Treaties and international agreements***

*registered*

*from 1 May 1985 to 21 May 1985*

*Nos. 23353 to 23364*



***Traités et accords internationaux***

*enregistrés*

*du 1<sup>er</sup> mai 1985 au 21 mai 1985*

*N<sup>os</sup> 23353 à 23364*

No. 23353  
(continued)

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## MULTILATERAL

**Convention concerning International Carriage by Rail (COTIF) (with Protocol on the Privileges and Immunities of the Intergovernmental Organisation for International Carriage by Rail (OTIF), appendices, annex IV, and official Arabic, Dutch, Italian, German and English translations of the Convention, Protocol, appendices and annex IV; with Final Act of 9 May 1980 of the Eighth Conference for reviewing the International Conventions concerning the carriage of goods (CIM) and of passengers and luggage by rail (CIV), Final Act of 17 February 1984 of the Diplomatic Conference convened to determine the entry into force of the Convention concerning International Carriage by Rail (COTIF), Protocol of 17 February 1984 established by the Diplomatic Conference convened for the entry into force of the Convention concerning International Carriage by Rail (COTIF) and annexes I, II and III). Concluded at Berne on 9 May 1980**

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N° 23353

(suite)

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## MULTILATÉRAL

**Convention relative aux transports internationaux ferroviaires (COTIF) [avec Protocole sur les privilèges et immunités de l'Organisation intergouvernementale pour les transports internationaux ferroviaires (OTIF), appendices, annexe IV, et traductions officielles en arabe, en néerlandais, en italien, en allemand et en anglais de la Convention, du Protocole, des appendices et de l'annexe IV; avec Acte final du 9 mai 1980 de la huitième Conférence de révision des Conventions internationales concernant le transport par chemins de fer des marchandises (CIM) et des voyageurs et des bagages (CIV), Acte final du 17 février 1984 de la Conférence diplomatique réunie en vue de la mise en vigueur de la Convention relative aux transports internationaux ferroviaires (COTIF), Protocole établi par la Conférence diplomatique réunie en vue de la mise en vigueur de la Convention relative aux transports internationaux ferroviaires (COTIF) et annexes I, II et III]. Conclue à Berne le 9 mai 1980**

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*Enregistrée par la Suisse le 1<sup>er</sup> mai 1985.*

*(Seules les traductions officielles en allemand et en anglais enregistrées sous le numéro I-23353 sont reproduites dans le présent volume. On trouvera le texte authentique français et les traductions officielles en arabe, en néerlandais et en italien dans le volume 1396.)*

[OFFICIAL TRANSLATION IN GERMAN<sup>1</sup> —  
TRADUCTION OFFICIELLE EN ALLEMAND<sup>2</sup>]

## ÜBEREINKOMMEN ÜBER DEN INTERNATIONALEN EISEN- BAHNVERKEHR (COTIF)

Die Vertragsparteien,

Sind in Anwendung des Artikels 69 § 1 des Internationalen Übereinkommens über den Eisenbahnfrachtverkehr (CIM) und des Artikels 64 § 1 des Internationalen Übereinkommens über den Eisenbahn- Personen- und -Gepäckverkehr (CIV) vom 7. Februar 1970 sowie in Anwendung des Artikels 27 des Zusatzübereinkommens zum CIV über die Haftung der Eisenbahn für Tötung und Verletzung von Reisenden vom 26. Februar 1966 zusammengetreten und haben,

Überzeugt von der Nützlichkeit einer internationalen Organisation und

In Erkenntnis der Notwendigkeit, die beförderungsrechtlichen Bestimmungen den wirtschaftlichen und technischen Bedürfnissen anzupassen,

Folgendes vereinbart:

### TITEL I. ALLGEMEINE BESTIMMUNGEN

#### *Artikel 1. ZWISCHENSTAATLICHE ORGANISATION*

§ 1. Die Parteien dieses Übereinkommens bilden als Mitgliedstaaten die Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr (OTIF), im folgenden « Organisation » genannt.

Die Organisation hat ihren Sitz in Bern.

§ 2. Die Organisation besitzt Rechtspersönlichkeit. Sie kann insbesondere Verträge schließen, bewegliches und unbewegliches Vermögen erwerben und veräußern sowie klagen und verklagt werden.

Die Organisation, die Mitglieder ihres Personals, die von ihr berufenen Sachverständigen und die Vertreter der Mitgliedstaaten genießen die zur Wahrnehmung ihrer Aufgaben erforderlichen Vorrechte und Immunitäten, und zwar zu den Bedingungen, wie sie im Protokoll, das dem Übereinkommen beigelegt ist und einen Bestandteil des Übereinkommens bildet, festgelegt sind.

Die Beziehungen zwischen der Organisation und dem Sitzstaat werden in einem Sitzabkommen geregelt.

§ 3. Die Arbeitssprachen der Organisation sind Französisch und Deutsch.

#### *Artikel 2. ZWECK DER ORGANISATION*

§ 1. Zweck der Organisation ist es vor allem, eine einheitliche Rechtsordnung für die Beförderung von Personen, Gepäck und Gütern im durchgehenden internationalen Verkehr zwischen den Mitgliedstaaten auf Eisenbahnlinien aufzustellen sowie die Durchführung und die Fortentwicklung dieser Rechtsordnung zu erleichtern.

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.

§ 2. Die in § 1 vorgesehene Rechtsordnung kann auch auf durchgehende internationale Beförderungen angewendet werden, die außer auf Eisenbahnlinien auch auf Linien zu Land, zur See und auf Binnengewässern erfolgen.

### *Artikel 3. EINHEITLICHE RECHTSVORSCHRIFTEN CIV UND CIM*

§ 1. Auf durchgehende internationale Beförderungen sind anzuwenden:

- die « Einheitlichen Rechtsvorschriften für den Vertrag über die internationale Eisenbahnbeförderung von Personen und Gepäck (CIV) » (Anhang A zum Übereinkommen);
- die « Einheitlichen Rechtsvorschriften für den Vertrag über die internationale Eisenbahnbeförderung von Gütern (CIM) » (Anhang B zum Übereinkommen).

§ 2. Die in Artikel 2 genannten Linien, auf denen diese Beförderungen durchgeführt werden, sind in zwei Listen einzutragen: Liste der Linien CIV und Liste der Linien CIM.

§ 3. Die Unternehmen, welche die in Artikel 2 § 2 bezeichneten, in diese Listen eingetragenen Linien betreiben, haben dieselben Rechte und Pflichten, wie sie den Eisenbahnen durch die Einheitlichen Rechtsvorschriften CIV und CIM übertragen sind, vorbehaltlich der Abweichungen, die sich aus den besonderen Betriebsbedingungen jeder Beförderungsart ergeben und die wie Tarife veröffentlicht sind.

Diese Abweichungen dürfen sich jedoch nicht auf die Haftungsbestimmungen beziehen.

§ 4. Die Einheitlichen Rechtsvorschriften CIV und CIM sind mit ihren Anlagen Bestandteil des Übereinkommens.

### *Artikel 4. BEGRIFFSBESTIMMUNG « ÜBEREINKOMMEN »*

Im folgenden umfaßt der Ausdruck « Übereinkommen » das Übereinkommen selbst, das in Artikel 1 § 2 Absatz 2 genannte Protokoll und die in Artikel 3 §§ 1 und 4 genannten Anhänge A und B sowie deren Anlagen.

## TITEL II. AUFBAU UND TÄTIGKEIT

### *Artikel 5. ORGANE*

Die Tätigkeit der Organisation wird durch die folgenden Organe wahrgenommen:

- Generalversammlung,
- Verwaltungsausschuß,
- Revisionsausschuß,
- Fachausschuß für die Beförderung gefährlicher Güter,
- Zentralamt für den internationalen Eisenbahnverkehr (OCTI).

### *Artikel 6. GENERALVERSAMMLUNG*

§ 1. Die Generalversammlung besteht aus den Vertretern der Mitgliedstaaten.

§ 2. Die Generalversammlung

- a) gibt sich eine Geschäftsordnung;

- b) bestimmt die Zusammensetzung des Verwaltungsausschusses gemäß Artikel 7 § 1;
- c) gibt Richtlinien für die Tätigkeit des Verwaltungsausschusses und des Zentralamtes;
- d) setzt für einen Zeitraum von fünf Jahren den Höchstbetrag fest, den die jährlichen Ausgaben der Organisation erreichen dürfen, oder gibt Richtlinien für die Begrenzung dieser Ausgaben;
- e) entscheidet gemäß Artikel 19 § 2 über Anträge auf Änderung des Übereinkommens;
- f) entscheidet über Beitrittsanträge, die ihr gemäß Artikel 23 § 2 unterbreitet werden;
- g) entscheidet über sonstige Fragen, die gemäß § 3 auf die Tagesordnung gesetzt sind.

§ 3. Das Zentralamt beruft die Generalversammlung alle fünf Jahre oder auf Antrag eines Drittels der Mitgliedstaaten sowie in den Fällen ein, die in Artikel 19 § 2 und 23 § 3 vorgesehen sind, und übermittelt den Mitgliedstaaten spätestens drei Monate vor der Eröffnung der Tagung den Entwurf der Tagesordnung.

§ 4. Die Generalversammlung ist beschlußfähig, wenn die Mehrheit der Mitgliedstaaten vertreten ist.

Ein Mitgliedstaat kann sich von einem anderen Mitgliedstaat vertreten lassen; ein Staat kann jedoch nicht mehr als zwei andere Staaten vertreten.

§ 5. Die Generalversammlung faßt ihre Beschlüsse mit der Mehrheit der bei der Abstimmung vertretenen Mitgliedstaaten.

Für die Anwendung des § 2 Buchstabe d) und des § 2 Buchstabe e) — in diesem Falle, soweit es sich um Anträge auf Änderung des Übereinkommens selbst und des Protokolls handelt — ist eine Mehrheit von zwei Dritteln erforderlich.

§ 6. Im Einverständnis mit der Mehrheit der Mitgliedstaaten lädt das Zentralamt auch Nichtmitgliedstaaten ein, an den Tagungen der Generalversammlung mit beratender Stimme teilzunehmen.

Im Einverständnis mit der Mehrheit der Mitgliedstaaten lädt das Zentralamt internationale Organisationen, die für Beförderungsfragen zuständig sind oder sich mit auf der Tagesordnung stehenden Fragen befassen, ein, an den Tagungen der Generalversammlung mit beratender Stimme teilzunehmen.

§ 7. Vor den Tagungen der Generalversammlung und gemäß den Richtlinien des Verwaltungsausschusses wird der Revisionsausschuß zur Vorprüfung der in Artikel 19 § 2 bezeichneten Anträge einberufen.

#### *Artikel 7. VERWALTUNGSAUSSCHUSS*

§ 1. Der Verwaltungsausschuß besteht aus den Vertretern von elf Mitgliedstaaten.

Die Schweizerische Eidgenossenschaft verfügt über einen ständigen Sitz und führt den Vorsitz im Ausschuß. Die anderen Staaten werden für fünf Jahre ernannt. Die Zusammensetzung des Ausschusses wird unter Berücksichtigung insbesondere einer angemessenen geographischen Verteilung für jede Amtszeit



bestimmt. Ein Mitgliedstaat darf nicht mehr als zwei aufeinanderfolgende Amtszeiten dem Ausschuß angehören.

Wird ein Sitz frei, so bezeichnet der Ausschuß einen anderen Mitgliedstaat für den Rest der Amtszeit.

Jeder Mitgliedstaat, der dem Ausschuß angehört, bezeichnet einen Delegierten; er kann auch einen stellvertretenden Delegierten bezeichnen.

## § 2. Der Ausschuß

- a) gibt sich eine Geschäftsordnung;
- b) schließt das Sitzabkommen;
- c) stellt die Vorschriften über die Organisation, die Tätigkeit und die Rechtsstellung des Personals des Zentralamtes auf;
- d) ernennt unter Berücksichtigung der Eignung der Bewerber und einer angemessenen geographischen Verteilung den Generaldirektor, den Vizegeneraldirektor, die Räte und die Ratsadjunkten des Zentralamtes; dieses setzt die Mitgliedstaaten rechtzeitig in Kenntnis, wenn eine dieser Stellen frei wird; die schweizerische Regierung unterbreitet Bewerbungen für die Stellen des Generaldirektors und des Vizegeneraldirektors;
- e) überwacht die administrative und die finanzielle Geschäftsführung des Zentralamtes;
- f) überwacht die sachgemäße Anwendung des Übereinkommens und der von den anderen Organen gefaßten Beschlüsse durch das Zentralamt; er empfiehlt gegebenenfalls die Maßnahmen, die zur Erleichterung der Anwendung des Übereinkommens und dieser Beschlüsse geeignet sind;
- g) begutachtet Fragen, welche die Tätigkeit des Zentralamtes betreffen können und die ihm von einem Mitgliedstaat oder dem Generaldirektor des Zentralamtes unterbreitet werden;
- h) genehmigt das jährliche Arbeitsprogramm des Zentralamtes;
- i) genehmigt den jährlichen Voranschlag der Organisation, den Geschäftsbericht und die Jahresrechnung;
- j) teilt den Mitgliedstaaten den Geschäftsbericht, den Jahresrechnungsabschluß sowie seine Beschlüsse und Empfehlungen mit;
- k) verfaßt einen Tätigkeitsbericht, macht Vorschläge für seine Neubestellung und teilt sie den Mitgliedstaaten im Hinblick auf die Generalversammlung, die seine Zusammensetzung zu bestimmen hat, spätestens zwei Monate vor der Eröffnung der Tagung mit.

§ 3. Sofern er nichts anderes beschließt, tritt der Ausschuß am Sitz der Organisation zusammen.

Er hält jedes Jahr zwei Tagungen ab; er tritt ferner zusammen, wenn der Vorsitzende es beschließt oder vier seiner Mitglieder es beantragen.

Die Niederschriften der Tagungen werden allen Mitgliedstaaten zugestellt.

## Artikel 8. AUSSCHÜSSE

§ 1. Der Revisionsausschuß und der Fachausschuß für die Beförderung gefährlicher Güter, im folgenden « Fachausschuß » genannt, bestehen aus den Vertretern der Mitgliedstaaten.

Der Generaldirektor des Zentralamtes oder sein Vertreter nimmt mit beratender Stimme an den Tagungen teil.

#### § 2. Der Revisionsausschuß

- a) entscheidet gemäß Artikel 19 § 3 über Anträge auf Änderung des Übereinkommens,
- b) prüft gemäß Artikel 6 § 7 die Anträge, die der Generalversammlung vorgelegt werden.

#### Der Fachausschuß

Entscheidet gemäß Artikel 19 § 4 über Anträge auf Änderung des Übereinkommens.

§ 3. Das Zentralamt beruft die Ausschüsse entweder von sich aus oder auf Antrag von fünf Mitgliedstaaten sowie in dem in Artikel 6 § 7 vorgesehenen Fall ein; es übermittelt den Mitgliedstaaten spätestens zwei Monate vor der Eröffnung der Tagung den Entwurf der Tagesordnung.

§ 4. Der Revisionsausschuß ist beschlußfähig, wenn die Mehrheit der Mitgliedstaaten vertreten ist; der Fachausschuß ist beschlußfähig, wenn ein Drittel der Mitgliedstaaten vertreten ist.

Ein Mitgliedstaat kann sich von einem anderen Mitgliedstaat vertreten lassen; ein Staat kann jedoch nicht mehr als zwei andere Staaten vertreten.

§ 5. Jeder vertretene Mitgliedstaat verfügt über eine Stimme; die Abstimmung findet durch Handerheben oder, auf Antrag, durch namentlichen Aufruf statt.

Ein Antrag ist angenommen, wenn die Zahl der Ja-Stimmen

- a) mindestens gleich einem Drittel der bei der Abstimmung vertretenen Mitgliedstaaten und
- b) größer als die Zahl der Nein-Stimmen ist.

§ 6. Im Einverständnis mit der Mehrheit der Mitgliedstaaten lädt das Zentralamt Nichtmitgliedstaaten und internationale Organisationen, die für Beförderungsfragen zuständig sind oder sich mit auf der Tagesordnung stehenden Fragen befassen, ein, an den Tagungen der Ausschüsse mit beratender Stimme teilzunehmen. Unter denselben Voraussetzungen können unabhängige Sachverständige zu den Tagungen des Fachausschusses eingeladen werden.

§ 7. Die Ausschüsse wählen für jede Tagung einen Vorsitzenden und einen oder zwei stellvertretende Vorsitzende.

§ 8. Die Beratungen finden in den Arbeitssprachen statt. Die während der Sitzung in einer Arbeitssprache vorgetragenen Ausführungen werden ihrem wesentlichen Inhalt nach in die andere Arbeitssprache übersetzt; die Anträge und die Beschlüsse werden in ihrem vollen Wortlaut übersetzt.

§ 9. Die Niederschriften enthalten eine gedrängte Wiedergabe der Verhandlungen. Die Anträge und die Beschlüsse werden in ihrem vollen Wortlaut aufgenommen. Hinsichtlich der Beschlüsse ist der französische Wortlaut maßgebend.

Die Niederschriften werden den Mitgliedstaaten zugestellt.

§ 10. Die Ausschüsse können zur Behandlung bestimmter Fragen Arbeitsgruppen einsetzen.

§ 11. Die Ausschüsse können sich eine Geschäftsordnung geben.

#### *Artikel 9. ZENTRALAMT*

§ 1. Das Zentralamt für den internationalen Eisenbahnverkehr besorgt die Sekretariatsgeschäfte der Organisation.

§ 2. Das Zentralamt hat insbesondere

- a) die Aufgaben auszuführen, die ihm von den anderen Organen der Organisation übertragen werden,
- b) die Anträge auf Änderung des Übereinkommens zur Behandlung vorzubereiten, wobei gegebenenfalls Sachverständige zugezogen werden,
- c) die Ausschüsse einzuberufen,
- d) den Mitgliedstaaten rechtzeitig die erforderlichen Dokumente für die Tagungen der verschiedenen Organe zu übermitteln,
- e) die in Artikel 3 § 2 vorgesehenen Listen der Linien auf dem laufenden zu halten und zu veröffentlichen,
- f) die Mitteilungen der Mitgliedstaaten und der Beförderungsunternehmen entgegenzunehmen und sie gegebenenfalls den anderen Mitgliedstaaten und Beförderungsunternehmen zur Kenntnis zu bringen,
- g) eine Rechtsprechungskartei auf dem laufenden zu halten und zu veröffentlichen,
- h) eine Zeitschrift herauszugeben,
- i) die Organisation bei anderen internationalen Organisationen zu vertreten, die für Fragen zuständig sind, die mit den von der Organisation verfolgten Zielen zusammenhängen,
- j) den jährlichen Voranschlag der Organisation auszuarbeiten und ihn dem Verwaltungsausschuß zur Genehmigung zu unterbreiten,
- k) die Finanzen der Organisation im Rahmen des genehmigten Voranschlages zu führen,
- l) auf Ersuchen eines Mitgliedstaates oder eines Beförderungsunternehmens durch Anbieten seiner guten Dienste zu versuchen, Streitigkeiten zwischen den betreffenden Staaten oder Unternehmen über Auslegung oder Anwendung des Übereinkommens zu schlichten,
- m) auf Ersuchen der beteiligten Parteien — Mitgliedstaaten, Beförderungsunternehmen oder Benutzer — bei Streitigkeiten über Auslegung oder Anwendung des Übereinkommens Gutachten abzugeben,
- n) bei der schiedsgerichtlichen Beilegung von Streitigkeiten gemäß Titel III mitzuwirken,
- o) die durch den internationalen Verkehr bedingten finanziellen Beziehungen zwischen Beförderungsunternehmen sowie die Einziehung unbezahlter Forderungen zu erleichtern.

§ 3. Die Zeitschrift enthält die für die Anwendung des Übereinkommens notwendigen Mitteilungen sowie Abhandlungen, Gerichtsurteile und Infor-

mationen, die für die Auslegung, die Anwendung und die Entwicklung des Eisenbahnbeförderungsrechtes von Bedeutung sind; die Zeitschrift erscheint in den Arbeitssprachen.

#### *Artikel 10. LISTEN DER LINIEN*

§ 1. Die Mitgliedstaaten richten ihre Mitteilungen betreffend die Eintragung oder die Streichung von Linien in den in Artikel 3 § 2 vorgesehenen Listen an das Zentralamt.

Sofern die in Artikel 2 § 2 bezeichneten Linien Mitgliedstaaten verbinden, werden sie nur im Einverständnis dieser Staaten eingetragen; für die Streichung einer solchen Linie genügt die Mitteilung eines dieser Staaten.

Das Zentralamt teilt allen Mitgliedstaaten die Eintragung oder die Streichung einer Linie mit.

§ 2. Eine Linie ist dem Übereinkommen nach Ablauf eines Monats, gerechnet vom Tage der Mitteilung des Zentralamtes über ihre Eintragung, unterstellt.

§ 3. Eine Linie ist dem Übereinkommen nicht mehr unterstellt nach Ablauf eines Monats, gerechnet vom Tage der Mitteilung des Zentralamtes über ihre Streichung, ausgenommen hinsichtlich der bereits begonnenen Beförderungen, die abgewickelt werden müssen.

#### *Artikel 11. FINANZEN*

§ 1. Die Höhe der Ausgaben der Organisation wird auf Vorschlag des Zentralamtes vom Verwaltungsausschuß für jedes Geschäftsjahr festgelegt.

Die Ausgaben der Organisation werden von den Mitgliedstaaten im Verhältnis der Länge der eingetragenen Linien getragen. Für Linien zur See und auf Binnengewässern wird jedoch nur die Hälfte ihrer Längen berechnet; für die anderen Linien, die unter besonderen Bedingungen betrieben werden, kann der Beitrag auf Grund einer Vereinbarung zwischen der betreffenden Regierung und dem Zentralamt, vorbehaltlich der Genehmigung durch den Verwaltungsausschuß, um höchstens die Hälfte herabgesetzt werden.

§ 2. Mit der Übermittlung des Geschäftsberichtes und des Jahresrechnungsabschlusses ersucht das Zentralamt die Mitgliedstaaten, ihren Beitrag zu den Ausgaben für das abgelaufene Geschäftsjahr innerhalb möglichst kurzer Frist, spätestens aber am 31. Dezember des Jahres der Übermittlung, zu entrichten.

Nach diesem Zeitpunkt sind die geschuldeten Beträge mit fünf Prozent jährlich zu verzinsen.

Hat ein Mitgliedstaat zwei Jahre nach diesem Zeitpunkt seinen Beitrag nicht gezahlt, so ist sein Stimmrecht ausgesetzt, bis er seiner Zahlungspflicht nachgekommen ist.

Nach Ablauf einer weiteren Frist von zwei Jahren prüft die Generalversammlung, ob die Haltung dieses Staates als stillschweigende Kündigung des Übereinkommens anzusehen sei, wobei sie gegebenenfalls den Zeitpunkt festlegt, in dem die Kündigung wirksam wird.

§ 3. Im Falle der Kündigung gemäß § 2 und gemäß Artikel 25 sowie im Falle der Aussetzung des Stimmrechtes bleiben die fälligen Beiträge geschuldet.

§ 4. Die nicht gezahlten Beträge sollen nach Möglichkeit aus Mitteln der Organisation gedeckt werden; sie können auf vier Geschäftsjahre verteilt werden. Ein verbleibender Fehlbetrag wird auf ein besonderes Konto zu Lasten der anderen Mitgliedstaaten gebucht, soweit sie während der Zeit der Nichtzahlung am Übereinkommen beteiligt waren; die Belastung erfolgt im Verhältnis der Länge ihrer eingetragenen Linien im Zeitpunkt der Eröffnung des besonderen Kontos.

§ 5. Ein Staat, der das Übereinkommen gekündigt hat, kann durch Beitritt weider Mitgliedstaat werden, vorausgesetzt, daß er die von ihm geschuldeten Beträge gezahlt hat.

§ 6. Die Organisation erhebt eine Vergütung zur Deckung der besonderen Kosten, die sich aus den in Artikel 9 § 2 Buchstabe *l)* bis *n)* vorgesehenen Tätigkeiten ergeben; in den Fällen des Artikels 9 § 2 Buchstabe *l)* und *m)* wird dieser Betrag auf Vorschlag des Zentralamtes vom Verwaltungsausschuß festgesetzt; im Falle des Artikels 9 § 2 Buchstabe *n)* ist Artikel 15 § 2 anzuwenden.

§ 7. Die Übereinstimmung der Geschäftsbücher mit den Rechnungsbelegen wird von der schweizerischen Regierung geprüft, die dem Verwaltungsausschuß einen Bericht vorlegt.

### TITEL III. SCHIEDSGERICHTSBARKEIT

#### *Artikel 12. ZUSTÄNDIGKEIT*

§ 1. Streitigkeiten zwischen Mitgliedstaaten über Auslegung oder Anwendung dieses Übereinkommens sowie Streitigkeiten zwischen Mitgliedstaaten und der Organisation über Auslegung oder Anwendung des Protokolls über die Vorrechte und Immunitäten können auf Ersuchen einer der Parteien einem Schiedsgericht unterbreitet werden. Die Parteien bestimmen die Zusammensetzung des Schiedsgerichtes und das schiedsgerichtliche Verfahren nach freiem Ermessen.

§ 2. Streitigkeiten

- a) zwischen Beförderungsunternehmen,
- b) zwischen Beförderungsunternehmen und Benutzern,
- c) zwischen Benutzern

bei der Anwendung der Einheitlichen Rechtsvorschriften CIV und der Einheitlichen Rechtsvorschriften CIM können, wenn sie nicht gütlich beigelegt oder der Entscheidung der ordentlichen Gerichte unterbreitet worden sind, im Einverständnis der beteiligten Parteien einem Schiedsgericht unterbreitet werden. Für die Zusammensetzung des Schiedsgerichtes und das schiedsgerichtliche Verfahren gelten die Artikel 13 bis 16.

§ 3. Jeder Staat kann bei der Unterzeichnung des Übereinkommens oder bei der Hinterlegung seiner Ratifikations-, Annahme-, Genehmigungs- oder Beitrittsurkunde sich das Recht vorbehalten, die Bestimmungen des § 1 und des § 2 ganz oder teilweise nicht anzuwenden.

§ 4. Jeder Staat, der einen Vorbehalt gemäß § 3 angebracht hat, kann jederzeit durch Mitteilung an die Depositarregierung darauf verzichten. Der Verzicht auf den Vorbehalt wird einen Monat nach dem Tag wirksam, an dem die Depositarregierung den Staaten davon Kenntnis gegeben hat.

### Artikel 13. SCHIEDSVERTRAG. GERICHTSKANZLEI

Die Parteien schließen einen Schiedsvertrag, der insbesondere bestimmt:

- a) den Streitgegenstand;
- b) die Zusammensetzung des Gerichtes und die für die Ernennung des oder der Schiedsrichter vereinbarten Fristen;
- c) den als Sitz des Gerichtes vereinbarten Ort.

Der Schiedsvertrag muß dem Zentralamt mitgeteilt werden, das die Aufgaben einer Gerichtskanzlei wahrnimmt.

### Artikel 14. SCHIEDSRICHTER

§ 1. Das Zentralamt stellt eine Liste der Schiedsrichter auf und hält sie auf dem laufenden. Jeder Mitgliedstaat kann zwei seiner Staatsangehörigen, die Sachverständige des internationalen beförderungsrechtes sind, in die Liste der Schiedsrichter eintragen lassen.

§ 2. Das Schiedsgericht besteht gemäß dem Schiedsvertrag aus einem, drei oder fünf Schiedsrichtern.

Die Schiedsrichter werden unter den Personen gewählt, die in der in § 1 erwähnten Liste eingetragen sind. Sieht der Schiedsvertrag jedoch fünf Schiedsrichter vor, so kann jede Partei einen nicht in der Liste eingetragenen Schiedsrichter wählen.

Sieht der Schiedsvertrag einen Einzelschiedsrichter vor, so wird er im gegenseitigen Einverständnis der Parteien gewählt.

Sieht der Schiedsvertrag drei oder fünf Schiedsrichter vor, so wählt jede Partei jeweils einen oder zwei Schiedsrichter; diese bezeichnen im gegenseitigen Einverständnis den dritten oder den fünften Schiedsrichter, der den Vorsitz des Schiedsgerichtes führt.

Sind die Parteien über die Bezeichnung des Einzelschiedsrichters oder die gewählten Schiedsrichter über die Bezeichnung des dritten oder des fünften Schiedsrichters nicht einig, so wird dieser durch den Generaldirektor des Zentralamtes bezeichnet.

§ 3. Sofern die Parteien nicht dieselbe Staatsangehörigkeit haben, muß der Einzelschiedsrichter, der dritte oder der fünfte Schiedsrichter eine andere Staatsangehörigkeit haben als die Parteien.

Die Beteiligung einer Drittpartei am Streitfall hat keinen Einfluß auf die Zusammensetzung des Schiedsgerichtes.

### Artikel 15. VERFAHREN. KOSTEN

§ 1. Das Schiedsgericht bestimmt das Verfahren unter Berücksichtigung insbesondere der folgenden Bestimmungen:

- a) es untersucht und beurteilt die Streitsache auf Grund des Vorbringens der Parteien, ohne daß es bei seiner Entscheidung über Rechtsfragen an die Auslegung durch die Parteien gebunden ist;
- b) es kann nicht mehr oder nichts anderes zusprechen, als der Kläger verlangt, und nicht weniger, als der Beklagte als geschuldet anerkannt hat;

- c) der Schiedsspruch wird mit entsprechender Begründung vom Schiedsgericht abgefaßt und den Parteien durch das Zentralamt zugestellt;
- d) vorbehaltlich einer gegenteiligen Bestimmung zwingenden Rechtes an dem Ort, an dem das Schiedsgericht seinen Sitz hat, und vorbehaltlich gegenteiliger Vereinbarung der Parteien ist der Schiedsspruch endgültig.

§ 2. Die Honorare der Schiedsrichter werden vom Generaldirektor des Zentralamtes festgelegt.

Der Schiedsspruch setzt die Kosten und Auslagen fest und bestimmt, in welchem Verhältnis sie und die Honorare der Schiedsrichter unter die Parteien aufzuteilen sind.

#### *Artikel 16. VERJÄHRUNG. VOLLSTRECKBARKEIT*

§ 1. Die Einleitung des schiedsgerichtlichen Verfahrens hat für die Unterbrechung der Verjährung dieselbe Wirkung, wie sie nach dem anzuwendenden materiellen Recht für die Klageerhebung beim ordentlichen Gericht vorgesehen ist.

§ 2. Der Schiedsspruch des Schiedsgerichtes wird gegenüber Beförderungsunternehmen und Benutzern in jedem Mitgliedstaat vollstreckbar, sobald die in dem Staat, in dem die Vollstreckung erfolgen soll, vorgeschriebenen Förmlichkeiten erfüllt sind. Eine sachliche Nachprüfung des Inhaltes ist nicht zulässig.

#### TITEL IV. VERSCHIEDENE BESTIMMUNGEN

##### *Artikel 17. EINZIEHUNG UNBEZAHLTER FORDERUNGEN ZWISCHEN BEFÖRDERUNGSUNTERNEHMEN*

§ 1. Unbezahlt gebliebene Forderungen aus Beförderungen, auf welche die Einheitlichen Rechtsvorschriften anzuwenden sind, können vom forderungsberechtigten Beförderungsunternehmen zur Erleichterung der Einziehung dem Zentralamt mitgeteilt werden; zu diesem Zweck fordert das Zentralamt das schuldnerische Beförderungsunternehmen auf, den geschuldeten Betrag zu zahlen oder die Gründe der Zahlungsverweigerung anzugeben.

§ 2. Ist das Zentralamt der Ansicht, daß die Weigerung hinreichend begründet ist, so schlägt es den Parteien vor, sich an das zuständige Gericht oder an das in Artikel 12 § 2 vorgesehene Schiedsgericht zu wenden.

§ 3. Ist das Zentralamt der Ansicht, daß der Betrag ganz oder teilweise geschuldet ist, so kann es nach allfälliger Anhörung eines Sachverständigen erklären, daß das schuldnerische Beförderungsunternehmen den geschuldeten Betrag ganz oder teilweise beim Zentralamt einzuzahlen hat; der daraufhin eingezahlte Betrag bleibt hinterlegt, bis das zuständige Gericht oder das Schiedsgericht in der Sache selbst endgültig entschieden hat.

§ 4. Zahlt das Unternehmen die vom Zentralamt festgelegte Summe nicht binnen zweier Wochen ein, so wird es unter Hinweis auf die Folgen seiner Weigerung erneut zur Zahlung aufgefordert.

§ 5. Wird auch dieser zweiten Aufforderung nicht binnen zweier Monate entsprochen, so richtet das Zentralamt an den Mitgliedstaat, dem das Unternehmen angehört, ein mit Gründen versehenes Ersuchen, Maßnahmen zu ergreifen und insbesondere zu prüfen, ob die Linien des schuldnerischen Beförderungsunternehmens weiterhin in der Liste zu belassen sind.

§ 6. Erklärt der Mitgliedstaat, daß er trotz Nichtzahlung die Eintragung der Linien dieses Unternehmens aufrechterhält, oder läßt er die Mitteilung des Zentralamtes sechs Wochen unbeantwortet, so wird von Rechts wegen vermutet, daß er für die Begleichung aller Forderungen bürgt, die aus Beförderungen herrühren, auf welche die Einheitlichen Rechtsvorschriften anzuwenden sind.

*Artikel 18. URTEILE. ARREST UND PFÄNDUNG. SICHERHEITSLEISTUNG*

§ 1. Urteile, auch Versäumnisurteile, die auf Grund des Übereinkommens vom zuständigen Gericht gefällt worden und nach den für das urteilende Gericht maßgebenden Gesetzen vollstreckbar geworden sind, werden in jedem der anderen Mitgliedstaaten vollstreckbar, sobald die in dem Staat, in dem die Vollstreckung erfolgen soll, vorgeschriebenen Förmlichkeiten erfüllt sind. Eine sachliche Nachprüfung des Inhaltes ist nicht zulässig.

Diese Bestimmung findet keine Anwendung auf nur vorläufig vollstreckbare Urteile und auf Urteile, die dem Kläger wegen seines Unterliegens im Rechtsstreit außer den Kosten eine Entschädigung auferlegen.

Absatz 1 gilt auch für gerichtliche Vergleiche.

§ 2. Stehen einem Beförderungsunternehmen aus einer Beförderung, auf welche die Einheitlichen Rechtsvorschriften anzuwenden sind, Forderungen gegen ein anderes Beförderungsunternehmen zu, das nicht demselben Mitgliedstaat angehört, so können diese Forderungen nur auf Grund einer Entscheidung der Gerichte des Mitgliedstaates mit Arrest belegt oder gepfändet werden, dem das Unternehmen angehört, das Gläubiger der zu pfändenden Forderung ist.

§ 3. Das rollende Material der Eisenbahn sowie die der Beförderung dienenden bahneigenen Gegenstände aller Art, wie Container, Ladegeräte und Decken, können in einem anderen Mitgliedstaat als demjenigen, dem die Eigentumsbahn angehört, nur auf Grund einer Entscheidung der Gerichte dieses Staates mit Arrest belegt oder gepfändet werden.

Privatwagen sowie die darin befindlichen, der Beförderung dienenden und dem Wageneigentümer gehörenden Gegenstände aller Art können in einem anderen Mitgliedstaat als demjenigen, in dem der Wageneigentümer seinen Sitz hat, nur auf Grund einer Entscheidung der Gerichte dieses Staates mit Arrest belegt oder gepfändet werden.

§ 4. Bei Klagen auf Grund des Übereinkommens kann eine Sicherheitsleistung für die Kosten des Rechtsstreites nicht gefordert werden.

TITEL V. ÄNDERUNG DES ÜBEREINKOMMENS

*Artikel 19. ZUSTÄNDIGKEIT*

§ 1. Die Mitgliedstaaten richten ihre Anträge auf Änderung des Übereinkommens an das Zentralamt, das sie unverzüglich den Mitgliedstaaten zur Kenntnis bringt.

§ 2. Die Generalversammlung entscheidet über Anträge auf Änderung der Bestimmungen des Übereinkommens, die in den §§ 3 und 4 nicht vorgesehen sind.

Ein Antrag auf Änderung kann nur mit Zustimmung eines Drittels der Mitgliedstaaten auf die Tagesordnung einer Tagung der Generalversammlung gesetzt werden.



Wird der Generalversammlung ein Antrag auf Änderung vorgelegt, so kann sie mit der in Artikel 6 § 5 vorgesehenen Mehrheit feststellen, daß ein solcher Antrag in unmittelbarem Zusammenhang mit einer oder mit mehreren Bestimmungen steht, für deren Änderung gemäß § 3 der Revisionsausschuß zuständig ist. In diesem Fall ist die Generalversammlung auch für die Entscheidung über die Änderung dieser Bestimmung oder dieser Bestimmungen zuständig.

§ 3. Vorbehaltlich einer Feststellung der Generalversammlung gemäß § 2 Absatz 3 entscheidet der Revisionsausschuß über Anträge auf Änderung der nachstehend aufgeführten Bestimmungen:

a) *Einheitliche Rechtsvorschriften CIV:*

- Artikel 1 § 3, Artikel 4 § 2, Artikel 5 (ohne § 2), 6, 9 bis 14, 15 (ohne § 6), 16 bis 21, 22 § 3, Artikel 23 bis 25, 37, 43 (ohne die §§ 2 und 4), 48, 49, 56 bis 58, 61;
- die in Rechnungseinheiten festgesetzten Beträge in Artikel 30, 31, 38, 40 und 41, wenn die Änderung zu einer Erhöhung dieser Beträge führen würde;

b) *Einheitliche Rechtsvorschriften CIM:*

- Artikel 1 § 2, Artikel 3 §§ 2 bis 5, Artikel 4, 5, 6 (ohne § 3), 7, 8, 11 bis 13, 14 (ohne § 7), 15 bis 17, 19 (ohne § 4), 20 (ohne § 3), 21 bis 24, 25 (ohne § 3), 26 (ohne § 2), 27, 28 §§ 3 und 6, Artikel 29, 30 (ohne § 3), 31, 32 (ohne § 3), 33 (ohne § 5), 34, 38, 39, 41, 45, 46, 47 (ohne § 3), 48 — soweit eine Anpassung an das internationale Seefrachtrecht angestrebt wird —, 52, 53, 59 bis 61, 64 und 65;
- der in Rechnungseinheiten festgesetzte Betrag in Artikel 40, wenn die Änderung zu einer Erhöhung dieses Betrages führen würde;
- Ordnung für die internationale Eisenbahnbeförderung von Privatwagen (RIP), Anlage II;
- Ordnung für die internationale Eisenbahnbeförderung von Containern (RICO), Anlage III;
- Ordnung für die internationale Eisenbahnbeförderung von Expreßgut (RIEx), Anlage IV.

§ 4. Der Fachausschuß entscheidet über Anträge auf Änderung der Bestimmungen der Ordnung für die internationale Eisenbahnbeförderung gefährlicher Güter (RID), Anlage I zu den Einheitlichen Rechtsvorschriften CIM.

*Artikel 20. BESCHLÜSSE DER GENERALVERSAMMLUNG*

§ 1. Die von der Generalversammlung beschlossenen Änderungen werden in ein Protokoll aufgenommen, das von den Vertretern der Mitgliedstaaten unterzeichnet wird. Dieses Protokoll bedarf der Ratifizierung, der Annahme oder der Genehmigung; die Ratifikations-, Annahme- oder Genehmigungsurkunden werden so bald wie möglich bei der Depositarregierung hinterlegt.

§ 2. Wenn das Protokoll von mehr als zwei Dritteln der Mitgliedstaaten ratifiziert, angenommen oder genehmigt ist, treten die Beschlüsse nach Ablauf der von der Generalversammlung festgesetzten Frist in Kraft.

§ 3. Die Anwendung der Einheitlichen Rechtsvorschriften CIV und CIM im Verkehr mit und zwischen den Mitgliedstaaten, die einen Monat vor dem

Inkrafttreten ihre Ratifikations-, Annahme- oder Genehmigungsurkunde noch nicht hinterlegt haben, ist mit dem Inkrafttreten der Beschlüsse ausgesetzt. Das Zentralamt teilt diese Aussetzung den Mitgliedstaaten mit; sie verliert ihre Wirkung nach Ablauf eines Monats, gerechnet von dem Tag, an dem das Zentralamt die Ratifizierung, die Annahme oder die Genehmigung der genannten Beschlüsse durch die betreffenden Mitgliedstaaten mitgeteilt hat.

Die Aussetzung hat keine Wirkung für Mitgliedstaaten, die, ohne ihre Ratifikations-, Annahme- oder Genehmigungsurkunde hinterlegt zu haben, dem Zentralamt mitgeteilt haben, daß sie die von der Generalversammlung beschlossenen Änderungen anwenden.

#### *Artikel 21. BESCHLÜSSE DER AUSSCHÜSSE*

§ 1. Die von den Ausschüssen beschlossenen Änderungen werden den Mitgliedstaaten vom Zentralamt mitgeteilt.

§ 2. Diese Beschlüsse treten für alle Mitgliedstaaten am ersten Tage des zwölften Monats nach dem Monat in Kraft, in dem das Zentralamt sie den Mitgliedstaaten mitgeteilt hat, sofern nicht innerhalb von vier Monaten, gerechnet vom Tage der Mitteilung, ein Drittel der Mitgliedstaaten Widerspruch erhoben hat.

Wenn jedoch ein Mitgliedstaat innerhalb der Frist von vier Monaten gegen einen Beschluß des Revisionsausschusses Widerspruch erhebt und das Übereinkommen spätestens zwei Monate vor dem Zeitpunkt kündigt, der für das Inkrafttreten dieses Beschlusses vorgesehen ist, tritt dieser Beschluß erst in dem Zeitpunkt in Kraft, in dem die Kündigung des betreffenden Mitgliedstaates wirksam wird.

#### TITEL VI. SCHLUSSBESTIMMUNGEN

##### *Artikel 22. UNTERZEICHNUNG, RATIFIZIERUNG, ANNAHME, GENEHMIGUNG DES ÜBEREINKOMMENS*

§ 1. Das Übereinkommen liegt bis zum 31. Dezember 1980 in Bern bei der schweizerischen Regierung zur Unterzeichnung durch die Staaten auf, die zur achten ordentlichen Revisionskonferenz der Übereinkommen CIM und CIV eingeladen worden sind.

§ 2. Das Übereinkommen bedarf der Ratifizierung, der Annahme oder der Genehmigung; die Ratifikations-, Annahme- oder Genehmigungsurkunden sind bei der schweizerischen Regierung als Depositarregierung zu hinterlegen.

##### *Artikel 23. BEITRITT ZUM ÜBEREINKOMMEN*

§ 1. Die Staaten, die zur achten ordentlichen Revisionskonferenz der Übereinkommen CIM und CIV eingeladen worden sind und das Übereinkommen nicht innerhalb der in Artikel 22 § 1 vorgesehenen Frist unterzeichnet haben, können dennoch ihren Beitritt zum Übereinkommen vor seiner Inkraftsetzung mitteilen. Die Beitrittsurkunde ist bei der Depositarregierung zu hinterlegen.

§ 2. Jeder Staat, der dem Übereinkommen nach seiner Inkraftsetzung beizutreten wünscht, richtet an die Depositarregierung einen Antrag und einen Bericht über die Lage seiner Eisenbahnunternehmen hinsichtlich internationaler Beförderungen. Die Depositarregierung teilt sie den Mitgliedstaaten und dem Zentralamt mit.

Haben nicht fünf Mitgliedstaaten bei der Depositarregierung Einspruch erhoben, so ist der Antrag sechs Monate nach der genannten Mitteilung rechtsverbindlich angenommen. Die Depositarregierung teilt dies dem antragstellenden Staat sowie den Mitgliedstaaten und dem Zentralamt mit. Der neue Mitgliedstaat kommt unverzüglich den Bestimmungen des Artikels 10 nach.

Wird Einspruch erhoben, so unterbreitet die Depositarregierung den Beitrittsantrag der Generalversammlung zur Entscheidung.

Nach der Hinterlegung der Beitrittsurkunde wird der Beitritt am ersten Tage des zweiten Monats nach dem Monat wirksam, in dem das Zentralamt den Mitgliedstaaten die Liste der Linien des neuen Mitgliedstaates mitgeteilt hat.

§ 3. Jeder Beitritt zum Übereinkommen kann sich nur auf das Übereinkommen in seiner jeweils geltenden Fassung beziehen.

#### *Artikel 24. INKRAFTSETZUNG DES ÜBEREINKOMMENS*

§ 1. Sobald die Ratifikations-, Annahme-, Genehmigungs- oder Beitrittsurkunden von fünfzehn Staaten hinterlegt sind, setzt sich die Depositarregierung mit den beteiligten Regierungen im Hinblick auf die Vereinbarung der Inkraftsetzung des Übereinkommens in Verbindung.

§ 2. Das Inkrafttreten des Übereinkommens zieht die Aufhebung der internationalen Übereinkommen über den Eisenbahnfrachtverkehr (CIM) und über den Eisenbahn-Personen- und -Gepäckverkehr (CIV) vom 7. Februar 1970 sowie des Zusatzübereinkommens zum CIV über die Haftung der Eisenbahn für Tötung und Verletzung von Reisenden vom 26. Februar 1966 nach sich.

#### *Artikel 25. KÜNDIGUNG DES ÜBEREINKOMMENS*

Will ein Mitgliedstaat das Übereinkommen kündigen, so teilt er dies der Depositarregierung mit. Die Kündigung wird am 31. Dezember des darauffolgenden Jahres wirksam.

#### *Artikel 26. AUFGABEN DER DEPOSITARREGIERUNG*

Die Depositarregierung verständigt die zur achten ordentlichen Revisionskonferenz der Übereinkommen CIM und CIV eingeladenen Staaten, die anderen Staaten, die dem Übereinkommen beigetreten sind, sowie das Zentralamt über

- a) die Unterzeichnungen des Übereinkommens, die Hinterlegung der Ratifikations-, Annahme-, Genehmigungs- oder Beitrittsurkunden und die Mitteilungen über die Kündigung,
- b) den Tag, an dem das Übereinkommen in Anwendung des Artikels 24 in Kraft tritt,
- c) die Hinterlegung der Ratifikations-, Annahme- oder Genehmigungsurkunden der Protokolle gemäß Artikel 20.

#### *Artikel 27. VORBEHALTE ZUM ÜBEREINKOMMEN*

Vorbehalte zum Übereinkommen sind nur zulässig, soweit sie darin vorgesehen sind.

#### *Artikel 28. WORTLAUT DES ÜBEREINKOMMENS*

Das Übereinkommen ist in französischer Sprache geschlossen und unterzeichnet.

Dem französischen Wortlaut sind amtliche Übersetzungen in deutscher, englischer, arabischer, italienischer und niederländischer Sprache beigegeben.

Nur der französische Wortlaut ist authentisch.

ZU URKUND DESSEN haben die Unterzeichneten, die von ihren Regierungen gehörig bevollmächtigt sind, dieses Übereinkommen unterschrieben.

GESCHEHEN zu Bern, am neunten Mai neunzehnhundertachtzig, in einer Urschrift in französischer Sprache, die im Archiv der Schweizerischen Eidgenossenschaft hinterlegt bleibt. Eine beglaubigte Abschrift wird jedem Mitgliedstaat zugestellt werden.

[*For the signature pages, see authentic French text in United Nations, Treaty Series, vol. 1396, p. 18 — Voir Nations Unies, Recueil des Traités, vol. 1396, p. 18 pour les pages de signature du texte authentique français.*]

## PROTOKOLL ÜBER DIE VORRECHTE UND IMMUNITÄTEN DER ZWISCHENSTAATLICHEN ORGANISATION FÜR DEN INTERNATIONALEN EISENBAHNVERKEHR (OTIF)

### Artikel 1

§ 1. Die Organisation genießt im Rahmen ihrer amtlichen Tätigkeit Immunität von der Gerichtsbarkeit und Vollstreckung außer in folgenden Fällen:

- a) soweit die Organisation im Einzelfall ausdrücklich darauf verzichtet;
- b) im Fall eines von einem Dritten angestregten Zivilverfahrens wegen Schadenersatzes auf Grund eines Unfalles, der durch ein der Organisation gehörendes oder für sie betriebenes Kraftfahrzeug oder sonstiges Fahrzeug verursacht wurde, oder im Fall eines Verstoßes gegen die Vorschriften über den Verkehr, an dem das genannte Fahrzeug beteiligt ist;
- c) im Fall einer Widerklage, die in direktem Zusammenhang mit einer durch die Organisation erhobenen Hauptklage steht;
- d) im Fall einer durch gerichtliche Entscheidung angeordneten Pfändung von Gehältern, Löhnen und sonstigen Bezügen, welche die Organisation einem Mitglied des Personals schuldet.

§ 2. Die Guthaben und die sonstigen Vermögenswerte der Organisation genießen ohne Rücksicht darauf, wo sie sich befinden, Immunität von jeder Form der Beschlagnahme, Einziehung, Zwangsverwaltung und anderer Form von Pfändung oder Zwang, sofern diese nicht zur Verhinderung oder Untersuchung von Unfällen, an denen der Organisation gehörende oder für sie betriebene Kraftfahrzeuge beteiligt sind, vorübergehend notwendig sind.

Ist eine Enteignung aus Gründen des öffentlichen Interesses erforderlich, so müssen alle geeigneten Maßnahmen getroffen werden, um zu verhindern, daß sie die Ausübung der Tätigkeiten der Organisation beeinträchtigt, und es ist im voraus und unverzüglich eine angemessene Entschädigung zu leisten.

§ 3. Jeder Mitgliedstaat gewährt der Organisation, ihrem Vermögen und ihren Einkünften im Rahmen ihrer amtlichen Tätigkeit Befreiung von der direkten Besteuerung. Werden vor der Organisation Käufe von erheblichem Wert getätigt oder Dienstleistungen von erheblichem Wert in Anspruch genommen, die für die

Ausübung ihrer amtlichen Tätigkeit unbedingt erforderlich sind, und sind bei diesen Käufen oder Dienstleistungen Steuern oder sonstige Abgaben im Preis enthalten, so werden — soweit möglich — von den Mitgliedstaaten geeignete Maßnahmen zur Befreiung von diesen Steuern und sonstigen Abgaben oder zu ihrer Erstattung getroffen.

Für Steuern oder sonstige Abgaben, die lediglich eine Vergütung für Dienstleistungen darstellen, wird eine Befreiung von Steuern und Abgaben nicht gewährt.

Die von der Organisation ein- oder ausgeführten Waren, die für die Ausübung ihrer amtlichen Tätigkeit unbedingt erforderlich sind, sind von allen Abgaben und Zöllen, die bei der Ein- oder Ausfuhr erhoben werden, befreit.

Für Waren und Dienstleistungen, die für den persönlichen Bedarf der Mitglieder des Personals der Organisation gekauft oder eingeführt beziehungsweise erbracht werden, wird eine Befreiung gemäß diesem Artikel nicht gewährt.

§ 4. Waren, die gemäß § 3 erworben oder eingeführt worden sind, dürfen nur zu den Bedingungen verkauft, abgegeben oder benutzt werden, die von dem Mitgliedstaat festgelegt sind, der diese Befreiungen gewährt hat.

§ 5. Amtliche Tätigkeiten der Organisation im Sinne dieses Protokolls sind die Tätigkeiten, die den in Artikel 2 des Übereinkommens festgelegten Zwecken entsprechen.

### *Artikel 2*

§ 1. Die Organisation darf jede Art von Geldmitteln, Währungen oder Wertpapieren entgegennehmen und besitzen; sie kann für alle im Übereinkommen vorgesehenen Zwecke frei darüber verfügen und in dem zur Erfüllung ihrer Verpflichtungen erforderlichen Umfang in jeder Währung Konten unterhalten.

§ 2. Bei ihrem amtlichen Nachrichtenverkehr und der Übermittlung aller ihrer Schriftstücke hat die Organisation Anspruch auf eine nicht weniger günstige Behandlung, als sie von den einzelnen Mitgliedstaaten anderen vergleichbaren internationalen Organisationen gewährt wird.

### *Artikel 3*

Die Vertreter der Mitgliedstaaten genießen auf dem Gebiet eines jeden Mitgliedstaates bei der Wahrnehmung ihrer Aufgaben und für die Dauer ihrer Dienstreisen folgende Vorrechte und Immunitäten:

- a) Immunität von der Gerichtsbarkeit, auch nach Beendigung ihres Auftrages, hinsichtlich der von ihnen bei der Wahrnehmung ihrer Aufgaben vorgenommenen Handlungen, einschließlich ihrer mündlichen und schriftlichen Äußerungen; diese Immunität gilt jedoch nicht im Falle von Schäden auf Grund eines Unfalles, der durch ein einem Vertreter eines Staates gehörendes oder von ihm geführtes Kraftfahrzeug oder sonstiges Fahrzeug verursacht wurde, oder im Fall eines Verstoßes gegen die Vorschriften über den Verkehr, an dem das genannte Fahrzeug beteiligt ist;
- b) Immunität von Festnahme und Untersuchungshaft, außer wenn sie auf frischer Tat ertappt werden;
- c) Immunität von der Beschlagnahme ihres persönlichen Gepäcks, außer wenn sie auf frischer Tat ertappt werden;

- d) Unverletzlichkeit aller ihrer amtlichen Schriftstücke und Urkunden;
- e) Befreiung für sich und ihre Ehegatten von allen Einreisebeschränkungen und von der Ausländermeldepflicht;
- f) die gleichen Erleichterungen hinsichtlich der Währungs- und Devisenvorschriften wie Vertreter ausländischer Regierungen mit vorübergehendem amtlichen Auftrag.

#### Artikel 4

Die Mitglieder des Personals der Organisation genießen auf dem Gebiet eines jeden Mitgliedstaates bei der Wahrnehmung ihrer Aufgaben folgende Vorrechte und Immunitäten:

- a) Immunität von der Gerichtsbarkeit hinsichtlich der von ihnen bei der Wahrnehmung ihrer Aufgaben und im Rahmen ihrer Zuständigkeit vorgenommenen Handlungen, einschließlich ihrer mündlichen und schriftlichen Äußerungen, und zwar auch nach ihrem Ausscheiden aus dem Dienst der Organisation; diese Immunität gilt jedoch nicht im Falle von Schäden auf Grund eines Unfalles, der durch ein einem Mitglied des Personals der Organisation gehörendes oder von ihm geführtes Kraftfahrzeug oder sonstiges Fahrzeug verursacht wurde, oder im Fall eines Verstoßes gegen die Vorschriften über den Verkehr, an dem das genannte Fahrzeug beteiligt ist;
- b) Unverletzlichkeit aller ihrer amtlichen Schriftstücke und Urkunden;
- c) dieselbe Befreiung von den Einwanderungsbeschränkungen und der Ausländermeldepflicht, wie sie allgemein den Mitgliedern des Personals internationaler Organisationen gewährt wird; Familienangehörige, die in ihrem Haushalt leben, genießen dieselben Erleichterungen;
- d) Befreiung von der staatlichen Einkommenssteuer, unter der Voraussetzung, daß die von der Organisation gezahlten Gehälter, Löhne und sonstigen Bezüge einer Besteuerung zugunsten der Organisation unterliegen; die Mitgliedstaaten haben jedoch das Recht, diese Gehälter, Löhne und sonstigen Bezüge bei der Festsetzung des auf Einkommen aus anderen Quellen zu erhebenden Steuerbetrages zu berücksichtigen; die Mitgliedstaaten sind nicht verpflichtet, diese Steuerbefreiung für Entschädigungen und Ruhegehälter sowie Hinterbliebenenrenten zu gewähren, welche die Organisation den ehemaligen Mitgliedern ihres Personals oder den nach ihnen Anspruchsberechtigten zahlt;
- e) in bezug auf Devisenvorschriften dieselben Vorrechte, wie sie allgemein den Mitgliedern des Personals internationaler Organisationen gewährt werden;
- f) im Fall einer internationalen Krise dieselben Erleichterungen bei der Rückführung in ihren Heimatstaat, wie sie allgemein den Mitgliedern des Personals internationaler Organisationen gewährt werden; das gleiche gilt für die in ihrem Haushalt lebenden Familienangehörigen.

#### Artikel 5

Die von der Organisation berufenen Sachverständigen genießen während ihrer dienstlichen Tätigkeit im Zusammenhang mit der Organisation oder bei der Durchführung von Aufträgen für die Organisation, einschließlich der bei dieser Tätigkeit oder diesen Aufträgen durchgeführten Reisen, folgende Vorrechte und Immunitäten, soweit diese für die Wahrnehmung ihrer Aufgaben erforderlich sind:

- a) Immunität von der Gerichtsbarkeit hinsichtlich der von ihnen bei der Wahrnehmung ihrer Aufgaben vorgenommenen Handlungen, einschließlich ihrer mündlichen und schriftlichen Äußerungen; diese Immunität gilt jedoch nicht im Falle von Schäden auf Grund eines Unfalles, der durch ein einem Sachverständigen gehörendes oder von ihm geführtes Kraftfahrzeug oder sonstiges Fahrzeug verursacht wurde, oder im Fall eines Verstoßes gegen die Vorschriften über den Verkehr, an dem das genannte Fahrzeug beteiligt ist; die Sachverständigen genießen diese Immunität auch nach Beendigung ihrer Tätigkeit bei der Organisation;
- b) Unverletzlichkeit aller ihrer amtlichen Schriftstücke und Urkunden;
- c) die Erleichterungen in bezug auf Devisenvorschriften, die notwendig sind, um ihre Vergütungen zu überweisen;
- d) dieselben Erleichterungen in bezug auf ihr persönliches Gepäck wie die Bediensteten ausländischer Regierungen mit vorübergehendem amtlichen Auftrag.

#### *Artikel 6*

§ 1. Die in diesem Protokoll vorgesehenen Vorrechte und Immunitäten werden ausschließlich gewährt, um unter allen Umständen die unbehinderte Ausübung der Tätigkeit der Organisation und die vollständige Unabhängigkeit der Personen, denen sie gewährt werden, sicherzustellen. Die zuständigen Behörden heben eine Immunität auf, wenn ihre Aufrechterhaltung verhindern würde, daß der Gerechtigkeit Genüge geschieht, und wenn sie ohne Beeinträchtigung der Zielsetzungen, für die sie gewährt worden ist, aufgehoben werden kann.

§ 2. Zuständige Behörden gemäß § 1 sind:

- die Mitgliedstaaten für ihre Vertreter,
- der Verwaltungsausschuß für den Generaldirektor,
- der Generaldirektor für die übrigen Mitglieder des Personals und für die von der Organisation berufenen Sachverständigen.

#### *Artikel 7*

§ 1. Dieses Protokoll berührt nicht das Recht eines jeden Mitgliedstaates, alle Vorsichtsmaßnahmen zu treffen, die im Interesse seiner öffentlichen Sicherheit angebracht sind.

§ 2. Die Organisation wird jederzeit mit den zuständigen Behörden der Mitgliedstaaten zusammenarbeiten, um eine ordnungsgemäße Rechtspflege zu erleichtern, die Einhaltung der Gesetze und Vorschriften der betreffenden Mitgliedstaaten zu gewährleisten und jeglichen Mißbrauch zu verhindern, der sich aus den in diesem Protokoll vorgesehenen Vorrechten und Immunitäten ergeben könnte.

#### *Artikel 8*

Ein Mitgliedstaat ist nicht verpflichtet, seinen eigenen Staatsangehörigen oder Personen, die ihren ständigen Aufenthalt in diesem Staat haben, die Vorrechte und Immunitäten gemäß

- Artikel 3, ausgenommen Buchstabe d),

- Artikel 4, ausgenommen Buchstabe *a)*, *b)* und *d)*,  
— Artikel 5, ausgenommen Buchstabe *a)* und *b)*,  
dieses Protokolls zu gewähren.

#### *Artikel 9*

Die Organisation kann mit einzelnen oder mehreren Mitgliedstaaten Ergänzungsabkommen zur Durchführung dieses Protokolls in bezug auf diesen Mitgliedstaat oder diese Mitgliedstaaten sowie sonstige Vereinbarungen schließen, um die wirksame Tätigkeit der Organisation zu gewährleisten.

### ANHANG A ZUM ÜBEREINKOMMEN ÜBER DEN INTERNATIONALEN EISENBAHNVERKEHR (COTIF) VOM 9. MAI 1980

#### *EINHEITLICHE RECHTSVORSCHRIFTEN FÜR DEN VERTRAG ÜBER DIE INTERNATIONALE EISENBAHNBEFÖRDERUNG VON PERSONEN UND GEPÄCK (CIV)*

##### TITEL I. ALLGEMEINE BESTIMMUNGEN

###### *Artikel 1. ANWENDUNGSBEREICH*

§ 1. Vorbehaltlich der in Artikel 2, 3 und 33 vorgesehenen Ausnahmen finden die Einheitlichen Rechtsvorschriften Anwendung auf alle Beförderungen von Personen und Gepäck mit internationalen Beförderungsausweisen, die auf einem Wege gelten, der die Gebiete mindestens zweier Staaten berührt und ausschließlich Linien umfaßt, die in der Liste gemäß Artikel 3 und 10 des Übereinkommens eingetragen sind.

Die Einheitlichen Rechtsvorschriften finden hinsichtlich der Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden auch auf Begleiter von Sendungen Anwendung, die gemäß den Einheitlichen Rechtsvorschriften für den Vertrag über die internationale Eisenbahnbeförderung von Gütern (CIM) befördert werden.

§ 2. Die internationalen Tarife bestimmen die Verbindungen, für die internationale Beförderungsausweise ausgegeben werden.

§ 3. In den Einheitlichen Rechtsvorschriften umfaßt der Ausdruck « Bahnhof » die Bahnhöfe der Eisenbahnen, die Häfen der Schifffahrtslinien und alle anderen für die Ausführung des Beförderungsvertrages geöffneten Stellen der Beförderungsunternehmen.

###### *Artikel 2. AUSNAHMEN VOM ANWENDUNGSBEREICH*

§ 1. Auf Beförderungen, deren Abgangs- und Bestimmungsbahnhof im Gebiet desselben Staates liegen und die das Gebiet eines anderen Staates nur im Durchgang berühren, finden die Einheitlichen Rechtsvorschriften keine Anwendung,

- a) wenn die Durchgangslinien ausschließlich von einer Eisenbahn des Abgangsstaates betrieben werden oder
- b) wenn die beteiligten Staaten oder Eisenbahnen vereinbart haben, diese Beförderungen nicht als international anzusehen.

§ 2. Auf Beförderungen zwischen Bahnhöfen zweier Nachbarstaaten und auf Beförderungen zwischen Bahnhöfen zweier Staaten über das Gebiet eines dritten Staates finden, wenn die Linien, auf denen die Beförderung durchgeführt wird, ausschließlich von einer Eisenbahn eines dieser drei Staaten betrieben werden, die für den Binnenverkehr dieser Eisenbahn geltenden Vorschriften Anwendung, sofern die Gesetze und Vorschriften keines der beteiligten Staaten dem entgegenstehen.



*Artikel 3. VORBEHALT ÜBER DIE HAFTUNG BEI TÖTUNG  
UND VERLETZUNG VON REISENDEN*

§ 1. Jeder Staat kann bei der Unterzeichnung des Übereinkommens oder bei der Hinterlegung seiner Ratifikations-, Annahme-, Genehmigungs- oder Beitrittsurkunde sich das Recht vorbehalten, sämtliche Bestimmungen über die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden nicht anzuwenden, wenn sich der Unfall auf seinem Gebiet ereignet hat und der Reisende Angehöriger dieses Staates ist oder in diesem Staat seinen gewöhnlichen Aufenthalt hat.

§ 2. Jeder Staat, der den vorstehend genannten Vorbehalt angebracht hat, kann jederzeit durch Mitteilung an die Depositarregierung darauf verzichten. Der Verzicht auf den Vorbehalt wird einen Monat nach dem Tage wirksam, an dem die Depositarregierung den Staaten davon Kenntnis gegeben hat.

*Artikel 4. BEFÖRDERUNGSPFLICHT*

§ 1. Die Eisenbahn ist verpflichtet, Reisende und Reisegepäck gemäß den Einheitlichen Rechtsvorschriften zu befördern, sofern

- a) der Reisende die Einheitlichen Rechtsvorschriften, die Zusatzbestimmungen und die internationalen Tarife einhält,
- b) die Beförderung mit den Personen und den normalen Beförderungsmitteln möglich ist, die den regelmäßigen Bedürfnissen des Verkehrs genügen,
- c) die Beförderung nicht durch Umstände verhindert wird, welche die Eisenbahn nicht abzuwenden und denen sie auch nicht abzuwehren vermag.

§ 2. Hat die zuständige Behörde angeordnet, daß der Betrieb vorübergehend oder dauernd ganz oder teilweise eingestellt wird, so sind diese Maßnahmen unverzüglich der Öffentlichkeit und den Eisenbahnen bekanntzugeben; diese teilen sie den Eisenbahnen der anderen Staaten zwecks Veröffentlichung mit.

§ 3. Jede Zuwiderhandlung der Eisenbahn gegen diesen Artikel begründet einen Anspruch auf Ersatz des dadurch entstandenen Schadens.

*Artikel 5. TARIFE. SONDERABMACHUNGEN*

§ 1. Die internationalen Tarife müssen alle für die Beförderung maßgebenden besonderen Bedingungen, insbesondere die zur Berechnung des Beförderungspreises und der Nebengebühren notwendigen Angaben, und gegebenenfalls die Bedingungen für die Umrechnung der Währungen enthalten.

Die Bedingungen der internationalen Tarife dürfen von den Einheitlichen Rechtsvorschriften nur abweichen, wenn diese es ausdrücklich vorsehen.

§ 2. Die internationalen Tarife müssen gegenüber jedermann unter den gleichen Bedingungen angewendet werden.

§ 3. Die Eisenbahnen können Sonderabmachungen treffen, durch die Preisermäßigungen oder sonstige Vergünstigungen eingeräumt werden, soweit den in vergleichbarer Lage befindlichen Reisenden vergleichbare Bedingungen zugestanden werden.

Für den Eisenbahndienst, für Zwecke der öffentlichen Verwaltungen, für wohltätige Zwecke oder für Erziehungs- und Unterrichtszwecke können Preisermäßigungen oder sonstige Vergünstigungen gewährt werden.

Die gemäß Absatz 1 und 2 getroffenen Maßnahmen müssen nicht veröffentlicht werden.

§ 4. Die internationalen Tarife müssen nur in den Staaten veröffentlicht werden, deren Eisenbahnen an diesen Tarifen als Abgangs- oder Bestimmungsbahn beteiligt sind. Diese Tarife und ihre Änderungen treten an dem in der Veröffentlichung angegebenen Tag

in Kraft. Preiserhöhungen und andere Erschwerungen der Beförderungsbedingungen dieser Tarife treten jedoch frühestens sechs Tage nach ihrer Veröffentlichung in Kraft.

Durch Kursschwankungen bedingte Änderungen der in den internationalen Tarifen enthaltenen Beförderungspreise und Nebengebühren sowie Berichtigungen offensichtlicher Fehler treten am Tage nach ihrer Veröffentlichung in Kraft.

§ 5. Auf allen für den internationalen Verkehr geöffneten Bahnhöfen muß der Reisende die internationalen Tarife oder Auszüge aus diesen Tarifen einsehen können, welche die Preise der dort erhältlichen internationalen Fahrausweise und die entsprechenden Gepäckfrachten angeben.

#### *Artikel 6. RECHNUNGSEINHEIT. UMRECHNUNGS- UND ANNAHMEKURSE FÜR WÄHRUNGEN*

§ 1. Die in den Einheitlichen Rechtsvorschriften vorgesehene Rechnungseinheit ist das Sonderziehungsrecht, wie es vom Internationalen Währungsfonds definiert ist.

Der in Sonderziehungsrechten ausgedrückte Wert der Landeswährung eines Staates, der Mitglied des Internationalen Währungsfonds ist, wird nach der vom Internationalen Währungsfonds für seine eigenen Operationen und Transaktionen angewendeten Berechnungsmethode ermittelt.

§ 2. Der in Sonderziehungsrechten ausgedrückte Wert der Landeswährung eines Staates, der nicht Mitglied des Internationalen Währungsfonds ist, wird auf die von diesem Staat bestimmte Art und Weise berechnet.

Diese Berechnung muß in der Landeswährung soweit wie möglich zu demselben Realwert führen, wie er sich aus der Anwendung des § 1 ergeben würde.

§ 3. Für einen Staat, der nicht Mitglied des Internationalen Währungsfonds ist und dessen Gesetzgebung die Anwendung des § 1 oder des § 2 nicht erlaubt, wird die in den Einheitlichen Rechtsvorschriften vorgesehene Rechnungseinheit dem Wert von drei Goldfranken gleichgesetzt.

Der Goldfranken ist durch 10/31 Gramm Gold mit einem Feingehalt von 0,900 definiert.

Die Umrechnung des Goldfrankens muß in der Landeswährung soweit wie möglich zu demselben Realwert führen, wie er sich aus der Anwendung des § 1 ergeben würde.

§ 4. Innerhalb von drei Monaten nach der Inkraftsetzung des Übereinkommens und immer dann, wenn in ihrer Berechnungsmethode oder im Wert ihrer Landeswährung im Verhältnis zur Rechnungseinheit eine Veränderung eintritt, teilen die Staaten dem Zentralamt ihre Berechnungsmethode gemäß § 2 oder das Ergebnis der Umrechnung gemäß § 3 mit.

Das Zentralamt bringt den Staaten diese Mitteilungen zur Kenntnis.

§ 5. Die Eisenbahn hat die Kurse bekanntzugeben,

- a) zu denen sie die in ausländischer Währung ausgedrückten Beträge umrechnet, wenn sie in inländischen Zahlungsmitteln zu entrichten sind (Umrechnungskurse),
- b) zu denen sie ausländische Zahlungsmittel annimmt (Annahmekurse).

#### *Artikel 7. ZUSATZBESTIMMUNGEN*

§ 1. Zwei oder mehrere Staaten oder zwei oder mehrere Eisenbahnen können zur Ausführung der Einheitlichen Rechtsvorschriften Zusatzbestimmungen erlassen. Sie dürfen von den Einheitlichen Rechtsvorschriften nur abweichen, wenn diese es ausdrücklich vorsehen.

§ 2. Die Zusatzbestimmungen werden in der durch die Gesetze und Vorschriften jedes Staates vorgesehenen Form in Kraft gesetzt und veröffentlicht. Die Zusatzbestimmungen und ihre Inkraftsetzung werden dem Zentralamt mitgeteilt.

*Artikel 8. LANDESRECHT*

§ 1. Soweit in den Einheitlichen Rechtsvorschriften, in den Zusatzbestimmungen und in den internationalen Tarifen keine Bestimmungen getroffen sind, gilt das Landesrecht.

§ 2. Unter Landesrecht versteht man das Recht des Staates, in dem der Berechtigte seinen Anspruch geltend macht, einschließlich der Kollisionsnormen.

§ 3. Für die Anwendung der Bestimmungen über die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden gilt als Landesrecht das Recht des Staates, auf dessen Gebiet sich der Unfall des Reisenden ereignet hat, einschließlich der Kollisionsnormen.

## TITEL II. BEFÖRDERUNGSVERTRAG

Kapitel I. *BEFÖRDERUNG VON REISENDEN**Artikel 9. FAHRPLÄNE UND BENUTZUNG DER ZÜGE*

§ 1. Die Eisenbahn hat dem Publikum die Fahrpläne der Züge in geeigneter Weise zur Kenntnis zu bringen.

§ 2. Einschränkungen in der Benutzung bestimmter Züge oder Wagenklassen müssen aus den Fahrplänen oder den Tarifen zu ersehen sein.

*Artikel 10. AUSSCHLUSS VON DER BEFÖRDERUNG. BEDINGUNGSWEISE ZULASSUNG*

§ 1. Von der Beförderung sind ausgeschlossen oder können unterwegs davon ausgeschlossen werden:

- a) betrunkene Personen und solche, die den Anstand verletzen oder die in den einzelnen Staaten jeweils geltenden Vorschriften nicht beachten; solche Personen haben keinen Anspruch auf Erstattung des Fahrpreises und der Gepäckfracht;
- b) Personen, die wegen einer Krankheit oder aus anderen Gründen den Mitreisenden offensichtlich lästig fallen würden, wenn für sie nicht im voraus ein besonderes Abteil reserviert ist oder ihnen gegen Bezahlung angewiesen werden kann. Unterwegs erkrankte Personen sind jedoch zumindest bis zum nächsten geeigneten Bahnhof zu befördern, wo sie die nötige Pflege finden können; der gezahlte Fahrpreis ist abzüglich des Betrages für die durchfahrene Strecke gemäß Artikel 25 zu erstatten; das gleiche gilt gegebenenfalls für die Beförderung des Reisegepäcks.

§ 2. Für die Beförderung von Personen, die an ansteckenden Krankheiten leiden, sind die internationalen Abkommen und Vorschriften oder mangels solcher die Gesetze und Vorschriften jedes Staates maßgebend.

*Artikel 11. FAHRAUSWEISE*

§ 1. Die für eine internationale Beförderung gemäß den Einheitlichen Rechtsvorschriften ausgegebenen Fahrausweise müssen die Abkürzung CIV tragen. Übergangsweise ist das Zeichen  $\Phi$  zugelassen.

§ 2. Die internationalen Tarife oder die Vereinbarungen zwischen den Eisenbahnen bestimmen die Form und den Inhalt der Fahrausweise sowie die Sprache und die Schriftzeichen, die beim Druck und beim Ausfüllen zu verwenden sind.

§ 3. Soweit die internationalen Tarife keine Ausnahme vorsehen, müssen die Fahrausweise enthalten:

- a) den Abgangs- und den Bestimmungsbahnhof;
- b) den Beförderungsweg; wenn die Benutzung verschiedener Wege oder Beförderungsmittel gestattet ist, muß dies angegeben sein;

- c) die Zuggattung und die Wagenklasse;
- d) den Fahrpreis;
- e) den ersten Geltungstag;
- f) die Geltungsdauer.

§ 4. Fahrscheinhefte, die gemäß einem internationalen Tarif ausgegeben werden, bilden einen einzigen Fahrausweis im Sinne der Einheitlichen Rechtsvorschriften.

§ 5. Soweit die internationalen Tarife keine Ausnahme vorsehen, ist ein Fahrausweis nur übertragbar, wenn er nicht auf den Namen lautet und die Reise noch nicht angetreten ist.

§ 6. Der Reisende hat sich bei der Entgegennahme des Fahrausweises zu vergewissern, daß dieser seinen Angaben gemäß ausgefertigt ist.

§ 7. Die Geltungsdauer der Fahrausweise und die Fahrtunterbrechungen werden durch die internationalen Tarife geregelt.

#### *Artikel 12. BERECHTIGUNG ZUR FAHRT. REISENDER OHNE GÜLTIGEN FAHRAUSWEIS*

§ 1. Der Reisende muß vom Beginn der Reise an mit einem gültigen Fahrausweis versehen sein; er hat ihn bis zur Beendigung der Reise aufzubewahren, auf Verlangen jedem mit der Prüfung betrauten Eisenbahnbediensteten vorzuzeigen und bei Beendigung der Reise abzugeben. Die internationalen Tarife können Ausnahmen vorsehen.

§ 2. Unbefugt geänderte Fahrausweise sind ungültig und werden von den mit der Prüfung betrauten Eisenbahnbediensteten eingezogen.

§ 3. Der Reisende, der keinen gültigen Fahrausweis vorzeigen kann, hat außer dem Fahrpreis einen Zuschlag zu zahlen, der gemäß den Vorschriften zu berechnen ist, die von der den Zuschlag fordernden Eisenbahn anzuwenden sind.

§ 4. Der Reisende, der die sofortige Zahlung des Fahrpreises oder des Zuschlages verweigert, kann von der Beförderung ausgeschlossen werden. Wird ein Reisender ausgeschlossen, so kann er nicht verlangen, daß ihm sein Reisegepäck auf einem anderen als dem Bestimmungsbahnhof zur Verfügung gestellt wird.

#### *Artikel 13. FAHRPREISERMÄSSIGUNG FÜR KINDER*

§ 1. Kinder bis zum vollendeten fünften Lebensjahr, für die kein gesonderter Platz beansprucht wird, sind ohne Fahrausweis unentgeltlich zu befördern.

§ 2. Kinder vom vollendeten fünften bis zum vollendeten zehnten Lebensjahr und jüngere Kinder, für die ein gesonderter Platz beansprucht wird, sind zu ermäßigten Preisen zu befördern. Diese dürfen mit Ausnahme der Zuschläge für die Benutzung gewisser Züge oder Wagen nicht mehr als die Hälfte der Preise der Fahrausweise für Erwachsene betragen, unbeschadet der Aufrundung nach den Vorschriften, die von der den Fahrausweis ausgebenden Eisenbahn anzuwenden sind.

Diese Ermäßigung muß für Fahrausweise, die schon eine Ermäßigung gegenüber dem gewöhnlichen Fahrpreis für einfache Fahrt enthalten, nicht gewährt werden.

§ 3. Die internationalen Tarife können jedoch andere als die in den §§ 1 und 2 genannten Altersgrenzen vorsehen, sofern die Grenze für die in § 1 vorgesehene unentgeltliche Beförderung nicht niedriger als vier Jahre und die Grenze für die in § 2 vorgesehene Beförderung zu ermäßigten Preisen nicht niedriger als zehn Jahre ist.

#### *Artikel 14. BENUTZUNG DER PLÄTZE*

§ 1. Für die Benutzung, Anweisung und Reservierung von Plätzen in den Zügen gelten die von der Eisenbahn anzuwendenden Vorschriften.

§ 2. Unter den in den internationalen Tarifen enthaltenen Bedingungen kann der Reisende einen Platz in einer höheren Wagenklasse oder eine Zuggattung mit höherem Fahrpreis benutzen, als der Fahrausweis angibt, oder den Beförderungsweg ändern lassen.

*Artikel 15. MITNAHME VON HANDGEPÄCK UND TIEREN IN DIE PERSONENWAGEN*

§ 1. Der Reisende darf leicht tragbare Gegenstände (Handgepäck) unentgeltlich in die Personenwagen mitnehmen.

Jedem Reisenden steht für sein Handgepäck nur der Raum über und unter seinem Sitzplatz zur Verfügung oder ein entsprechender anderer Raum, wenn es sich um Wagen besonderer Bauart, insbesondere solche mit Gepäckabteil, handelt.

§ 2. In die Personenwagen dürfen nicht mitgenommen werden:

- a) die gemäß Artikel 18 Buchstabe e) von der Beförderung als Reisegepäck ausgeschlossenen Stoffe und Gegenstände, soweit die Zusatzbestimmungen oder die Tarife keine Ausnahme vorsehen;
- b) Gegenstände, die den Reisenden lästig fallen oder Schäden verursachen können;
- c) Gegenstände, deren Mitnahme zoll- oder sonstige verwaltungsbehördliche Vorschriften entgegenstehen;
- d) lebende Tiere, soweit die Zusatzbestimmungen oder die Tarife keine Ausnahme vorsehen.

§ 3. Die internationalen Tarife können vorsehen, unter welchen Bedingungen Gegenstände, die entgegen § 1 und § 2 Buchstabe b) in Personenwagen mitgenommen worden sind, gleichwohl als Hand- oder Reisegepäck weiterbefördert werden können.

§ 4. Die Eisenbahn ist berechtigt, bei begründeter Vermutung einer Zuwiderhandlung gegen § 2 Buchstabe a), b) und d) sich von der Beschaffenheit der in die Personenwagen mitgenommenen Gegenstände in Gegenwart des Reisenden zu überzeugen. Kann der Reisende, welcher die der Nachprüfung unterliegenden Gegenstände mitführt, nicht festgestellt werden, so führt die Eisenbahn die Nachprüfung in Gegenwart zweier bahnfremder Zeugen durch.

§ 5. Die in die Personenwagen mitgenommenen Gegenstände und Tiere sind vom Reisenden zu beaufsichtigen, es sei denn, er befindet sich in einem der in § 1 erwähnten Wagen besonderer Bauart und kann deshalb diese Aufsicht nicht ausüben.

§ 6. Der Reisende haftet für jeden Schaden, der durch Gegenstände oder Tiere verursacht wird, die er in den Personenwagen mitnimmt, sofern er nicht beweist, daß der Schaden auf ein Verschulden der Eisenbahn, ein Verschulden eines Dritten oder auf Umstände zurückzuführen ist, die der Reisende nicht vermeiden und deren Folgen er nicht abwenden konnte.

Diese Bestimmung berührt nicht die Haftung der Eisenbahn gemäß Artikel 26.

*Artikel 16. VERSÄUMUNG DES ANSCHLUSSES. AUSFALL VON ZÜGEN*

§ 1. Wird infolge einer Zugverspätung der Anschluß an einen anderen Zug versäumt oder fällt ein Zug ganz oder auf Teilstrecken aus und will der Reisende seine Reise fortsetzen, so hat die Eisenbahn, soweit möglich, den Reisenden mit seinem Hand- und Reisegepäck ohne Preiszuschlag mit einem Zug zu befördern, der auf der gleichen oder auf einer anderen Linie der am ursprünglichen Beförderungsweg beteiligten Eisenbahnen zum selben Bestimmungsbahnhof fährt und der es dem Reisenden ermöglicht, sein Reiseziel mit der geringsten Verspätung zu erreichen.

§ 2. Die Eisenbahn hat gegebenenfalls auf dem Fahrausweis die Versäumung des Anschlusses oder den Zugausfall zu bescheinigen, die Geltungsdauer des Fahrausweises, soweit erforderlich, zu verlängern und ihn mit einem Gültigkeitsvermerk für den neuen Weg, für eine höhere Wagenklasse oder für eine Zuggattung mit höherem Fahrpreis zu

versehen. Die Tarife oder die Fahrpläne können jedoch die Benutzung bestimmter Züge ausschließen.

## Kapitel II. BEFÖRDERUNG VON REISEGEPÄCK

### Artikel 17. ZUGELASSENE GEGENSTÄNDE

§ 1. Zur Beförderung als Reisegepäck sind für Reisezwecke bestimmte Gegenstände zugelassen, die in Reisekoffern, Körben, Handkoffern, Reisesäcken oder anderen Verpackungen dieser Art enthalten sind, ferner auch diese Verpackungen.

§ 2. Die internationalen Tarife können unter bestimmten Bedingungen Tiere und Gegenstände, die in § 1 nicht genannt sind, insbesondere begleitete Kraftfahrzeuge, die mit oder ohne Anhänger zur Beförderung übergeben werden, als Reisegepäck zulassen.

§ 3. Die Tarife oder die Fahrpläne können die Beförderung von Reisegepäck in bestimmten Zügen oder Zuggattungen ausschließen oder beschränken.

### Artikel 18. AUSGESCHLOSSENE GEGENSTÄNDE

Von der Beförderung als Reisegepäck sind ausgeschlossen:

- a) Gegenstände, deren Beförderung auch nur in einem der an der Beförderung des Reisegepäcks beteiligten Staaten verboten ist;
- b) Gegenstände, für die auch nur in einem der an der Beförderung des Reisegepäcks beteiligten Staaten die Post das alleinige Recht zur Beförderung hat;
- c) Handelswaren;
- d) sperrige oder zu schwere Gegenstände;
- e) gefährliche Stoffe und Gegenstände, insbesondere geladene Schußwaffen, explosive oder entzündbare Stoffe und Gegenstände, entzündend wirkende, giftige, radioaktive oder ätzende Stoffe sowie ekelerregende oder ansteckungsgefährliche Stoffe; die internationalen Tarife können gewisse dieser Stoffe und Gegenstände bedingungsweise als Reisegepäck zulassen.

### Artikel 19. ABFERTIGUNG UND BEFÖRDERUNG DES REISEGEPÄCKS

§ 1. Reisegepäck wird nur gegen Vorzeigen eines mindestens bis zum Bestimmungsbahnhof des Reisegepäcks gültigen Fahrausweises und nur über den auf dem Fahrausweis angegebenen Beförderungsweg abgefertigt.

Gilt der Fahrausweis über mehrere Beförderungswegen oder kommen verschiedene Bahnhöfe am gleichen Bestimmungsort in Frage, so hat der Reisende den Beförderungsweg oder den Bahnhof, nach dem das Reisegepäck abgefertigt werden soll, genau zu bezeichnen. Die Eisenbahn haftet nicht für die Folgen der Nichtbeachtung dieser Bestimmung durch den Reisenden.

§ 2. Wenn die Tarife es vorsehen, kann der Reisende während der Geltungsdauer der Fahrausweises Reisegepäck entweder für die ganze Strecke oder für beliebige Teilstrecken aufgeben.

§ 3. Die Tarife bestimmen, ob und unter welchen Bedingungen Reisegepäck ohne Vorzeigen eines Fahrausweises oder über einen anderen als den im vorgewiesenen Fahrausweis angegebenen Beförderungsweg abgefertigt wird. Wenn die Tarife die Annahme von Reisegepäck ohne Vorzeigen eines Fahrausweises vorsehen, gelten die Bestimmungen der Einheitlichen Rechtsvorschriften über die Rechte und Pflichten des Reisenden hinsichtlich seines Reisegepäcks für den Absender von Reisegepäck sinngemäß.

§ 4. Die Gepäckfracht muß bei der Aufgabe gezahlt werden.

§ 5. Im übrigen erfolgt die Abfertigung des Reisegepäcks gemäß den für den Aufgabebahnhof geltenden Vorschriften.

§ 6. Der Reisende kann gemäß den für den Aufgabebahnhof geltenden Vorschriften den Zug angeben, mit dem das Reisegepäck abgesandt werden soll. Macht er von diesem Recht keinen Gebrauch, so wird das Reisegepäck mit dem nächsten geeigneten Zug befördert.

Muß das Reisegepäck auf einem Anschlußbahnhof umgeladen werden, so ist es mit dem nächsten für die regelmäßige Gepäckbeförderung vorgesehenen Zug zu befördern.

Das Reisegepäck kann in der vorbezeichneten Weise nur befördert werden, wenn die Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften auf dem Aufgabebahnhof oder unterwegs dem nicht entgegensteht.

#### Artikel 20. GEPÄCKSCHEIN

§ 1. Bei der Aufgabe des Reisegepäcks ist dem Reisenden ein Gepäckschein zu übergeben.

§ 2. Die für eine internationale Beförderung ausgegebenen Gepäckscheine müssen die Abkürzung CIV tragen. Übergangsweise ist das Zeichen  $\text{C}$  zugelassen.

§ 3. Die internationalen Tarife oder die Vereinbarungen zwischen den Eisenbahnen bestimmen die Form und den Inhalt des Gepäckscheines sowie die Sprache und die Schriftzeichen, die beim Druck und beim Ausfüllen zu verwenden sind.

§ 4. Soweit in den internationalen Tarifen keine Ausnahme vorgesehen ist, muß der Gepäckschein enthalten:

- a) den Aufgabe- und den Bestimmungsbahnhof;
- b) den Beförderungsweg;
- c) den Tag der Aufgabe und den Zug, mit dem das Reisegepäck abgesandt werden soll;
- d) die Anzahl der Reisenden;
- e) die Anzahl und die Masse der Gepäckstücke;
- f) die Gepäckfracht und die sonstigen Kosten.

§ 5. Der Reisende hat sich beim Empfang des Gepäckscheines zu vergewissern, ob dieser seinen Angaben gemäß ausgefertigt ist.

#### Artikel 21. ZUSTAND, BESCHAFFENHEIT, VERPACKUNG UND KENNZEICHNUNG DES REISEGEPÄCKS

§ 1. Die Annahme von Gepäckstücken, deren Zustand oder Beschaffenheit mangelhaft oder deren Verpackung ungenügend ist oder die offensichtlich Spuren von Beschädigungen aufweisen, kann von der Eisenbahn verweigert werden. Werden sie gleichwohl zur Beförderung angenommen, so kann die Eisenbahn einen entsprechenden Vermerk in den Gepäckschein aufnehmen. Nimmt der Reisende den Gepäckschein mit einem solchen Vermerk an, so gilt dies als Beweis dafür, daß der Reisende die Richtigkeit dieses Vermerkes anerkannt hat.

§ 2. Der Reisende hat auf jedem Gepäckstück an gut sichtbarer Stelle haltbar, deutlich, unauslöschlich und unverwechselbar anzugeben:

- a) seinen Namen und seine Anschrift;
- b) den Bestimmungsbahnhof und das Bestimmungsland.

Nicht mehr zutreffende Kennzeichnungen müssen vom Reisenden unleserlich gemacht oder entfernt werden.

Die Eisenbahn kann die Annahme von Gepäckstücken ohne die vorgeschriebene Kennzeichnung verweigern.

*Artikel 22. VERANTWORTLICHKEIT DES REISENDEN. NACHPRÜFUNG. ZUSCHLAG*

§ 1. Der Reisende haftet für alle Folgen der Nichtbeachtung der Artikel 17, 18 und 21 § 2.

§ 2. Die Eisenbahn ist berechtigt, bei begründeter Vermutung einer Zuwiderhandlung nachzuprüfen, ob der Inhalt der Gepäckstücke den Vorschriften entspricht, wenn es die Gesetze und Vorschriften des Staates, in dem die Nachprüfung stattfinden soll, nicht verbieten. Der Reisende ist einzuladen, der Nachprüfung beizuwohnen. Erscheint er nicht oder ist er nicht zu erreichen, so sind für die Nachprüfung zwei bahnfremde Zeugen beizuziehen.

§ 3. Wird eine Zuwiderhandlung festgestellt, so hat der Reisende die Kosten der Nachprüfung zu zahlen. Bei einer Zuwiderhandlung gegen Artikel 17 und 18 kann die Eisenbahn, abgesehen von der Nachzahlung des Frachtunterschiedes und dem Ersatz des etwaigen Schadens, einen durch die internationalen Tarife festgesetzten Zuschlag erheben.

*Artikel 23. AUSLIEFERUNG*

§ 1. Das Reisegepäck wird gegen Rückgabe des Gepäckscheines und gegen Entrichtung der gegebenenfalls die Sendung belastenden Kosten ausgeliefert. Die Eisenbahn ist berechtigt, aber nicht verpflichtet, nachzuprüfen, ob der Inhaber des Gepäckscheines berechtigt ist, das Reisegepäck in Empfang zu nehmen.

§ 2. Der Auslieferung an den Inhaber des Gepäckscheines stehen gleich eine gemäß den für den ausliefernden Bahnhof geltenden Vorschriften erfolgte

- a) Übergabe des Reisegepäcks an die Zoll- oder Steuerverwaltung in deren Abfertigungs- oder Lagerräumen, wenn diese nicht unter der Obhut der Eisenbahn stehen,
- b) Übergabe von lebenden Tieren an einen Dritten zur Verwahrung.

§ 3. Der Inhaber des Gepäckscheines kann auf dem Bestimmungsbahnhof die Auslieferung des Reisegepäcks an der Ausgabestelle verlangen, sobald nach der Ankunft des Zuges, mit dem es zu befördern war, die zur Bereitstellung und gegebenenfalls zur Abfertigung durch die Zoll- oder sonstigen Verwaltungsbehörden erforderliche Zeit abgelaufen ist.

§ 4. Wird der Gepäckschein nicht zurückgegeben, so braucht die Eisenbahn das Reisegepäck nur demjenigen auszuliefern, der seine Berechtigung nachweist; bei unzureichendem Nachweis kann die Eisenbahn eine Sicherheitsleistung verlangen.

§ 5. Das Reisegepäck ist auf dem Bahnhof auszuliefern, nach dem es abgefertigt worden ist. Auf rechtzeitiges Verlangen des Inhabers des Gepäckscheines kann es jedoch, wenn die Umstände es gestatten und keine zoll- oder sonstigen verwaltungsbehördlichen Vorschriften dem entgegenstehen, gegen Rückgabe des Gepäckscheines und, wenn es die Tarife vorschreiben, gegen Vorzeigen des Fahrausweises auf dem Aufgabebahnhof zurückgegeben oder auf einem Unterwegsbahnhof ausgeliefert werden.

§ 6. Der Inhaber des Gepäckscheines, dem das Reisegepäck nicht gemäß § 3 ausgeliefert wird, kann verlangen, daß ihm auf dem Gepäckschein Tag und Stunde bescheinigt werden, zu denen er die Auslieferung verlangt hat.

§ 7. Auf Verlangen des Berechtigten ist die Eisenbahn verpflichtet, das Reisegepäck in seiner Gegenwart nachzuprüfen, um einen von ihm behaupteten Schaden festzustellen. Leistet die Eisenbahn seinem Verlangen nicht Folge, so kann der Berechtigte die Annahme des Reisegepäcks verweigern.

§ 8. Im übrigen erfolgt die Auslieferung des Reisegepäcks gemäß den für den ausliefernden Bahnhof geltenden Vorschriften.



### Kapitel III. *GEMEINSAME BESTIMMUNGEN FÜR DIE BEFÖRDERUNG VON PERSONEN UND REISEGEPÄCK*

#### *Artikel 24. ERFÜLLUNG VERWALTUNGSBEHÖRDLICHER VORSCHRIFTEN*

Der Reisende hat die zoll- oder sonstigen verwaltungsbehördlichen Vorschriften für sich, für die mitgenommenen Tiere sowie für sein Hand- und Reisegepäck zu erfüllen. Er hat der Untersuchung seines Hand- und Reisegepäckes beizuwohnen, soweit die Gesetze und Vorschriften jedes Staates keine Ausnahme vorsehen. Die Eisenbahn haftet dem Reisenden gegenüber nicht für den Schaden, der dadurch entsteht, daß der Reisende diesen Verpflichtungen nicht nachgekommen ist.

#### *Artikel 25. ERSTATTUNG UND NACHZAHLUNG*

§ 1. Der Beförderungspreis wird ganz oder teilweise erstattet, wenn

- a) der Fahrausweis nicht oder nur teilweise benutzt worden ist;
- b) der Fahrausweis wegen Platzmangels in einer niedrigeren Wagenklasse oder in einer Zuggattung mit niedrigerem Fahrpreis benutzt worden ist, als der Fahrausweis angibt;
- c) das Reisegepäck auf dem Aufgabebahnhof zurückgenommen oder auf einem Unterwegsbahnhof ausgeliefert worden ist.

§ 2. Die internationalen Tarife bestimmen, welche Papiere und Bescheinigungen zur Begründung des Erstattungsantrages vorzulegen sind, die Erstattungsbeträge sowie die davon abzuziehenden Gebühren.

Diese Tarife können in bestimmten Fällen die Erstattung des Beförderungspreises ausschließen oder an Bedingungen knüpfen.

§ 3. Jeder Anspruch auf Erstattung gemäß den vorstehenden Paragraphen und gemäß Artikel 10 § 1 Buchstabe b) ist verwirkt, wenn er bei der Eisenbahn nicht binnen einer Frist von sechs Monaten geltend gemacht worden ist. Die Frist beginnt bei Fahrausweisen mit dem auf den Ablauf ihrer Geltungsdauer folgenden Tag und bei Gepäckscheinen mit dem Tag ihrer Ausfertigung.

§ 4. Ist ein Tarif unrichtig angewendet worden oder sind bei der Berechnung oder bei der Erhebung des Beförderungspreises und sonstiger Kosten Fehler vorgekommen, so muß der zuviel oder zuwenig gezahlte Betrag von der Eisenbahn nur erstattet oder ihr nachgezahlt werden, wenn er 1 Rechnungseinheit je Fahrausweis oder Gepäckschein übersteigt.

§ 5. Für die Berechnung des zu erstattenden oder nachzuzahlenden Betrages ist der offizielle Umrechnungskurs des Tages anzuwenden, an dem der Beförderungspreis erhoben worden ist. Wird in einer anderen Währung als derjenigen gezahlt, in welcher der Beförderungspreis erhoben worden ist, so gilt der Umrechnungskurs des Tages, an dem diese Zahlung geleistet wird.

§ 6. In den durch diesen Artikel nicht geregelten Fällen und mangels einer Vereinbarung zwischen den Eisenbahnen sind die im Abgangsstaat geltenden Vorschriften anzuwenden.

### TITEL III. HAFTUNG

#### Kapitel I. *HAFTUNG DER EISENBAHN BEI TÖTUNG UND VERLETZUNG VON REISENDEN*

##### *Artikel 26. HAFTUNGSGRUND*

§ 1. Die Eisenbahn haftet für den Schaden, der dadurch entsteht, daß ein Reisender durch Unfall im Zusammenhang mit dem Eisenbahnbetrieb während seines Aufenthaltes in den Fahrzeugen oder beim Ein- oder Aussteigen getötet, verletzt oder sonst in seiner körperlichen oder in seiner geistigen Gesundheit beeinträchtigt wird.

Die Eisenbahn haftet ferner für den Schaden, der durch gänzlichen oder teilweisen Verlust oder durch Beschädigung von Sachen entsteht, die der durch einen solchen Unfall betroffene Reisende an sich trägt oder als Handgepäck mit sich führt; dies gilt auch für Tiere, die der Reisende mit sich führt.

§ 2. Die Eisenbahn ist von dieser Haftung befreit:

- a) wenn der Unfall durch außerhalb des Betriebes liegende Umstände verursacht worden ist und die Eisenbahn diese Umstände trotz Anwendung der nach Lage des Falles gebotenen Sorgfalt nicht vermeiden und deren Folgen nicht abwenden konnte;
- b) ganz oder teilweise, und zwar in dem Maße, in dem der Unfall auf ein Verschulden des Reisenden oder auf ein Verhalten des Reisenden zurückzuführen ist, das nicht dem gewöhnlichen Verhalten von Reisenden entspricht;
- c) wenn der Unfall auf das Verhalten eines Dritten zurückzuführen ist und die Eisenbahn dieses Verhalten trotz Anwendung der nach Lage des Falles gebotenen Sorgfalt nicht vermeiden und dessen Folgen nicht abwenden konnte; ist die Haftung der Eisenbahn danach nicht ausgeschlossen, so haftet sie unter den Beschränkungen der Einheitlichen Rechtsvorschriften voll, unbeschadet eines etwaigen Rückgriffsrechtes gegen den Dritten.

§ 3. Eine etwaige Haftung der Eisenbahn in den in § 1 nicht vorgesehenen Fällen wird durch die Einheitlichen Rechtsvorschriften nicht berührt.

§ 4. Die haftbare Eisenbahn im Sinne dieses Kapitels ist diejenige Eisenbahn, die nach der Liste gemäß Artikel 3 und 10 des Übereinkommens die Linie betreibt, auf der sich der Unfall ereignet hat. Besteht nach dieser Liste gemeinsamer Betrieb zweier Eisenbahnen, so ist jede von ihnen haftbar.

#### *Artikel 27. SCHADENERSATZ BEI TÖTUNG*

§ 1. Bei Tötung des Reisenden umfaßt der Schadenersatz:

- a) die infolge des Todes des Reisenden entstandenen notwendigen Kosten, insbesondere für die Leichenbeförderung, die Erd- und die Feuerbestattung;
- b) bei nicht sofortigem Eintritt des Todes den in Artikel 28 vorgesehenen Schadenersatz.

§ 2. Haben durch den Tod des Reisenden Personen, denen gegenüber er kraft Gesetzes unterhaltspflichtig war oder zukünftig unterhaltspflichtig geworden wäre, den Versorger verloren, so ist auch für diesen Verlust Ersatz zu leisten. Der Schadenersatzanspruch von Personen, denen der Reisende ohne gesetzliche Verpflichtung Unterhalt gewährt hat, richtet sich nach dem Landesrecht.

#### *Artikel 28. SCHADENERSATZ BEI VERLETZUNG*

Bei Verletzung oder sonstiger Beeinträchtigung der körperlichen oder der geistigen Gesundheit des Reisenden umfaßt der Schadenersatz:

- a) die notwendigen Kosten, insbesondere für Heilung und Pflege sowie für die Beförderung;
- b) den Vermögensnachteil, den der Reisende durch gänzliche oder teilweise Arbeitsunfähigkeit oder durch eine Vermehrung seiner Bedürfnisse erleidet.

#### *Artikel 29. ERSATZ ANDERER SCHÄDEN*

Ob und inwieweit die Eisenbahn für andere als die in Artikel 27 und 28 vorgesehenen Schäden Ersatz zu leisten hat, insbesondere für körperliche und seelische Unbill (*pretium doloris*) und für ästhetische Nachteile, richtet sich nach dem Landesrecht.

#### *Artikel 30. FORM UND BESCHRÄNKUNG DES SCHADENERSATZES BEI TÖTUNG UND VERLETZUNG*

§ 1. Der in Artikel 27 § 2 und 28 Buchstabe b) vorgesehene Schadenersatz ist in Form eines Kapitalbetrages zu leisten. Ist jedoch nach Landesrecht die Zuerkennung einer

Rente zulässig, so wird der Schadenersatz in dieser Form geleistet, wenn der verletzte Reisende oder die nach Artikel 27 § 2 Anspruchsberechtigten die Zahlung einer Rente verlangen.

§ 2. Die Höhe des gemäß § 1 zu leistenden Schadenersatzes bestimmt das Landesrecht. Bei Anwendung der Einheitlichen Rechtsvorschriften gilt jedoch für jeden Reisenden eine Höchstgrenze von 70 000 Rechnungseinheiten für den Kapitalbetrag oder eine diesem Betrag entsprechende Jahresrente, sofern das Landesrecht eine niedrigere Höchstgrenze vorsieht.

#### *Artikel 31. BESCHRÄNKUNG DES SCHADENERSATZES BEI VERLUST ODER BESCHÄDIGUNG VON SACHEN*

Haftet die Eisenbahn gemäß Artikel 26 § 1 Absatz 2, so hat sie Schadenersatz bis zur Höchstgrenze von 700 Rechnungseinheiten für jeden Reisenden zu leisten.

#### *Artikel 32. VERBOT VON HAFTUNGSBESCHRÄNKUNGEN*

Bestimmungen in Tarifen und in Sonderabmachungen zwischen der Eisenbahn und dem Reisenden, durch welche die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden im voraus ganz oder teilweise ausgeschlossen werden soll, die der Eisenbahn obliegende Beweislast umgekehrt wird oder niedrigere als die in Artikel 30 § 2 und 31 vorgesehenen Höchstgrenzen festgelegt werden, sind nichtig. Diese Nichtigkeit hat jedoch nicht die Nichtigkeit des Beförderungsvertrages zur Folge.

#### *Artikel 33. GEMISCHTE BEFÖRDERUNGEN*

§ 1. Die Bestimmungen über die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden sind, vorbehaltlich des § 2, nicht auf Schäden anzuwenden, die während der Beförderung auf einer in der Liste gemäß Artikel 3 und 10 des Übereinkommens eingetragenen Linie entstehen, die kein Schienenweg ist.

§ 2. Werden jedoch Eisenbahnwagen auf einem Fährschiff befördert, so sind die Bestimmungen über die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden auf die durch Artikel 26 § 1 erfaßten Schäden anzuwenden, die der Reisende durch Unfall im Zusammenhang mit dem Eisenbahnbetrieb während seines Aufenthaltes in diesen Wagen, beim Einsteigen in die Wagen oder beim Aussteigen aus den Wagen erleidet.

Für die Anwendung des vorstehenden Absatzes ist unter dem « Staat, auf dessen Gebiet sich der Unfall des Reisenden ereignet hat » der Staat zu verstehen, dessen Flagge das Fährschiff führt.

§ 3. Wenn die Eisenbahn infolge außerordentlicher Umstände genötigt ist, ihren Betrieb vorübergehend zu unterbrechen, und die Reisenden mit einem anderen Beförderungsmittel befördert oder befördern läßt, haftet sie gemäß dem für dieses Beförderungsmittel geltenden Recht. Artikel 18 des Übereinkommens sowie Artikel 8, 48 bis 53 und 55 der Einheitlichen Rechtsvorschriften bleiben jedoch anwendbar.

### *Kapitel II. HAFTUNG DER EISENBAHN FÜR DAS REISEGEPÄCK*

#### *Artikel 34. HAFTUNGSGEMEINSCHAFT DER EISENBAHNEN*

§ 1. Die Eisenbahn, die Reisegepäck unter Übergabe eines Gepäckscheines zur Beförderung angenommen hat, haftet für die Ausführung der Beförderung auf der ganzen Strecke bis zur Auslieferung.

§ 2. Jede folgende Eisenbahn tritt dadurch, daß sie das Reisegepäck übernimmt, in den Beförderungsvertrag ein und übernimmt die sich daraus ergebenden Verpflichtungen, unbeschadet der die Bestimmungsbahn betreffenden Bestimmungen des Artikels 51 § 3.

### Artikel 35. UMFANG DER HAFTUNG

§ 1. Die Eisenbahn haftet für den Schaden, der durch gänzlichen oder teilweisen Verlust oder durch Beschädigung des Reisegepäcks in der Zeit von der Annahme zur Beförderung bis zur Auslieferung entsteht, sowie für die verspätete Auslieferung.

§ 2. Die Eisenbahn ist von dieser Haftung befreit, wenn der Verlust, die Beschädigung oder die verspätete Auslieferung durch ein Verschulden des Reisenden, eine nicht von der Eisenbahn verschuldete Anweisung des Reisenden, besondere Mängel des Reisegepäcks oder Umstände verursacht worden ist, welche die Eisenbahn nicht vermeiden und deren Folgen sie nicht abwenden konnte.

§ 3. Die Eisenbahn ist von dieser Haftung befreit, wenn der Verlust oder die Beschädigung aus der mit einer oder mehreren der folgenden Tatsachen verbundenen besonderen Gefahr entstanden ist:

- a) Fehlen oder Mängel der Verpackung;
- b) natürliche Beschaffenheit des Reisegepäcks;
- c) Aufgabe von Gegenständen, die von der Beförderung als Reisegepäck ausgeschlossen sind.

### Artikel 36. BEWEISLAST

§ 1. Der Beweis, daß der Verlust, die Beschädigung oder die verspätete Auslieferung durch eine der in Artikel 35 § 2 erwähnten Tatsachen verursacht worden ist, obliegt der Eisenbahn.

§ 2. Legt die Eisenbahn dar, daß der Verlust oder die Beschädigung nach den Umständen des Falles aus einer oder mehreren der in Artikel 35 § 3 erwähnten besonderen Gefahren entstehen konnte, so wird vermutet, daß der Schaden daraus entstanden ist. Der Berechtigte hat jedoch das Recht nachzuweisen, daß der Schaden nicht oder nicht ausschließlich aus einer dieser Gefahren entstanden ist.

### Artikel 37. VERMUTUNG FÜR DEN VERLUST DES REISEGEPÄCKS

§ 1. Der Berechtigte kann ein Gepäckstück ohne weiteren Nachweis als verloren betrachten, wenn es nicht binnen 14 Tagen, nachdem seine Auslieferung gemäß Artikel 23 § 3 verlangt wurde, ausgeliefert oder zu seiner Verfügung bereitgestellt worden ist.

§ 2. Wird ein für verloren gehaltenes Gepäckstück binnen einem Jahr nach dem Verlangen auf Auslieferung wieder aufgefunden, so hat die Eisenbahn den Berechtigten zu benachrichtigen, wenn seine Anschrift bekannt ist oder sich ermitteln läßt.

§ 3. Der Berechtigte kann binnen 30 Tagen nach Empfang der Nachricht verlangen, daß ihm das Gepäckstück auf einem Bahnhof der Beförderungsstrecke ausgeliefert wird. In diesem Fall hat er die Kosten für die Beförderung des Gepäckstückes vom Aufgabebahnhof bis zu dem Bahnhof zu zahlen, auf dem das Gepäckstück ausgeliefert wird, und die erhaltene Entschädigung, abzüglich der ihm allenfalls erstatteten, in dieser Entschädigung enthaltenen Kosten, zurückzuzahlen. Er behält jedoch seine Ansprüche auf Entschädigung wegen verspäteter Auslieferung gemäß Artikel 40.

§ 4. Wird das wiederaufgefundene Gepäckstück nicht binnen der in § 3 vorgesehenen Frist zurückverlangt oder wird es später als ein Jahr nach dem Verlangen auf Auslieferung wiederaufgefunden, so verfügt die Eisenbahn darüber gemäß den Gesetzen und Vorschriften des Staates, dem sie angehört.

### Artikel 38. ENTSCHÄDIGUNG BEI VERLUST

§ 1. Bei gänzlichem oder teilweisem Verlust des Reisegepäcks hat die Eisenbahn ohne weiteren Schadenersatz zu zahlen:

- a) wenn die Höhe des Schadens nachgewiesen ist, eine Entschädigung in dieser Höhe, die jedoch 34 Rechnungseinheiten je fehlendes Kilogramm Bruttomasse oder 500 Rechnungseinheiten je Gepäckstück nicht übersteigen darf;

- b) wenn die Höhe des Schadens nicht nachgewiesen ist, eine Pauschalentschädigung von 10 Rechnungseinheiten je fehlendes Kilogramm Bruttomasse oder von 150 Rechnungseinheiten je Gepäckstück.

Die Art der Entschädigung, je fehlendes Kilogramm oder je Gepäckstück, wird durch die internationalen Tarife festgelegt.

§ 2. Die Eisenbahn hat außerdem Gepäckfracht, Zölle und sonstige aus Anlaß der Beförderung des verlorenen Gepäckstückes gezahlte Beträge zu erstatten.

#### Artikel 39. ENTSCHÄDIGUNG BEI BESCHÄDIGUNG

§ 1. Bei Beschädigung des Reisegepäcks hat die Eisenbahn ohne weiteren Schadenersatz eine Entschädigung zu zahlen, die der Wertminderung des Reisegepäcks entspricht.

§ 2. Die Entschädigung darf nicht übersteigen:

- a) wenn das gesamte Reisegepäck durch die Beschädigung entwertet ist, den Betrag, der bei ganzlichem Verlust zu zahlen wäre;
- b) wenn nur ein Teil des Reisegepäcks durch die Beschädigung entwertet ist, den Betrag, der bei Verlust des entwerteten Teiles zu zahlen wäre.

#### Artikel 40. ENTSCHÄDIGUNG BEI VERSPÄTETER AUSLIEFERUNG

§ 1. Bei verspäteter Auslieferung des Reisegepäcks hat die Eisenbahn für je angefangene 24 Stunden seit dem Verlangen auf Auslieferung, höchstens aber für 14 Tage, zu zahlen:

- a) wenn der Berechtigte nachweist, daß daraus ein Schaden, einschließlich einer Beschädigung, entstanden ist, eine Entschädigung in der Höhe des Schadens bis zu einem Höchstbetrag von 0,40 Rechnungseinheiten je Kilogramm Bruttomasse oder von 7 Rechnungseinheiten je Stück des verspätet ausgelieferten Reisegepäcks;
- b) wenn der Berechtigte nicht nachweist, daß daraus ein Schaden entstanden ist, eine Pauschalentschädigung von 0,07 Rechnungseinheiten je Kilogramm Bruttomasse oder von 1,40 Rechnungseinheiten je Stück des verspätet ausgelieferten Reisegepäcks.

Die Art der Entschädigung, je Kilogramm oder je Gepäckstück, wird durch die internationalen Tarife festgelegt.

§ 2. Bei ganzlichem Verlust des Reisegepäcks wird die Entschädigung gemäß § 1 nicht neben der des Artikels 38 geleistet.

§ 3. Bei teilweisem Verlust des Reisegepäcks wird die Entschädigung gemäß § 1 für den nicht verlorenen Teil geleistet.

§ 4. Bei einer Beschädigung des Reisegepäcks, die nicht Folge der verspäteten Auslieferung ist, wird die Entschädigung gemäß § 1 gegebenenfalls neben der des Artikels 39 geleistet.

§ 5. In keinem Fall darf die Entschädigung gemäß § 1 zuzüglich derjenigen der Artikel 38 und 39 insgesamt höher sein als die Entschädigung bei ganzlichem Verlust des Reisegepäcks.

#### Artikel 41. BEGLEITETE KRAFTFAHRZEUGE

§ 1. Wird ein begleitetes Kraftfahrzeug aus einem von der Eisenbahn zu vertretenden Umstand verspätet verladen oder wird es verspätet ausgeliefert, so hat die Eisenbahn, wenn der Berechtigte nachweist, daß daraus ein Schaden entstanden ist, eine Entschädigung zu zahlen, deren Betrag den Beförderungspreis für das Fahrzeug nicht übersteigen darf.

§ 2. Ergibt sich bei der Verladung aus einem von der Eisenbahn zu vertretenden Umstand eine Verspätung und verzichtet der Berechtigte deshalb auf die Durchführung des

Beförderungsvertrages, so wird ihm der Beförderungspreis für das Fahrzeug und die Reisenden erstattet. Weist er nach, daß aus dieser Verspätung ein Schaden entstanden ist, so kann er außerdem eine Entschädigung verlangen, deren Betrag den Beförderungspreis für das Fahrzeug nicht übersteigen darf.

§ 3. Bei gänzlichem oder teilweisem Verlust eines Fahrzeuges wird die dem Berechtigten für den nachgewiesenen Schaden zu zahlende Entschädigung nach dem Zeitwert des Fahrzeuges berechnet und darf 4000 Rechnungseinheiten nicht übersteigen. Ein Anhänger gilt mit oder ohne Ladung als ein Fahrzeug.

§ 4. Hinsichtlich der im Fahrzeug belassenen Gegenstände haftet die Eisenbahn nur für Schäden, die auf ihr Verschulden zurückzuführen sind. Der Gesamtbetrag der Entschädigung darf 700 Rechnungseinheiten nicht übersteigen.

Die Eisenbahn haftet nicht für Gegenstände, die auf dem Fahrzeug belassen werden.

§ 5. Im übrigen gelten die Bestimmungen über die Haftung für Reisegepäck auch bei der Beförderung von begleiteten Kraftfahrzeugen.

### Kapitel III. GEMEINSAME BESTIMMUNGEN ÜBER DIE HAFTUNG

#### Artikel 42. ENTSCHÄDIGUNG BEI VORSATZ ODER GROBER FAHRLÄSSIGKEIT

Ist der Schaden auf Vorsatz oder grobe Fahrlässigkeit der Eisenbahn zurückzuführen, so finden die Bestimmungen der Artikel 30, 31 und 38 bis 41 der Einheitlichen Rechtsvorschriften sowie die Bestimmungen des Landesrechtes, die den Schadenersatz auf einen festen Betrag begrenzen, keine Anwendung.

Im Falle grober Fahrlässigkeit ist die Entschädigung für Verlust, Beschädigung oder verspätete Auslieferung des Reisegepäcks jedoch auf das Doppelte der in Artikel 38 bis 41 vorgesehenen Höchstbeträge begrenzt.

#### Artikel 43. VERZINSUNG DER ENTSCHÄDIGUNG

§ 1. Der Berechtigte kann auf die Entschädigung Zinsen in Höhe von fünf Prozent jährlich beanspruchen, und zwar vom Tage der Reklamation gemäß Artikel 49 oder, wenn keine Reklamation vorangegangen ist, vom Tage der Klageerhebung an.

§ 2. Für Entschädigungen gemäß Artikel 27 und 28 laufen jedoch die Zinsen erst von dem Tag an, an dem die für die Bemessung des Schadenersatzes maßgebenden Umstände eingetreten sind, wenn dieser Tag später liegt als derjenige der Reklamation oder der Klageerhebung.

§ 3. Bei Reisegepäck können die Zinsen nur beansprucht werden, wenn die Entschädigung 4 Rechnungseinheiten je Gepäckschein übersteigt.

§ 4. Legt der Berechtigte der Eisenbahn bei Reisegepäck die zur abschließenden Behandlung der Reklamation erforderlichen Belege nicht innerhalb einer ihm gestellten angemessenen Frist vor, so ist der Lauf der Zinsen vom Ablauf dieser Frist an bis zur Übergabe dieser Belege gehemmt.

#### Artikel 44. HAFTUNG BEI EINEM NUKLEAREN EREIGNIS

Die Eisenbahn ist von der ihr gemäß den Einheitlichen Rechtsvorschriften obliegenden Haftung befreit, wenn der Schaden durch ein nukleares Ereignis verursacht worden ist und wenn gemäß den Gesetzen und Vorschriften eines Staates über die Haftung auf dem Gebiet der Kernenergie der Inhaber einer Kernanlage oder eine ihm gleichgestellte Person für diesen Schaden haftet.

#### Artikel 45. HAFTUNG DER EISENBAHN FÜR IHRE LEUTE

Die Eisenbahn haftet für ihre Bediensteten und für andere Personen, derer sie sich bei der Ausführung der Beförderung bedient.

Wenn jedoch diese Bediensteten und anderen Personen auf Verlangen eines Reisenden der Eisenbahn nicht obliegende Verrichtungen besorgen, gelten sie als Beauftragte des Reisenden, für den sie tätig sind.

#### *Artikel 46. SONSTIGE ANSPRÜCHE*

In allen Fällen, auf welche die Einheitlichen Rechtsvorschriften Anwendung finden, kann gegen die Eisenbahn ein Anspruch auf Schadenersatz, auf welchem Rechtsgrund er auch beruht, nur unter den darin vorgesehenen Voraussetzungen und Beschränkungen geltend gemacht werden.

Das gleiche gilt für Ansprüche gegen die Bediensteten und anderen Personen, für welche die Eisenbahn gemäß Artikel 45 haftet.

#### *Artikel 47. SONDERBESTIMMUNGEN*

§ 1. Vorbehaltlich des Artikels 41 richtet sich die Haftung der Eisenbahn für den Schaden, der durch Verspätung oder Ausfall eines Zuges oder durch Anschlußversäumnis entsteht, nach den Gesetzen und Vorschriften des Staates, in dem das schädigende Ereignis eingetreten ist.

§ 2. Vorbehaltlich des Artikels 26 haftet die Eisenbahn für Gegenstände und Tiere, deren Überwachung gemäß Artikel 15 § 5 dem Reisenden obliegt, sowie für Gegenstände, die der Reisende an sich trägt, nur insoweit, als der Schaden auf ihr Verschulden zurückzuführen ist.

§ 3. Die übrigen Artikel des Titels III und der Titel IV finden in den Fällen der §§ 1 und 2 keine Anwendung.

#### TITEL IV. GELTENDMACHUNG VON ANSPRÜCHEN

##### *Artikel 48. FESTSTELLUNG EINES TEILWEISEN VERLUSTES ODER EINER BESCHÄDIGUNG DES REISEGEPÄCKS*

§ 1. Wird ein teilweiser Verlust oder eine Beschädigung des Reisegepäckes von der Eisenbahn entdeckt oder vermutet oder vom Berechtigten behauptet, so hat die Eisenbahn je nach Art des Schadens den Zustand des Reisegepäckes, seine Masse und, soweit möglich, das Ausmaß und die Ursache des Schadens sowie den Zeitpunkt seines Entstehens unverzüglich in einer Tatbestandsaufnahme festzuhalten, und zwar wenn möglich in Gegenwart des Berechtigten.

Dem Berechtigten ist eine Abschrift dieser Tatbestandsaufnahme unentgeltlich auszuhändigen.

§ 2. Erkennt der Berechtigte die Feststellungen in der Tatbestandsaufnahme nicht an, so kann er verlangen, daß der Zustand und die Masse des Reisegepäckes sowie die Ursache und der Betrag des Schadens von einem durch die Parteien oder ein Gericht bestellten Sachverständigen festgestellt werden. Das Verfahren richtet sich nach den Gesetzen und Vorschriften des Staates, in dem die Feststellung erfolgt.

§ 3. Bei Verlust von Gepäckstücken hat der Berechtigte zur Erleichterung der Nachforschungen der Eisenbahn eine möglichst genaue Beschreibung der verlorenen Gepäckstücke zu geben.

##### *Artikel 49. REKLAMATIONEN*

§ 1. Reklamationen betreffend die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden sind schriftlich bei einer der nachstehend genannten Eisenbahnen einzureichen:

- a) bei der haftbaren Eisenbahn; falls gemäß Artikel 26 § 4 zwei Eisenbahnen haftbar sind, bei einer von ihnen;
- b) bei der Abgangsbahn;

- c) bei der Bestimmungsbahn;
- d) bei der Eisenbahn am Wohnsitz oder am gewöhnlichen Aufenthaltsort des Reisenden, sofern der Sitz dieser Eisenbahn sich auf dem Gebiet eines Mitgliedstaates befindet.

§ 2. Die übrigen Reklamationen aus dem Beförderungsvertrag sind schriftlich bei der in Artikel 51 §§ 2 und 3 genannten Eisenbahn einzureichen.

Bei der abschließenden Regelung der Reklamation kann die Eisenbahn die Rückgabe der Fahrausweise oder der Gepäckscheine verlangen.

§ 3. Zur Einreichung einer Reklamation sind die gemäß Artikel 50 zur gerichtlichen Geltendmachung von Ansprüchen gegen die Eisenbahn berechtigten Personen befugt.

§ 4. Die Fahrausweise, die Gepäckscheine und die sonstigen Belege, die der Berechtigte der Reklamation begeben will, sind im Original oder in Abschrift, auf Verlangen der Eisenbahn in gehörig beglaubigter Form, vorzulegen.

#### *Artikel 50. ZUR GERICHTLICHEN GELTENDMACHUNG VON ANSPRÜCHEN GEGEN DIE EISENBAHN BERECHTIGTE PERSONEN*

Zur gerichtlichen Geltendmachung von Ansprüchen gegen die Eisenbahn ist berechtigt, wer den Fahrausweis oder den Gepäckschein vorlegt oder andernfalls seine Berechtigung auf andere Weise nachweist.

#### *Artikel 51. EISENBAHNEN, GEGEN DIE ANSPRÜCHE GERICHTLICH GELTEND GEMACHT WERDEN KÖNNEN*

§ 1. Schadenersatzansprüche auf Grund der Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden können nur gegen die haftbare Eisenbahn im Sinne des Artikels 26 § 4 gerichtlich geltend gemacht werden. Bei gemeinsamem Betrieb zweier Eisenbahnen hat der Kläger die Wahl zwischen diesen Bahnen.

§ 2. Ansprüche auf Erstattung von Beträgen, die auf Grund des Beförderungsvertrages gezahlt worden sind, können gegen die Eisenbahn gerichtlich geltend gemacht werden, die den Betrag erhoben hat, oder gegen die Eisenbahn, zu deren Gunsten der Betrag erhoben worden ist.

§ 3. Sonstige Ansprüche aus dem Beförderungsvertrag können gegen die Abgangsbahn, die Bestimmungsbahn oder diejenige Eisenbahn gerichtlich geltend gemacht werden, auf deren Linien die den Anspruch begründende Tatsache eingetreten ist.

Gegen die Bestimmungsbahn können diese Ansprüche auch dann gerichtlich geltend gemacht werden, wenn sie das Reisegepäck nicht erhalten hat.

§ 4. Hat der Kläger die Wahl unter mehreren Eisenbahnen, so erlischt sein Wahlrecht, sobald die Klage gegen eine dieser Eisenbahnen eingereicht ist.

§ 5. Im Wege der Widerklage oder der Einrede können Ansprüche auch gegen eine andere als die in den §§ 2 und 3 genannten Eisenbahnen geltend gemacht werden, wenn sich die Klage auf denselben Beförderungsvertrag gründet.

#### *Artikel 52. ZUSTÄNDIGKEIT*

§ 1. Ist in Staatsverträgen oder Konzessionen nichts anderes bestimmt, so können Ansprüche, die auf die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden gegründet sind, nur vor den Gerichten des Staates geltend gemacht werden, auf dessen Gebiet sich der Unfall des Reisenden ereignet hat.

§ 2. Ist in Staatsverträgen oder Konzessionen nichts anderes bestimmt, so können andere auf die Einheitlichen Rechtsvorschriften gegründete Ansprüche nur vor den Gerichten des Staates geltend gemacht werden, dem die in Anspruch genommene Eisenbahn angehört.



Betreibt eine Eisenbahn mehrere selbständige Netze in verschiedenen Staaten, so wird jedes dieser Netze für die Anwendung dieses Paragraphen als gesonderte Eisenbahn angesehen.

*Artikel 53. ERLÖSCHEN DER ANSPRÜCHE AUS DER HAFTUNG BEI TÖTUNG UND VERLETZUNG VON REISENDEN*

§ 1. Alle Ansprüche des Berechtigten auf Grund der Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden sind erloschen, wenn er den Unfall des Reisenden nicht spätestens drei Monate, nachdem er vom Schaden Kenntnis erlangt hat, einer der Eisenbahnen anzeigt, bei denen die Reklamation gemäß Artikel 49 § 1 eingereicht werden kann.

Zeigt der Berechtigte der Eisenbahn den Unfall mündlich an, so hat diese ihm über die mündliche Anzeige eine Bestätigung auszustellen.

§ 2. Die Ansprüche erlöschen jedoch nicht, wenn

- a) der Berechtigte innerhalb der in § 1 vorgesehenen Frist eine Reklamation bei einer der in Artikel 49 § 1 genannten Eisenbahnen eingereicht hat;
- b) die haftbare Eisenbahn — oder, falls gemäß Artikel 26 § 4 zwei Eisenbahnen haftbar sind, eine von ihnen — innerhalb der in § 1 vorgesehenen Frist auf andere Weise vom Unfall des Reisenden Kenntnis erhalten hat;
- c) infolge von Umständen, die dem Berechtigten nicht zuzurechnen sind, der Unfall nicht oder nicht rechtzeitig angezeigt worden ist;
- d) der Berechtigte nachweist, daß der Unfall durch ein Verschulden der Eisenbahn verursacht worden ist.

*Artikel 54. ERLÖSCHEN DER ANSPRÜCHE AUS DEM GEPÄCKBEFÖRDERUNGSVERTRAG*

§ 1. Mit der Annahme des Reisegepäcks durch den Berechtigten sind alle Ansprüche gegen die Eisenbahn aus dem Beförderungsvertrag bei teilweisem Verlust, Beschädigung oder verspäteter Auslieferung erloschen.

§ 2. Die Ansprüche erlöschen jedoch nicht:

- a) bei teilweisem Verlust oder bei Beschädigung, wenn
  1. der Verlust oder die Beschädigung vor der Annahme des Reisegepäcks durch den Berechtigten gemäß Artikel 48 festgestellt worden ist;
  2. die Feststellung, die gemäß Artikel 48 hätte erfolgen müssen, nur durch Verschulden der Eisenbahn unterblieben ist;
- b) bei äußerlich nicht erkennbarem Schaden, der erst nach der Annahme des Reisegepäcks durch den Berechtigten festgestellt worden ist, wenn er
  1. die Feststellung gemäß Artikel 48 sofort nach der Entdeckung des Schadens und spätestens drei Tage nach der Annahme des Reisegepäcks verlangt und
  2. außerdem beweist, daß der Schaden in der Zeit zwischen der Annahme zur Beförderung und der Auslieferung entstanden ist;
- c) bei verspäteter Auslieferung, wenn der Berechtigte binnen 21 Tagen seine Rechte bei einer der in Artikel 51 § 3 genannten Eisenbahnen geltend gemacht hat;
- d) wenn der Berechtigte nachweist, daß der Schaden auf Vorsatz oder grobe Fahrlässigkeit der Eisenbahn zurückzuführen ist.

*Artikel 55. VERJÄHRUNG DER ANSPRÜCHE*

§ 1. Schadenersatzansprüche auf Grund der Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden verjähren:

- a) Ansprüche des Reisenden in drei Jahren, gerechnet vom ersten Tage nach dem Unfall;

- b) Ansprüche der anderen Berechtigten in drei Jahren, gerechnet vom ersten Tage nach dem Tod des Reisenden, spätestens aber in fünf Jahren, gerechnet vom ersten Tage nach dem Unfall.

§ 2. Andere Ansprüche aus dem Beförderungsvertrag verjähren in einem Jahr.

Die Verjährungsfrist beträgt jedoch zwei Jahre bei Ansprüchen

- a) wegen eines auf Vorsatz zurückzuführenden Schadens;  
b) im Fall eines Betruges.

§ 3. Die Verjährung gemäß § 2 beginnt bei Ansprüchen

- a) auf Entschädigung wegen gänzlichen Verlustes mit dem vierzehnten Tage nach Ablauf der Frist gemäß Artikel 23 § 3;  
b) auf Entschädigung wegen teilweisen Verlustes, Beschädigung oder verspäteter Auslieferung mit dem Tage der Auslieferung;  
c) auf Zahlung oder Erstattung des Beförderungspreises, von sonstigen Kosten oder Zuschlägen oder auf Berichtigung bei unrichtiger Tarifierung, fehlerhafter Berechnung oder Erhebung mit dem Tage der Zahlung oder, wenn keine Zahlung erfolgte, mit dem Tage, an dem sie hätte erfolgen sollen;  
d) auf eine von der Zoll- oder einer sonstigen Verwaltungsbehörde verlangte Nachzahlung mit dem Tage, an dem die betreffende Behörde das Verlangen gestellt hat;  
e) in allen anderen die Beförderung des Reisenden betreffenden Fällen mit dem Tage des Ablaufes der Geltungsdauer des Fahrausweises.

Der als Beginn der Verjährung bezeichnete Tag ist in keinem Fall in der Frist inbegriffen.

§ 4. Bei Einreichen einer Reklamation gemäß Artikel 49 mit den erforderlichen Belegen ist der Lauf der Verjährung bis zu dem Tage gehemmt, an dem die Eisenbahn die Reklamation durch schriftlichen Bescheid zurückweist und die Belege zurückgibt. Wird der Reklamation teilweise stattgegeben, so beginnt die Verjährung für den noch streitigen Teil der Reklamation wieder zu laufen. Wer sich auf die Einreichung einer Reklamation oder auf die Erteilung eines Bescheides und die Rückgabe der Belege beruft, hat dies zu beweisen.

Weitere Reklamationen, die denselben Anspruch betreffen, hemmen die Verjährung nicht.

§ 5. Verjährte Ansprüche können auch nicht im Wege der Widerklage oder der Einrede geltend gemacht werden.

§ 6. Vorbehaltlich vorstehender Bestimmungen gilt für die Hemmung und die Unterbrechung der Verjährung das Landesrecht.

## TITEL V. BEZIEHUNGEN DER EISENBAHNEN UNTEREINANDER

### Artikel 56. ABRECHNUNG UNTER DEN EISENBAHNEN

Jede Eisenbahn hat den beteiligten Eisenbahnen den ihnen zukommenden Anteil an dem Beförderungspreis zu zahlen, den sie erhoben hat oder hätte erheben müssen.

### Artikel 57. RÜCKGRIFF BEI VERLUST ODER BESCHÄDIGUNG

§ 1. Hat eine Eisenbahn gemäß den Einheitlichen Rechtsvorschriften eine Entschädigung für gänzlichen oder teilweisen Verlust oder für Beschädigung des Reisegepäcks geleistet, so steht ihr ein Rückgriffsrecht gegen die Eisenbahnen, die an der Beförderung beteiligt waren, gemäß den folgenden Bestimmungen zu:

- a) die Eisenbahn, die den Schaden verursacht hat, haftet ausschließlich dafür;

- b) haben mehrere Eisenbahnen den Schaden verursacht, so haftet jede Eisenbahn für den von ihr verursachten Schaden; ist eine Zuordnung nicht möglich, so wird die Entschädigung gemäß Buchstabe c) auf die Eisenbahnen aufgeteilt;
- c) wenn nicht nachgewiesen werden kann, daß eine oder mehrere Eisenbahnen den Schaden verursacht haben, wird die Entschädigung auf sämtliche Eisenbahnen, die an der Beförderung beteiligt waren, aufgeteilt, mit Ausnahme derjenigen, die beweisen, daß der Schaden nicht auf ihren Linien verursacht worden ist; die Aufteilung erfolgt im Verhältnis der Tarifkilometer.

§ 2. Bei Zahlungsunfähigkeit einer dieser Eisenbahnen wird der auf sie entfallende, aber von ihr nicht gezahlte Anteil auf alle anderen Eisenbahnen, die an der Beförderung beteiligt waren, im Verhältnis der Tarifkilometer aufgeteilt.

#### *Artikel 58. RÜCKGRIFF BEI VERSPÄTETER AUSLIEFERUNG*

Artikel 57 findet bei Entschädigung für verspätete Auslieferung Anwendung. Wurde die Verspätung durch mehrere Eisenbahnen verursacht, so ist die Entschädigung auf diese Eisenbahnen im Verhältnis der Dauer der auf ihren Linien entstandenen Verspätung aufzuteilen.

#### *Artikel 59. RÜCKGRIFFSVERFAHREN*

§ 1. Eine Eisenbahn, gegen die gemäß Artikel 57 oder 58 Rückgriff genommen wird, kann die Rechtmäßigkeit der durch die rückgriffnehmende Eisenbahn geleisteten Zahlung nicht bestreiten, wenn die Entschädigung gerichtlich festgesetzt worden ist, nachdem der erstgenannten Eisenbahn durch gehörige Streitverkündung die Möglichkeit gegeben war, dem Rechtsstreit beizutreten. Das Gericht der Hauptsache bestimmt die Fristen für die Streitverkündung und für den Beitritt.

§ 2. Die rückgriffnehmende Eisenbahn hat sämtliche Eisenbahnen, mit denen sie sich nicht gütlich geeinigt hat, mit ein und derselben Klage zu belangen; andernfalls erlischt das Rückgriffsrecht gegen die nicht belangten Eisenbahnen.

§ 3. Das Gericht hat in ein und demselben Urteil über alle Rückgriffe, mit denen es befaßt ist, zu entscheiden.

§ 4. Den beklagten Eisenbahnen steht kein weiterer Rückgriff zu.

§ 5. Rückgriffsverfahren dürfen nicht in das Entschädigungsverfahren einbezogen werden, das der aus dem Beförderungsvertrag Berechtigte angestrengt hat.

#### *Artikel 60. ZUSTÄNDIGKEIT BEIM RÜCKGRIFF*

§ 1. Das Gericht des Sitzes der Eisenbahn, gegen die der Rückgriff genommen wird, ist für solche Klagen ausschließlich zuständig.

§ 2. Ist die Klage gegen mehrere Eisenbahnen zu erheben, so hat die klagende Eisenbahn die Wahl unter den gemäß § 1 zuständigen Gerichten.

#### *Artikel 61. VEREINBARUNGEN ÜBER DEN RÜCKGRIFF*

Die Eisenbahnen können durch Vereinbarungen von den Bestimmungen dieses Titels über den gegenseitigen Rückgriff, mit Ausnahme derjenigen des Artikels 59 § 5, abweichen.

### TITEL VI. AUSNAHMEBESTIMMUNGEN

#### *Artikel 62. ABWEICHUNGEN*

Die Bestimmungen der Einheitlichen Rechtsvorschriften haben nicht den Vorrang gegenüber den Bestimmungen, die gewisse Staaten für ihren gegenseitigen Verkehr in Anwendung besonderer Verträge, wie etwa der Verträge über die Europäische Gemeinschaft für Kohle und Stahl und die Europäische Wirtschaftsgemeinschaft, zu treffen haben.

ANHANG B ZUM ÜBEREINKOMMEN ÜBER DEN INTERNATIONALEN  
EISENBAHNVERKEHR (COTIF) VOM 9. MAI 1980

*EINHEITLICHE RECHTSVORSCHRIFTEN FÜR DEN VERTRAG ÜBER DIE  
INTERNATIONALE EISENBAHNBEFÖRDERUNG VON GÜTERN (CIM)*

TITEL I. ALLGEMEINE BESTIMMUNGEN

*Artikel 1. ANWENDUNGSBEREICH*

§ 1. Vorbehaltlich der in Artikel 2 vorgesehenen Ausnahmen finden die Einheitlichen Rechtsvorschriften Anwendung auf alle Sendungen von Gütern, die mit durchgehendem Frachtbrief zur Beförderung auf einem Wege aufgegeben werden, der die Gebiete mindestens zweier Mitgliedstaaten berührt und ausschließlich Linien umfaßt, die in der Liste gemäß Artikel 3 und 10 des Übereinkommens eingetragen sind.

§ 2. In den Einheitlichen Rechtsvorschriften umfaßt der Ausdruck « Bahnhof » die Bahnhöfe der Eisenbahnen, die Häfen der Schifffahrtslinien und alle anderen für die Ausführung des Beförderungsvertrages geöffneten Stellen der Beförderungsunternehmen.

*Artikel 2. AUSNAHMEN VOM ANWENDUNGSBEREICH*

§ 1. Auf Sendungen, deren Versand- und Bestimmungsbahnhof im Gebiet desselben Staates liegen und die das Gebiet eines anderen Staates nur im Durchgang berühren, finden die Einheitlichen Rechtsvorschriften keine Anwendung,

- a) wenn die Durchgangslinien ausschließlich von einer Eisenbahn des Versandstaates betrieben werden oder
- b) wenn die beteiligten Staaten oder Eisenbahnen vereinbart haben, diese Sendungen nicht als international anzusehen.

§ 2. Auf Sendungen zwischen Bahnhöfen zweier Nachbarstaaten und auf Sendungen zwischen Bahnhöfen zweier Staaten über das Gebiet eines dritten Staates finden, wenn die Linien, auf denen die Beförderung durchgeführt wird, ausschließlich von einer Eisenbahn eines dieser drei Staaten betrieben werden, die für den Binnenverkehr dieser Eisenbahn geltenden Vorschriften Anwendung, sofern der Absender durch die Verwendung des entsprechenden Frachtbriefes dies beansprucht und die Gesetze und Vorschriften keines der beteiligten Staaten dem entgegenstehen.

*Artikel 3. BEFÖRDERUNGSPFLICHT*

§ 1. Die Eisenbahn ist verpflichtet, alle als Wagenladung aufgegebenen Güter gemäß den Einheitlichen Rechtsvorschriften zu befördern, sofern

- a) der Absender die Einheitlichen Rechtsvorschriften, die Zusatzbestimmungen und die Tarife einhält,
- b) die Beförderung mit den Personen und den normalen Beförderungsmitteln möglich ist, die den regelmäßigen Bedürfnissen des Verkehrs genügen,
- c) die Beförderung nicht durch Umstände verhindert wird, welche die Eisenbahn nicht abzuwenden und denen sie auch nicht abzuhelfen vermag.

§ 2. Die Eisenbahn ist zur Annahme von Gütern, deren Verladen, Umladen oder Abladen die Verwendung besonderer Vorrichtungen erfordert, nur verpflichtet, wenn die in Betracht kommenden Bahnhöfe über derartige Vorrichtungen verfügen.

§ 3. Die Eisenbahn ist nur verpflichtet, Güter anzunehmen, die unverzüglich befördert werden können; die für den Versandbahnhof geltenden Vorschriften bestimmen, in welchen Fällen Güter, die dieser Bedingung nicht entsprechen, vorläufig in Verwahrung zu nehmen sind.

§ 4. Hat die zuständige Behörde angeordnet, daß

- a) der Betrieb vorübergehend oder dauernd ganz oder teilweise eingestellt wird,
  - b) gewisse Sendungen ausgeschlossen oder nur bedingungsweise zugelassen werden,
- so sind diese Maßnahmen unverzüglich der Öffentlichkeit und den Eisenbahnen bekanntzugeben; diese teilen sie den Eisenbahnen der anderen Staaten zwecks Veröffentlichung mit.

§ 5. Die Eisenbahnen können im gegenseitigen Einverständnis die Beförderung von Gütern in gewissen Verbindungen auf bestimmte Grenzübergänge und auf bestimmte Durchgangsländer zusammenfassen.

Diese Maßnahmen werden dem Zentralamt mitgeteilt. Sie werden von den Eisenbahnen in besonderen Listen aufgeführt, wie internationale Tarife veröffentlicht und treten einen Monat nach dem Datum der Mitteilung an das Zentralamt in Kraft.

§ 6. Jede Zuwiderhandlung der Eisenbahn gegen diesen Artikel begründet einen Anspruch auf Ersatz des dadurch entstandenen Schadens.

#### Artikel 4. VON DER BEFÖRDERUNG AUSGESCHLOSSENE GEGENSTÄNDE

Von der Beförderung sind ausgeschlossen:

- a) Gegenstände, deren Beförderung auch nur in einem der beteiligten Staaten verboten ist;
- b) Gegenstände, für die auch nur in einem der an der Beförderung beteiligten Staaten die Post das alleinige Recht zur Beförderung hat;
- c) Gegenstände, die sich wegen ihres Umfanges, ihrer Masse oder ihrer Beschaffenheit mit Rücksicht auf die Anlagen oder die Betriebsmittel auch nur einer der beteiligten Eisenbahnen zur Beförderung nicht eignen;
- d) Stoffe und Gegenstände, die gemäß der Ordnung für die internationale Eisenbahnbeförderung gefährlicher Güter (RID), Anlage I zu den Einheitlichen Rechtsvorschriften, von der Beförderung ausgeschlossen sind, vorbehaltlich der in Artikel 5 § 2 vorgesehenen Abweichungen.

#### Artikel 5. BEDINGUNGSWEISE ZUR BEFÖRDERUNG ZUGELASSENE GEGENSTÄNDE

§ 1. Bedingungsweise zur Beförderung zugelassen sind:

- a) Stoffe und Gegenstände, die zu den Bedingungen des RID oder der in § 2 vorgesehenen Abkommen und Tarifbestimmungen zur Beförderung zugelassen sind;
- b) Leichensendungen, auf eigenen Rädern rollende Eisenbahnfahrzeuge, lebende Tiere sowie Gegenstände, deren Beförderung wegen ihres Umfanges, ihrer Masse oder ihrer Beschaffenheit besondere Schwierigkeiten verursacht, zu den Bedingungen der Zusatzbestimmungen; diese dürfen von den Einheitlichen Rechtsvorschriften abweichen.

Lebende Tiere müssen begleitet werden, wobei der Begleiter vom Absender zu stellen ist. Ein Begleiter ist jedoch nicht erforderlich, wenn dies in den internationalen Tarifen vorgesehen ist oder wenn die an der Beförderung beteiligten Eisenbahnen auf Verlangen des Absenders auf die Begleitung verzichten; in diesem Fall ist die Eisenbahn, vorbehaltlich einer gegenteiligen Abmachung, von ihrer Haftung für Verlust oder Beschädigung befreit, die aus einer Gefahr entstanden ist, die durch die Begleitung abgewendet werden sollte.

§ 2. Zwei oder mehrere Staaten können durch Abkommen oder zwei oder mehrere Eisenbahnen können durch Tarifbestimmungen Bedingungen vereinbaren, unter denen gewisse Stoffe oder gewisse Gegenstände, die durch das RID von der Beförderung ausgeschlossen sind, dennoch zur Beförderung zugelassen werden.

Die Staaten oder die Eisenbahnen können in gleicher Weise die im RID vorgesehenen Zulassungsbedingungen lockern.

Diese Abkommen und Tarifbestimmungen sind zu veröffentlichen und dem Zentralamt mitzuteilen; das Zentralamt bringt sie den Staaten zur Kenntnis.

*Artikel 6. TARIFE. SONDERABMACHUNGEN*

§ 1. Fracht und Nebengebühren sind gemäß den in jedem Staat zu Recht bestehenden und gehörig veröffentlichten Tarifen zu berechnen, die im Zeitpunkt des Abschlusses des Frachtvertrages in Kraft sind, auch wenn die Fracht getrennt für verschiedene Teilstrecken berechnet wird.

§ 2. Die Tarife müssen alle für die Beförderung maßgebenden besonderen Bedingungen, insbesondere die zur Berechnung der Fracht und der Nebengebühren notwendigen Angaben, und gegebenenfalls die Bedingungen für die Umrechnung der Währungen enthalten.

Die Bedingungen der Tarife dürfen von den Einheitlichen Rechtsvorschriften nur abweichen, wenn diese es ausdrücklich vorsehen.

§ 3. Die Tarife müssen gegenüber jedermann unter den gleichen Bedingungen angewendet werden.

§ 4. Die Eisenbahnen können Sonderabmachungen treffen, durch die Preisermäßigungen oder sonstige Vergünstigungen eingeräumt werden, soweit den in vergleichbarer Lage befindlichen Benutzern vergleichbare Bedingungen zugestanden werden.

Für den Eisenbahndienst, für Zwecke der öffentlichen Verwaltungen oder für wohltätige Zwecke können Preisermäßigungen oder sonstige Vergünstigungen gewährt werden.

Die gemäß Absatz 1 und 2 getroffenen Maßnahmen müssen nicht veröffentlicht werden.

§ 5. Die internationalen Tarife können für den internationalen Verkehr unter Ausschluß der Binnentarife verbindlich erklärt werden.

Die Anwendung eines internationalen Tarifes kann davon abhängig gemacht werden, daß sie im Frachtbrief ausdrücklich verlangt wird.

§ 6. Die Tarife und die Tarifänderungen gelten als gehörig veröffentlicht, sobald die Eisenbahn den Benutzern alle Einzelheiten zur Verfügung gestellt hat.

Internationale Tarife müssen nur in den Staaten veröffentlicht werden, deren Eisenbahnen an diesen Tarifen als Versand- oder Bestimmungsbahn beteiligt sind.

§ 7. Erhöhungen der Frachtsätze internationaler Tarife und andere Erschwerungen der Beförderungsbedingungen dieser Tarife treten frühestens 15 Tage nach ihrer Veröffentlichung in Kraft, mit Ausnahme nachstehender Fälle:

- a) wenn ein internationaler Tarif die Ausdehnung eines Binnentarifes auf die Gesamtstrecke vorsieht, gelten die Veröffentlichungsfristen dieses Binnentarifes;
- b) wenn die Erhöhungen der Frachtsätze eines internationalen Tarifes die Folge einer allgemeinen Erhöhung der Frachtsätze der Binnentarife einer der beteiligten Eisenbahnen sind, treten sie am Tage nach ihrer Veröffentlichung in Kraft, sofern die Anpassung der Frachtsätze des internationalen Tarifes an diese Erhöhung wenigstens 15 Tage vorher bekanntgegeben worden ist; diese Bekanntmachung darf jedoch nicht vor dem Zeitpunkt erfolgen, zu dem die Erhöhung der Frachtsätze der betreffenden Binnentarife veröffentlicht wird;
- c) wenn die Änderungen der in den internationalen Tarifen enthaltenen Frachten und Nebengebühren durch Kursschwankungen bedingt sind oder wenn offensichtliche Fehler berichtigt werden, treten diese Änderungen und Berichtigungen am Tage nach ihrer Veröffentlichung in Kraft.

§ 8. In Staaten, in denen keine Verpflichtung besteht, bestimmte Tarife zu veröffentlichen oder sie gegenüber jedermann unter den gleichen Bedingungen anzuwenden,

finden die Bestimmungen dieses Artikels keine Anwendung, soweit sie eine solche Verpflichtung enthalten.

§ 9. Außer der in den Tarifen vorgesehenen Fracht und den Nebengebühren darf die Eisenbahn nur ihre Auslagen erheben. Diese Auslagen sind gehörig festzustellen und im Frachtbrief getrennt, mit allen erforderlichen Beweismitteln, zu vermerken. Wenn diese Beweismittel aus Belegen bestehen, die dem Frachtbrief beigegeben sind, und wenn die Zahlung der entsprechenden Auslagen dem Absender obliegt, sind die Belege nicht dem Empfänger mit dem Frachtbrief, sondern dem Absender mit der in Artikel 15 § 7 erwähnten Kostenrechnung zu übergeben.

#### *Artikel 7. RECHNUNGSEINHEIT. UMRECHNUNGS- UND ANNAHMEKURSE FÜR WÄHRUNGEN*

§ 1. Die in den Einheitlichen Rechtsvorschriften vorgesehene Rechnungseinheit ist das Sonderziehungsrecht, wie es vom Internationalen Währungsfonds definiert ist.

Der in Sonderziehungsrechten ausgedrückte Wert der Landeswährung eines Staates, der Mitglied des Internationalen Währungsfonds ist, wird nach der vom Internationalen Währungsfonds für seine eigenen Operationen und Transaktionen angewendeten Berechnungsmethode ermittelt.

§ 2. Der in Sonderziehungsrechten ausgedrückte Wert der Landeswährung eines Staates, der nicht Mitglied des Internationalen Währungsfonds ist, wird auf die von diesem Staat bestimmte Art und Weise berechnet.

Diese Berechnung muß in der Landeswährung soweit wie möglich zu demselben Realwert führen, wie er sich aus der Anwendung des § 1 ergeben würde.

§ 3. Für einen Staat, der nicht Mitglied des Internationalen Währungsfonds ist und dessen Gesetzgebung die Anwendung des § 1 oder des § 2 nicht erlaubt, wird die in den Einheitlichen Rechtsvorschriften vorgesehene Rechnungseinheit dem Wert von drei Goldfranken gleichgesetzt.

Der Goldfranken ist durch 10/31 Gramm Gold mit einem Feingehalt von 0,900 definiert.

Die Umrechnung des Goldfrankens muß in der Landeswährung soweit wie möglich zu demselben Realwert führen, wie er sich aus der Anwendung des § 1 ergeben würde.

§ 4. Innerhalb von drei Monaten nach der Inkraftsetzung des Übereinkommens und immer dann, wenn in ihrer Berechnungsmethode oder im Wert ihrer Landeswährung im Verhältnis zur Rechnungseinheit eine Veränderung eintritt, teilen die Staaten dem Zentralamt ihre Berechnungsmethode gemäß § 2 oder das Ergebnis der Umrechnung gemäß § 3 mit.

Das Zentralamt bringt den Staaten diese Mitteilungen zur Kenntnis.

§ 5. Die Eisenbahn hat die Kurse bekanntzugeben,

- a) zu denen sie die in ausländischer Währung ausgedrückten Beträge umrechnet, wenn sie in inländischen Zahlungsmitteln zu entrichten sind (Umrechnungskurse),
- b) zu denen sie ausländische Zahlungsmittel annimmt (Annahmekurse).

#### *Artikel 8. BESONDERE BESTIMMUNGEN FÜR BESTIMMTE BEFÖRDERUNGEN*

§ 1. Für die Beförderung von Privatwagen sind in der Ordnung für die internationale Eisenbahnbeförderung von Privatwagen (RIP), Anlage II zu den Einheitlichen Rechtsvorschriften, besondere Bestimmungen vorgesehen.

§ 2. Für die Beförderung von Containern sind in der Ordnung für die internationale Eisenbahnbeförderung von Containern (RICO), Anlage III zu den Einheitlichen Rechtsvorschriften, besondere Bestimmungen vorgesehen.

§ 3. Für die Beförderung von Expreßgut können die Eisenbahnen durch Tarife besondere Bestimmungen vereinbaren, die der Ordnung für die internationale Eisenbahnbeförderung von Expreßgut (RIEx), Anlage IV zu den Einheitlichen Rechtsvorschriften, entsprechen.

§ 4. Zwei oder mehrere Staaten können durch Abkommen oder zwei oder mehrere Eisenbahnen können durch Zusatzbestimmungen oder Tarifbestimmungen Beförderungsbedingungen vereinbaren, die von den Einheitlichen Rechtsvorschriften abweichen dürfen, und zwar für

- a) Sendungen mit begebaren Frachtturkunden,
- b) Sendungen, die nur gegen Übergabe des Frachtbriefdoppels abgeliefert werden,
- c) Sendungen von Zeitungen,
- d) Sendungen, die für Messen oder Ausstellungen bestimmt sind,
- e) Sendungen von Lademitteln sowie Mitteln zum Schutze der beförderten Güter gegen Wärme und Kälte,
- f) Sendungen, die auf der ganzen Strecke oder auf Teilstrecken auf Grund von Frachtbriefen befördert werden, die nicht als Beleg für die Frachtberechnung und die Rechnungstellung dienen,
- g) Sendungen, die auf Grund von Belegen der automatischen Datenverarbeitung befördert werden.

#### *Artikel 9. ZUSATZBESTIMMUNGEN*

§ 1. Zwei oder mehrere Staaten oder zwei oder mehrere Eisenbahnen können zur Ausführung der Einheitlichen Rechtsvorschriften Zusatzbestimmungen erlassen. Sie dürfen von den Einheitlichen Rechtsvorschriften nur abweichen, wenn diese es ausdrücklich vorsehen.

§ 2. Die Zusatzbestimmungen werden in der durch die Gesetze und Vorschriften jedes Staates vorgesehenen Form in Kraft gesetzt und veröffentlicht. Die Zusatzbestimmungen und ihre Inkraftsetzung werden dem Zentralamt mitgeteilt.

#### *Artikel 10. LANDESRECHT*

§ 1. Soweit in den Einheitlichen Rechtsvorschriften, in den Zusatzbestimmungen und in den internationalen Tarifen keine Bestimmungen getroffen sind, gilt das Landesrecht.

§ 2. Unter Landesrecht versteht man das Recht des Staates, in dem der Berechtigte seinen Anspruch geltend macht, einschließlich der Kollisionsnormen.

### TITEL II. ABSCHLUSS UND AUSFÜHRUNG DES FRACHTVERTRAGES

#### *Artikel 11. ABSCHLUSS DES FRACHTVERTRAGES*

§ 1. Der Frachtvertrag ist abgeschlossen, sobald die Versandbahn das Gut mit dem Frachtbrief zur Beförderung angenommen hat. Als Zeichen der Annahme wird auf dem Frachtbrief und erforderlichenfalls auf jedem Zusatzblatt der Tagesstempel des Versandbahnhofes oder der maschinelle Buchungsvermerk mit dem Annahmedatum angebracht.

§ 2. Die Behandlung gemäß § 1 hat sofort nach vollständiger Auflieferung des im Frachtbrief bezeichneten Gutes und, soweit es die für den Versandbahnhof geltenden Vorschriften vorsehen, nach Zahlung der vom Absender übernommenen Kosten oder nach Hinterlegung einer Sicherheit gemäß Artikel 15 § 7 zu erfolgen. Diese Behandlung ist auf Verlangen des Absenders in seiner Gegenwart vorzunehmen.

§ 3. Der mit dem Tagesstempel oder dem maschinellen Buchungsvermerk versehene Frachtbrief dient als Beweis für den Abschluß und den Inhalt des Frachtvertrages.



§ 4. Für Güter, die der Absender gemäß den Tarifen oder gemäß einer auf dem Versandbahnhof zulässigen Abmachung zwischen ihm und der Eisenbahn zu verladen hat, dienen jedoch die Angaben im Frachtbrief über die Masse des Gutes oder die Stückzahl nur dann als Beweis gegen die Eisenbahn, wenn sie die Masse oder die Stückzahl nachgeprüft und dies im Frachtbrief vermerkt hat. Diese Angaben können gegebenenfalls auf andere Weise bewiesen werden.

Die Angaben im Frachtbrief über die Masse oder die Stückzahl dienen nicht als Beweis gegen die Eisenbahn, wenn der Unterschied zu diesen Angaben offensichtlich nicht auf einem tatsächlichen Verlust beruht. Dies ist insbesondere der Fall, wenn der Wagen dem Empfänger mit unversehrten Originalverschlüssen übergeben wird.

§ 5. Die Eisenbahn hat die Übernahme des Gutes und den Tag der Annahme zur Beförderung durch Anbringen des Tagesstempels oder des maschinellen Buchungsvermerkes auf dem Frachtbriefdoppel zu bescheinigen, bevor es dem Absender zurückgegeben wird.

Dieses Doppel hat nicht die Bedeutung des das Gut begleitenden Frachtbriefes oder eines Konnossementes.

#### Artikel 12. FRACHTBRIEF

§ 1. Der Absender hat einen ordnungsgemäß ausgefüllten Frachtbrief vorzulegen.

Für jede Sendung ist ein Frachtbrief zu verwenden. Ein Frachtbrief darf nur die Ladung eines einzigen Wagens zum Gegenstand haben. Die Zusatzbestimmungen dürfen von diesen Regeln abweichen.

§ 2. Die Eisenbahnen setzen für Frachtgut und für Eilgut das einheitliche Muster des Frachtbriefes fest, der ein für den Absender bestimmtes Doppel enthalten muß.

Die Wahl des Frachtbriefes durch den Absender zeigt an, ob das Gut als Frachtgut oder als Eilgut zu befördern ist. Vorbehaltlich einer Vereinbarung zwischen allen beteiligten Eisenbahnen ist es nicht zulässig, die Beförderung auf einer Teilstrecke als Eilgut und auf einer anderen Teilstrecke als Frachtgut vorzuschreiben.

Für bestimmte Verkehre, insbesondere zwischen Nachbarländern, können die Eisenbahnen in den Tarifen die Verwendung eines Frachtbriefes gemäß einem vereinfachten Muster vorschreiben.

§ 3. Der Frachtbrief ist in zwei oder gegebenenfalls in drei Sprachen zu drucken, von denen mindestens eine Arbeitssprache der Organisation sein muß.

Die internationalen Tarife können bestimmen, in welcher Sprache die Angaben des Absenders im Frachtbrief abzufassen sind. Andernfalls sind diese Angaben in einer der amtlichen Sprachen des Versandlandes abzufassen, und es ist eine Übersetzung in eine der Arbeitssprachen der Organisation beizufügen, sofern die Angaben nicht in einer dieser Sprachen abgefaßt sind.

Für die Angaben des Absenders im Frachtbrief sind lateinische Schriftzeichen zu verwenden, sofern die Zusatzbestimmungen oder die internationalen Tarife keine Abweichungen vorsehen.

#### Artikel 13. INHALT DES FRACHTBRIEFES

§ 1. Der Frachtbrief muß in jedem Fall enthalten:

- a) die Bezeichnung des Bestimmungsbahnhofes;
- b) den Namen und die Anschrift des Empfängers; als Empfänger darf nur eine einzelne natürliche Person oder ein anderes Rechtssubjekt angegeben werden;
- c) die Bezeichnung des Gutes;
- d) die Masse oder statt dessen eine ähnliche Angabe, die den für den Versandbahnhof geltenden Vorschriften entspricht;

- e) die Anzahl der Frachtstücke und die Art der Verpackung bei Stückgut sowie bei Wagenladungen, die im Eisenbahn-Seeverkehr umgeschlagen werden müssen, ohne Rücksicht darauf, ob die Ladungen aus einem oder aus mehreren Stücken bestehen;
- f) die Nummer des Wagens, bei Privatwagen außerdem die Eigenmasse, wenn das Verladen der Güter dem Absender obliegt;
- g) ein genaues Verzeichnis der durch die Zoll- oder sonstigen Verwaltungsbehörden vorgeschriebenen Papiere, die dem Frachtbrief beigegeben sind oder der Eisenbahn nach Angabe im Frachtbrief bei einem näher bezeichneten Bahnhof, bei einem Zollamt oder bei einer anderen amtlichen Stelle zur Verfügung stehen;
- h) den Namen und die Anschrift des Absenders; als Absender darf nur eine einzelne natürliche Person oder ein anderes Rechtssubjekt angegeben werden; wenn es die für den Versandbahnhof geltenden Vorschriften verlangen, hat der Absender seinem Namen und seiner Anschrift handschriftlich, durch Aufdruck oder durch Stempel seine Unterschrift hinzuzufügen.

Für die Begriffe « Wagenladung » und « Stückgut » sind die für den Versandbahnhof geltenden Vorschriften für die ganze Strecke maßgebend.

§ 2. Der Frachtbrief muß gegebenenfalls alle übrigen in den Einheitlichen Rechtsvorschriften vorgesehenen Angaben enthalten. Andere Angaben dürfen in den Frachtbrief nur aufgenommen werden, wenn sie durch die Gesetze und Vorschriften eines Staates, die Zusatzbestimmungen oder die Tarife vorgeschrieben oder zugelassen sind und den Einheitlichen Rechtsvorschriften nicht widersprechen.

§ 3. Der Absender darf jedoch an der dafür vorgesehenen Stelle des Frachtbriefes, aber nur zur Nachricht für den Empfänger und ohne jede Verbindlichkeit und Haftung der Eisenbahn, Vermerke anbringen, welche die Sendung betreffen.

§ 4. Es ist unzulässig, statt des Frachtbriefes andere Urkunden zu verwenden oder ihm andere als die durch die Einheitlichen Rechtsvorschriften, die Zusatzbestimmungen oder die Tarife vorgeschriebenen oder zugelassenen Papiere beigegeben.

#### Artikel 14. BEFÖRDERUNGSWEG UND ANZUWENDEnde TARIFE

§ 1. Der Absender kann im Frachtbrief den Beförderungsweg durch Angabe von Grenzübergängen oder Grenzbahnhöfen und gegebenenfalls von Übergangsbahnhöfen zwischen Eisenbahnen vorschreiben. Er darf nur Grenzübergänge oder Grenzbahnhöfe vorschreiben, die für den Verkehr in der betreffenden Verbindung zugelassen sind.

§ 2. Einer Wegevorschrift wird gleichgesetzt:

- a) die Bezeichnung der Bahnhöfe, auf denen die zoll- oder sonstigen verwaltungsbehördlichen Vorschriften zu erfüllen sind, sowie der Bahnhöfe, auf denen besondere Vorkehrungen für das Gut (Pflege lebender Tiere, Nachbeisung usw.) zu treffen sind;
- b) die Bezeichnung der anzuwendenden Tarife, wenn sie zur Feststellung der Bahnhöfe, zwischen denen die Tarife angewendet werden sollen, genügt;
- c) die Angabe, daß alle oder einzelne Kosten bis X (namentliche Bezeichnung eines Tarifschnittpunktes von Nachbarländern) gezahlt werden.

§ 3. Die Eisenbahn darf das Gut außer in den Fällen gemäß Artikel 3 §§ 4 und 5 und Artikel 33 § 1 nur unter folgenden Bedingungen auf einem anderen als dem vom Absender vorgeschriebenen Weg befördern:

- a) Die Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften sowie die besonderen Vorkehrungen für das Gut müssen immer auf den vom Absender bezeichneten Bahnhöfen erfolgen und
- b) Kosten und Lieferfrist dürfen nicht größer sein als bei Berechnung über den vom Absender vorgeschriebenen Weg.

Buchstabe *a*) gilt nicht für Stückgut, wenn eine der an der Beförderung beteiligten Eisenbahnen auf Grund einer Wegevorschrift in ihrer Ladeorganisation für den internationalen Stückgutverkehr den vom Absender vorgeschriebenen Beförderungsweg nicht einhalten kann.

§ 4. Kosten und Lieferfrist werden vorbehaltlich des § 3 über den vom Absender vorgeschriebenen Beförderungsweg oder andernfalls über den von der Eisenbahn gewählten Beförderungsweg berechnet.

§ 5. Der Absender kann die anzuwendenden Tarife im Frachtbrief vorschreiben. Die Eisenbahn hat diese Tarife anzuwenden, wenn deren Anwendungsbedingungen erfüllt sind.

§ 6. Genügen die Angaben des Absenders nicht, um den Beförderungsweg oder die anzuwendenden Tarife festzustellen, oder sind einzelne dieser Angaben miteinander unvereinbar, so hat die Eisenbahn den Beförderungsweg oder die Tarife zu wählen, die ihr für den Absender am vorteilhaftesten erscheinen.

§ 7. Die Eisenbahn haftet für einen aus der Wahl gemäß § 6 entstehenden Schaden nur bei Vorsatz oder grober Fahrlässigkeit.

§ 8. Besteht ein internationaler Tarif vom Versand- bis zum Bestimmungsbahnhof und hat die Eisenbahn mangels ausreichender Angaben des Absenders diesen Tarif angewendet, so hat sie auf Verlangen des Berechtigten den Unterschied zwischen der auf diese Weise berechneten Fracht und der Fracht zu erstatten, die sich durch Zusammenstoß anderer für dieselbe Beförderungsstrecke anwendbarer Tarife ergeben hätte, wenn der Unterschied 4 Rechnungseinheiten je Frachtbrief übersteigt.

Dasselbe gilt bei sonst gleichen Voraussetzungen, wenn die Eisenbahn mangels ausreichender Angaben des Absenders die Fracht durch Tarifzusammenstoß statt auf Grund eines anwendbaren, preislich günstigeren internationalen Tarifes berechnet hat.

#### *Artikel 15. ZAHLUNG DER KOSTEN*

§ 1. Die Kosten (Fracht, Nebengebühren, Zölle und sonstige von der Annahme zur Beförderung bis zur Ablieferung erwachsende Kosten) sind gemäß den folgenden Bestimmungen vom Absender oder vom Empfänger zu zahlen.

Für die Anwendung dieser Bestimmungen werden Beträge, die nach dem anzuwendenden Tarif bei der Frachtberechnung den Sätzen der Regel- oder Ausnahmetarife zuzuschlagen sind, als Fracht angesehen.

§ 2. Will der Absender die Kosten ganz oder teilweise übernehmen, so hat er dies im Frachtbrief durch einen der folgenden Vermerke anzugeben:

- a) 1. « Franko Fracht », wenn er nur die Fracht übernimmt;
2. « Franko Fracht einschließlich... », wenn er außer der Fracht noch weitere Kosten übernimmt; er hat diese Kosten genau zu bezeichnen; Zusätze, die nur Nebengebühren oder sonstige von der Annahme zur Beförderung bis zur Ablieferung erwachsende Kosten sowie Beträge betreffen können, die durch Zoll- oder sonstige Verwaltungsbehörden erhoben werden, dürfen nicht zu einer Teilung des Gesamtbetrages einer gleichen Kostengattung führen (z. B. Gesamtbetrag der Zölle und der den Zollbehörden zu zahlenden sonstigen Beträge, wobei die Mehrwertsteuer als eine besondere Kostengattung anzusehen ist);
3. « Franko Fracht bis X » (namentliche Bezeichnung eines Tarifschnittpunktes von Nachbarländern), wenn er die Fracht bis X übernimmt;
4. « Franko Fracht einschließlich... bis X » (namentliche Bezeichnung eines Tarifschnittpunktes von Nachbarländern), wenn er außer der Fracht bis X noch weitere Kosten übernimmt, unter Ausschluß aller Kosten, die sich auf das Nachbarland oder auf die anschließende Eisenbahn beziehen; Ziffer 2 gilt sinngemäß;
- b) « Franko aller Kosten », wenn er alle Kosten übernimmt (Fracht, Nebengebühren, Zölle und sonstige Kosten);

c) « Franko... », wenn er einen bestimmten Betrag übernimmt; bestimmen die Tarife nichts anderes, so muß dieser Betrag in der Währung des Versandlandes ausgedrückt werden.

Nebengebühren und sonstige Kosten, die gemäß den für den Versandbahnhof geltenden Vorschriften für die ganze in Betracht kommende Strecke berechnet werden, sowie die Gebühr für die Angabe des Interesses an der Lieferung gemäß Artikel 16 § 2 sind bei der Zahlung der Kosten gemäß Buchstabe a) Ziffer 4 immer ganz vom Absender zu zahlen.

§ 3. Die internationalen Tarife können für die Zahlung der Kosten die ausschließliche Verwendung bestimmter in § 2 vorgesehener Vermerke oder die Verwendung anderer Vermerke vorschreiben.

§ 4. Die Kosten, die der Absender nicht übernommen hat, gelten als auf den Empfänger überwiesen. Die Kosten gehen jedoch stets zu Lasten des Absenders, wenn der Empfänger weder den Frachtbrief eingelöst noch seine Rechte aus dem Frachtvertrag gemäß Artikel 28 § 4 geltend gemacht, noch den Frachtvertrag gemäß Artikel 31 abgeändert hat.

§ 5. Die Nebengebühren, wie Stand-, Lager- und Wiegegelder, deren Erhebung durch einen vom Empfänger zu vertretenden Umstand veranlaßt wird oder auf einem Verlangen des Empfängers beruht, sind immer von ihm zu zahlen.

§ 6. Die Versandbahn kann vom Absender die Vorauszahlung der Kosten fordern, wenn es sich um Güter handelt, die nach ihrem Ermessen raschem Verderb ausgesetzt sind oder wegen ihres geringen Wertes oder ihrer Natur nach die Kosten nicht sicher decken.

§ 7. Kann der Betrag der Kosten, die der Absender übernimmt, bei der Auflieferung nicht genau festgestellt werden, so werden diese Kosten in eine Frankaturrechnung eingetragen, über die spätestens 30 Tage nach Ablauf der Lieferfrist mit dem Absender abzurechnen ist. Die Eisenbahn kann gegen Quittung die Hinterlegung einer die Kosten ungefähr deckenden Summe als Sicherheit fordern. Dem Absender ist gegen Rückgabe der Quittung eine den Eintragungen in die Frankaturrechnung entsprechende aufgeschlüsselte Kostenrechnung auszuhändigen.

§ 8. Der Versandbahnhof muß im Frachtbrief und im Frachtbriefdoppel die als Frankatur erhobenen Kosten einzeln vermerken, soweit nicht die für den Versandbahnhof geltenden Vorschriften bestimmen, daß diese Kosten nur im Frachtbriefdoppel zu vermerken sind. In dem in § 7 erwähnten Fall sind diese Kosten weder im Frachtbrief noch im Frachtbriefdoppel zu vermerken.

#### *Artikel 16. INTERESSE AN DER LIEFERUNG*

§ 1. Für jede Sendung kann das Interesse an der Lieferung angegeben werden. Der Betrag des Interesses muß im Frachtbrief in Ziffern angegeben und in der Währung des Versandlandes, in einer anderen durch die Tarife festgesetzten Währung oder in der Rechnungseinheit ausgedrückt werden.

§ 2. Die Gebühr für die Angabe des Interesses an der Lieferung wird für die ganze in Betracht kommende Strecke gemäß den Tarifen der Versandbahn berechnet.

#### *Artikel 17. NACHNAHME UND BARVORSCHUSS*

§ 1. Der Absender kann das Gut bis zur Höhe seines Wertes zum Zeitpunkt der Annahme auf dem Versandbahnhof mit Nachnahme belasten. Der Nachnahmebetrag muß in der Währung des Versandlandes ausgedrückt werden; die Tarife können Ausnahmen vorsehen.

§ 2. Die Eisenbahn ist nur verpflichtet, die Nachnahme auszuführen, wenn der Betrag vom Empfänger eingezahlt ist. Dieser Betrag ist innerhalb einer Frist von 30 Tagen nach der Einzahlung zur Verfügung zu stellen; nach Ablauf dieser Frist ist er mit fünf Prozent jährlich zu verzinsen.

§ 3. Ist das Gut dem Empfänger ohne vorherige Einziehung der Nachnahme ganz oder zum Teil abgeliefert worden, so hat die Eisenbahn dem Absender den Schaden bis zum Betrag der Nachnahme zu ersetzen, vorbehaltlich eines Rückgriffes gegen den Empfänger.

§ 4. Für die Nachnahmesendung wird die in den Tarifen festgelegte Gebühr erhoben; diese Gebühr ist auch zu zahlen, wenn die Nachnahme durch eine Abänderung des Frachtvertrages gemäß Artikel 30 § 1 aufgehoben oder herabgesetzt wird.

§ 5. Barvorschüsse sind nur in Anwendung der für den Versandbahnhof geltenden Vorschriften zugelassen.

§ 6. Der Betrag der Nachnahme und der Betrag des Barvorschusses muß im Frachtbrief in Ziffern angegeben werden.

#### *Artikel 18. HAFTUNG FÜR DIE ANGABEN IM FRACHTBRIEF*

Der Absender haftet für die Richtigkeit seiner Angaben im Frachtbrief. Er trägt alle Folgen, die sich daraus ergeben, daß diese Angaben unrichtig, ungenau oder unvollständig sind oder nicht an der für sie vorgesehenen Stelle stehen. Reicht der Raum nicht aus, so hat der Absender an dieser Stelle einen Hinweis darauf anzubringen, wo sich die Fortsetzung der Angabe befindet.

#### *Artikel 19. ZUSTAND, VERPACKUNG UND KENNZEICHNUNG DES GUTES*

§ 1. Nimmt die Eisenbahn ein Gut zur Beförderung an, das offensichtlich Spuren von Beschädigungen aufweist, so kann sie verlangen, daß der Zustand des Gutes im Frachtbrief angegeben wird.

§ 2. Der Absender hat das Gut, soweit dessen Natur eine Verpackung erfordert, so zu verpacken, daß es gegen gänzlichen oder teilweisen Verlust und gegen Beschädigung während der Beförderung geschützt ist und weder Personen verletzen noch Betriebsmittel oder andere Güter beschädigen kann.

Im übrigen muß die Verpackung den für den Versandbahnhof geltenden Vorschriften entsprechen.

§ 3. Hat der Absender § 2 nicht eingehalten, so kann die Eisenbahn die Annahme des Gutes verweigern oder verlangen, daß der Absender im Frachtbrief das Fehlen oder den mangelhaften Zustand der Verpackung anerkennt und ihn genau beschreibt.

§ 4. Der Absender haftet für alle Folgen des Fehlens oder des mangelhaften Zustandes der Verpackung und hat der Eisenbahn insbesondere den ihr daraus entstandenen Schaden zu ersetzen. Enthält der Frachtbrief keine diesbezüglichen Angaben, so hat die Eisenbahn das Fehlen oder den mangelhaften Zustand der Verpackung nachzuweisen.

§ 5. Vorbehaltlich der in den Tarifen vorgesehenen Ausnahmen muß der Absender einer Stückgutsendung auf jedem Stück selbst oder auf einer von der Eisenbahn zugelassenen Etikette unverwechselbar und in genauer Übereinstimmung mit den Angaben im Frachtbrief deutlich und unauslöschlich angeben:

- a) den Namen und die Anschrift des Empfängers;
- b) den Bestimmungsbahnhof.

Im Eisenbahn-Seeverkehr sind die Angaben gemäß Buchstabe a) und b) auch auf jedem Stück einer Wagenladung anzubringen, die umgeschlagen werden muß.

Nicht mehr zutreffende Aufschriften oder Etiketten müssen vom Absender unleserlich gemacht oder entfernt werden.

§ 6. Vorbehaltlich der in den Zusatzbestimmungen oder in den Tarifen vorgesehenen Ausnahmen dürfen leicht zerbrechliche Güter oder Güter, die sich leicht im Wagen verstreuen, und Güter, die andere beschmutzen oder beschädigen können, nur als Wagenladungen befördert werden, es sei denn, sie werden so verpackt oder zusammen-

gefaßt, daß sie nicht zerbrechen, verlorengehen oder andere Güter beschmutzen oder beschädigen können.

#### Artikel 20. AUFLIEFERUNG UND VERLADUNG DES GUTES

§ 1. Das Verfahren bei der Auflieferung des Gutes richtet sich nach den für den Versandbahnhof geltenden Vorschriften.

§ 2. Ob das Verladen der Eisenbahn oder dem Absender obliegt, richtet sich nach den für den Versandbahnhof geltenden Vorschriften, soweit nicht die Einheitlichen Rechtsvorschriften etwas anderes bestimmen oder im Frachtbrief eine besondere Abmachung zwischen dem Absender und der Eisenbahn vermerkt ist.

Obliegt das Verladen dem Absender, so hat er die Lastgrenze zu beachten. Gelten auf den einzelnen zu durchlaufenden Teilstrecken unterschiedliche Lastgrenzen, so hat er die niedrigste dieser Lastgrenzen für den gesamten Beförderungsweg zu beachten. Die Bestimmungen über die einzuhaltenden Lastgrenzen sind wie Tarife zu veröffentlichen. Die Eisenbahn hat dem Absender auf Verlangen die einzuhaltende Lastgrenze bekanntzugeben.

§ 3. Wird das Gut vom Absender verladen, so haftet er für alle Folgen der mangelhaften Verladung und hat der Eisenbahn insbesondere den ihr daraus entstandenen Schaden zu ersetzen. Für die Zahlung der Kosten, die durch die Zurechtladung einer mangelhaften Verladung bedingt sind, gilt jedoch Artikel 15. Die Eisenbahn hat die mangelhafte Verladung nachzuweisen.

§ 4. Ob die Güter in gedeckten, in offenen, in offenen Wagen mit Decke oder in besonders eingerichteten Wagen befördert werden, richtet sich, soweit nicht die Einheitlichen Rechtsvorschriften etwas anderes bestimmen, nach den internationalen Tarifen. Bestehen keine solchen Tarife oder enthalten sie keine Bestimmungen darüber, so sind die für den Versandbahnhof geltenden Vorschriften für die ganze Strecke maßgebend.

§ 5. Das Verschließen der Wagen richtet sich nach den für den Versandbahnhof geltenden Vorschriften.

Der Absender hat im Frachtbrief die Anzahl und die Bezeichnung der Verschlüsse anzugeben, die er am Wagen anbringt.

#### Artikel 21. NACHPRÜFUNG

§ 1. Die Eisenbahn ist berechtigt, jederzeit nachzuprüfen, ob die Sendung mit den Angaben des Absenders im Frachtbrief übereinstimmt und ob die Bestimmungen für die Beförderung der bedingungsweise zugelassenen Güter eingehalten sind.

§ 2. Handelt es sich um die Nachprüfung des Inhaltes einer Sendung, so ist der Absender oder der Empfänger einzuladen, ihr beizuwohnen, je nachdem, ob die Nachprüfung auf dem Versand- oder auf dem Bestimmungsbahnhof stattfindet. Erscheint der Beteiligte nicht oder findet die Nachprüfung unterwegs statt, so sind zwei bahnfremde Zeugen beizuziehen, soweit nicht die Gesetze und Vorschriften des Staates, in dem die Nachprüfung stattfindet, etwas anderes bestimmen. Unterwegs darf die Eisenbahn den Inhalt jedoch nur dann nachprüfen, wenn es die Erfordernisse des Betriebes oder die zoll- oder sonstigen verwaltungsbehördlichen Vorschriften verlangen.

§ 3. Das Ergebnis der Nachprüfung der Angaben ist im Frachtbrief zu vermerken. Erfolgt die Nachprüfung auf dem Versandbahnhof, so ist das Ergebnis auch im Frachtbriefdoppel zu vermerken, wenn es sich bei der Eisenbahn befindet.

Stimmt die Sendung mit den Angaben im Frachtbrief nicht überein oder sind die Bestimmungen für die Beförderung der bedingungsweise zugelassenen Güter nicht eingehalten, so ist das Gut mit den durch die Nachprüfung verursachten Kosten belastet, falls sie nicht sofort beglichen werden.

*Artikel 22. FESTSTELLEN DER MASSE UND DER STÜCKZAHL*

§ 1. Die in jedem Staat geltenden Vorschriften legen fest, unter welchen Bedingungen die Eisenbahn die Masse des Gutes oder die Stückzahl sowie die tatsächliche Eigenmasse des Wagens festzustellen hat.

Die Eisenbahn hat im Frachtbrief das Ergebnis dieser Feststellungen zu vermerken.

§ 2. Ergibt eine von der Eisenbahn nach Abschluß des Frachtvertrages vorgenommene Verwiegung einen Unterschied, so bleibt die durch den Versandbahnhof festgestellte Masse oder andernfalls die vom Absender angegebene Masse für die Frachtberechnung maßgebend,

- a) wenn der Unterschied offensichtlich durch die Natur des Gutes oder durch Witterungseinflüsse verursacht worden ist oder
- b) wenn diese Verwiegung auf einer Gleiswaage vorgenommen worden ist und der Unterschied nicht mehr als zwei Prozent der durch den Versandbahnhof festgestellten Masse oder andernfalls der vom Absender angegebenen Masse beträgt.

*Artikel 23. ÜBERSCHREITUNG DER LASTGRENZE*

§ 1. Wird durch den Versandbahnhof oder durch einen Unterwegsbahnhof bei einem Wagen eine Überschreitung der Lastgrenze festgestellt, so kann die Überlast aus dem Wagen entfernt werden, selbst wenn kein Frachtzuschlag zu erheben ist. Gegebenenfalls ist der Absender, im Falle der Abänderung des Frachtvertrages gemäß Artikel 31 der Empfänger, unverzüglich zu ersuchen, wegen der Überlast eine Anweisung zu erteilen.

§ 2. Unbeschadet der Zahlung der Frachtzuschläge gemäß Artikel 24 wird die Fracht für die Überlast für die durchfahrene Strecke gemäß dem für die Hauptladung anzuwendenden Tarif berechnet. Die Kosten des Abladens der Überlast werden gemäß den Tarifen der ausführenden Eisenbahn berechnet.

Verfügt der Berechtigte, daß die Überlast zum Bestimmungsbahnhof der Hauptladung oder zu einem anderen Bestimmungsbahnhof befördert oder zum Versandbahnhof zurückgesandt werden soll, so wird sie als gesonderte Sendung behandelt.

*Artikel 24. FRACHTZUSCHLÄGE*

§ 1. Unbeschadet der Nachzahlung des Frachtunterschiedes und des Ersatzes eines etwaigen Schadens kann die Eisenbahn erheben:

- a) einen Frachtzuschlag von 1 Rechnungseinheit je Kilogramm Bruttomasse des ganzen Frachtstückes
  1. bei unrichtiger, ungenauer oder unvollständiger Bezeichnung der gemäß dem RID von der Beförderung ausgeschlossenen Stoffe und Gegenstände;
  2. bei unrichtiger, ungenauer oder unvollständiger Bezeichnung der gemäß dem RID bedingungsweise zur Beförderung zugelassenen Stoffe und Gegenstände oder bei Nichtbeachtung seiner Bedingungen;
- b) einen Frachtzuschlag von 5 Rechnungseinheiten je 100 Kilogramm der die Lastgrenze überschreitenden Masse, wenn der Wagen vom Absender beladen wurde;
- c) einen Frachtzuschlag in der Höhe des Doppelten des Unterschiedes
  1. zwischen der Fracht, die vom Versand- bis zum Bestimmungsbahnhof hätte erhoben werden müssen, und derjenigen, die berechnet wurde, bei unrichtiger, ungenauer oder unvollständiger Bezeichnung von Gütern, die nicht unter Buchstabe a) erwähnt sind, oder bei jeder Bezeichnung, die zur Anwendung eines niedrigeren als des für die Sendung tatsächlich anwendbaren Tarifes führen kann;
  2. zwischen der Fracht für die angegebene und derjenigen für die ermittelte Masse bei zu niedriger Angabe der Masse.

Besteht eine Sendung aus Gütern, für die verschiedene Frachtsätze gelten, und kann die Masse der einzelnen Güter leicht festgestellt werden, so wird der Frachtzuschlag nach dem für jedes der Güter geltenden Frachtsatz berechnet, wenn diese Berechnungsart einen niedrigeren Frachtzuschlag ergibt.

§ 2. Liegen bei demselben Wagen zu niedrige Angabe der Masse und Überschreitung der Lastgrenze vor, so werden die Frachtzuschläge für beide Verstöße nebeneinander erhoben.

§ 3. Die Frachtzuschläge belasten das Gut, gleichgültig, an welchem Ort die Tatsachen, die ihre Erhebung rechtfertigen, festgestellt worden sind.

§ 4. Die Höhe der Frachtzuschläge und der Grund für ihre Erhebung sind im Frachtbrief zu vermerken.

§ 5. Ein Frachtzuschlag kann nicht erhoben werden bei:

- a) unrichtiger Angabe der Masse, wenn die Eisenbahn gemäß den für den Versandbahnhof geltenden Vorschriften die Verwiegung vorzunehmen hat;
- b) unrichtiger Angabe der Masse oder Überschreitung der Lastgrenze, wenn der Absender im Frachtbrief die Verwiegung durch die Eisenbahn verlangt hat;
- c) einer während der Beförderung durch Witterungseinflüsse eingetretenen Überschreitung der Lastgrenze, wenn nachgewiesen wird, daß die Ladung des Wagens im Zeitpunkt der Auflieferung die Lastgrenze nicht überschritten hat;
- d) einer während der Beförderung eingetretenen Zunahme der Masse, ohne Überschreitung der Lastgrenze, wenn nachgewiesen wird, daß diese Zunahme auf Witterungseinflüsse zurückzuführen ist;
- e) unrichtiger Angabe der Masse, ohne Überschreitung der Lastgrenze, wenn der Unterschied zwischen der im Frachtbrief angegebenen und der festgestellten Masse drei Prozent der angegebenen Masse nicht übersteigt;
- f) Überschreitung der Lastgrenze, wenn die Eisenbahn die Lastgrenzen weder veröffentlicht noch sie dem Absender in einer Weise bekanntgegeben hat, die ihm gestattet, sie zu beachten.

#### Artikel 25. PAPIERE FÜR DIE ERFÜLLUNG VERWALTUNGSBEHÖRDLICHER VORSCHRIFTEN. ZOLLVERSCHLUSS

§ 1. Der Absender hat dem Frachtbrief die Papiere beizugeben, die zur Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften vor der Ablieferung des Gutes erforderlich sind. Diese Papiere dürfen nur Güter betreffen, die im selben Frachtbrief aufgeführt sind, soweit nicht die zoll- oder sonstigen verwaltungsbehördlichen Vorschriften oder die Tarife etwas anderes bestimmen.

Sind jedoch solche Papiere dem Frachtbrief nicht beigegeben oder sind sie vom Empfänger beizubringen, so hat der Absender im Frachtbrief den Bahnhof, das Zollamt oder eine andere amtliche Stelle anzugeben, wo diese Papiere der Eisenbahn zur Verfügung stehen und diese Vorschriften zu erfüllen sind. Wohnt der Absender der Behandlung durch die Zoll- oder sonstigen Verwaltungsbehörden selbst bei oder läßt er sich dabei durch einen Beauftragten vertreten, so genügt es, wenn die Papiere bei der Behandlung vorgelegt werden.

§ 2. Die Eisenbahn ist nicht verpflichtet zu prüfen, ob die beigegebenen Papiere vollständig und richtig sind.

§ 3. Der Absender haftet der Eisenbahn für jeden Schaden, der aus dem Fehlen, der Unzulänglichkeit oder der Unrichtigkeit dieser Papiere entsteht, sofern die Eisenbahn kein Verschulden trifft.

Die Eisenbahn haftet bei Verschulden für die Folgen, die sich daraus ergeben, daß die im Frachtbrief verzeichneten und ihm beigegebenen oder bei der Eisenbahn hinterlegten



Papiere in Verlust geraten oder unrichtig oder überhaupt nicht verwendet worden sind; sie hat aber in keinem Fall einen höheren Schadenersatz zu leisten als bei Verlust des Gutes.

§ 4. Der Absender hat für eine den zoll- oder sonstigen verwaltungsbehördlichen Vorschriften entsprechende Verpackung und Bedeckung der Güter zu sorgen. Hat der Absender die Güter nicht gemäß diesen Vorschriften verpackt oder bedeckt, so kann die Eisenbahn dies besorgen; die entstandenen Kosten belasten das Gut.

§ 5. Die Eisenbahn kann Sendungen zurückweisen, wenn der von den Zoll- oder sonstigen Verwaltungsbehörden angebrachte Verschuß verletzt oder mangelhaft ist.

#### *Artikel 26. ERFÜLLUNG VERWALTUNGSBEHÖRDLICHER VORSCHRIFTEN*

§ 1. Die zoll- oder sonstigen verwaltungsbehördlichen Vorschriften werden, solange das Gut unterwegs ist, von der Eisenbahn erfüllt. Sie kann jedoch diese Aufgabe einem Beauftragten übertragen.

§ 2. Bei der Erfüllung dieser Vorschriften haftet die Eisenbahn für ihr Verschulden oder dasjenige ihres Beauftragten; sie hat aber in keinem Fall einen höheren Schadenersatz zu leisten als bei Verlust des Gutes.

§ 3. Der Absender kann durch einen Vermerk im Frachtbrief oder der Empfänger durch eine Verfügung gemäß Artikel 31 verlangen,

- a) daß er selbst oder sein Beauftragter dieser Behandlung beiwohnt, um alle Auskünfte zu geben und sachdienliche Erklärungen vorzubringen;
- b) daß er selbst oder sein Beauftragter die Behandlung betreibt, soweit die Gesetze und Vorschriften des Staates, in dem sie vorgenommen wird, es zulassen;
- c) daß, sofern er selbst oder sein Beauftragter der Behandlung beiwohnt oder sie betreibt, er den Zoll und andere Kosten zahlt, soweit die Gesetze und Vorschriften des Staates, in dem diese Behandlung vorgenommen wird, die Zahlung durch ihn zulassen.

Weder der Absender noch der verfügungsberechtigte Empfänger, noch ihr Beauftragter dürfen das Gut in Besitz nehmen.

§ 4. Hat der Absender für die Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften einen Bahnhof bezeichnet, auf dem dies wegen der geltenden Vorschriften nicht möglich ist, oder hat er dafür ein anderes Verfahren vorgeschrieben, das nicht ausführbar ist, so handelt die Eisenbahn so, wie es ihr für den Berechtigten am vorteilhaftesten erscheint, und teilt dem Absender die getroffenen Maßnahmen mit.

Hat der Absender im Frachtbrief einen Frankaturvermerk verwendet, der die Zölle einschließt, so darf die Eisenbahn die Zollbehandlung unterwegs oder auf dem Bestimmungsbahnhof betreiben.

§ 5. Vorbehaltlich der in § 4 Absatz 2 vorgesehenen Ausnahme darf der Empfänger die Zollvorschriften auf dem Bestimmungsbahnhof erfüllen, falls dort ein Zollamt besteht, wenn entweder im Frachtbrief die Zollbehandlung auf dem Bestimmungsbahnhof verlangt wird oder, bei Fehlen eines solchen Verlangens, das Gut dort als Zollgut ankommt. Der Empfänger kann diese Vorschriften auch auf einem Bestimmungsbahnhof erfüllen, auf dem kein Zollamt besteht, wenn die Gesetze und Vorschriften des Staates es zulassen oder wenn die Eisenbahn und die Zollbehörde sich vorher damit einverstanden erklärt haben. Die Ausübung eines dieser Rechte setzt die vorherige Zahlung der das Gut belastenden Kosten voraus.

Löst der Empfänger den Frachtbrief nicht innerhalb der in den für den Bestimmungsbahnhof geltenden Vorschriften vorgesehenen Frist ein, so kann die Eisenbahn gemäß § 4 verfahren.

#### *Artikel 27. LIEFERFRISTEN*

§ 1. Die Lieferfristen werden durch Vereinbarungen zwischen den an der Beförderung beteiligten Eisenbahnen oder durch die vom Versand- bis zum Bestimmungs-

bahnhof anwendbaren internationalen Tarife festgesetzt. Für bestimmte Sonderverkehre und in bestimmten Verbindungen können diese Fristen auch auf Grund von Beförderungsplänen festgesetzt werden, die zwischen den beteiligten Bahnen anwendbar sind; in diesem Falle müssen sie in internationale Tarife oder in besondere Abmachungen aufgenommen werden, die von den §§ 3 bis 9 abweichen dürfen.

Die Lieferfristen dürfen in keinem Falle länger sein, als sie sich aus den folgenden Paragraphen ergeben.

§ 2. Soweit keine Lieferfristen gemäß § 1 festgesetzt sind, betragen sie vorbehaltlich der folgenden Paragraphen:

a) für Wagenladungen:

1. als Eilgut:

Abfertigungsfrist..... 12 Stunden,  
Beförderungsfrist je angefangene 400 km ..... 24 Stunden;

2. als Frachtgut:

Abfertigungsfrist..... 24 Stunden,  
Beförderungsfrist je angefangene 300 km ..... 24 Stunden;

b) für Stückgut:

1. als Eilgut:

Abfertigungsfrist..... 12 Stunden,  
Beförderungsfrist je angefangene 300 km ..... 24 Stunden;

2. als Frachtgut:

Abfertigungsfrist..... 24 Stunden,  
Beförderungsfrist je angefangene 200 km ..... 24 Stunden.

Alle Entfernungen beziehen sich auf Tarifkilometer.

§ 3. Die Beförderungsfrist ist nach der Gesamtentfernung zwischen dem Versand- und dem Bestimmungsbahnhof zu berechnen. Die Abfertigungsfrist ist ohne Rücksicht auf die Zahl der beteiligten Netze nur einmal zu rechnen.

§ 4. Die Eisenbahn darf Zuschlagsfristen von bestimmter Dauer für folgende Fälle festsetzen:

a) Sendungen, die außerhalb des Bahnhofes aufgeliefert oder abgeliefert werden;

b) Sendungen, die befördert werden:

1. über eine Linie oder über ein Netz, die für die rasche Behandlung der Sendungen nicht ausgerüstet sind,
2. über eine Verbindungsbahn, die zwei Linien desselben Netzes oder verschiedene Netze verbindet,
3. über eine Nebenbahn,
4. über Linien mit unterschiedlicher Spurweite,
5. über den Seeweg oder über Binnenwasserstraßen,
6. auf einer Straße, wenn keine Eisenbahnverbindung besteht;

c) Sendungen, die nach Binnen-Spezialtarifen oder -Ausnahmetarifen mit ermäßigten Frachtsätzen befördert werden;

d) außergewöhnliche Verhältnisse, die eine ungewöhnliche Verkehrszunahme oder ungewöhnliche Betriebsschwierigkeiten zur Folge haben.

§ 5. Die in § 4 Buchstabe *a)* bis *c)* vorgesehenen Zuschlagsfristen müssen aus den Tarifen oder aus den in jedem Staat gehörig veröffentlichten Vorschriften ersichtlich sein.

Die in § 4 Buchstabe *d)* vorgesehenen Zuschlagsfristen müssen veröffentlicht werden und treten nicht vor ihrer Veröffentlichung in Kraft.

§ 6. Die Lieferfrist beginnt mit der auf die Annahme des Gutes zur Beförderung folgenden Mitternacht. Ist jedoch der auf die Annahme folgende Tag ein Sonntag oder ein gesetzlicher Feiertag und ist der Versandbahnhof an diesem Sonntag oder Feiertag für den Eilgutverkehr nicht geöffnet, so beginnt die Lieferfrist für Eilgutsendungen 24 Stunden später.

§ 7. Die Lieferfrist wird um die Dauer des Aufenthaltes verlängert, der ohne Verschulden der Eisenbahn verursacht wird durch

- a)* Nachprüfung gemäß Artikel 21 und 22 § 1, sofern hierbei Abweichungen von den Angaben im Frachtbrief festgestellt werden;
- b)* Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften;
- c)* Abänderung des Frachtvertrages gemäß Artikel 30 oder 31;
- d)* besondere Vorkehrungen für das Gut;
- e)* Umladen oder Zurechtladen infolge mangelhafter Verladung durch den Absender;
- f)* jede Verkehrsunterbrechung, durch die der Beginn oder die Fortsetzung der Beförderung zeitweilig verhindert wird.

Ursache und Dauer dieser Verlängerungen sind im Frachtbrief zu vermerken. Sie können gegebenenfalls in anderer Weise bewiesen werden.

§ 8. Die Lieferfrist ruht für:

- a)* Frachtgut an Sonntagen und gesetzlichen Feiertagen;
- b)* Eilgut an Sonntagen und bestimmten gesetzlichen Feiertagen, wenn in einem Staat die geltenden Vorschriften ein Ruhen der Lieferfrist an diesen Tagen für ihren Eisenbahnbinnengüterverkehr vorsehen;
- c)* Fracht- und Eilgut an Samstagen, wenn in einem Staat die geltenden Vorschriften ein Ruhen der Lieferfrist an diesen Tagen für ihren Eisenbahnbinnengüterverkehr vorsehen.

§ 9. Würde die Lieferfrist nach Schluß der Dienststunden des Bestimmungsbahnhofes ablaufen, so endet sie erst zwei Stunden nach dem darauffolgenden Dienstbeginn.

Außerdem endet für Eilgutsendungen die Lieferfrist, wenn sie an einem unter § 8 Buchstabe *b)* bezeichneten Sonntag oder Feiertag ablaufen würde, erst mit der entsprechenden Stunde des darauffolgenden Werktages.

§ 10. Die Lieferfrist ist gewahrt, wenn vor ihrem Ablauf

- a)* der Empfänger von der Ankunft des Gutes benachrichtigt und das Gut zu seiner Verfügung bereitgestellt ist, sofern es sich um eine Sendung handelt, die auf dem Bahnhof abgeliefert werden muß und von deren Ankunft der Empfänger zu benachrichtigen ist;
- b)* das Gut zur Verfügung des Empfängers bereitgestellt ist, sofern es sich um eine Sendung handelt, die auf dem Bahnhof abgeliefert werden muß und von deren Ankunft der Empfänger nicht zu benachrichtigen ist;
- c)* das Gut dem Empfänger zur Verfügung gestellt ist, sofern es sich um eine Sendung handelt, die außerhalb des Bahnhofes abzuliefern ist.

### Artikel 28. ABLIEFERUNG

§ 1. Die Eisenbahn hat dem Empfänger auf dem Bestimmungsbahnhof, gegen Empfangsbescheinigung und gegen Zahlung der auf ihn überwiesenen Forderungen der Eisenbahn, den Frachtbrief zu übergeben und das Gut abzuliefern.

Die Annahme des Frachtbriefes verpflichtet den Empfänger, der Eisenbahn den Betrag der auf ihn überwiesenen Forderungen zu zahlen.

§ 2. Der Ablieferung an den Empfänger stehen gleich eine gemäß den für den Bestimmungsbahnhof geltenden Vorschriften erfolgte

- a) Übergabe des Gutes an die Zoll- oder Steuerverwaltung in deren Abfertigungs- oder Lagerräumen, wenn diese nicht unter der Obhut der Eisenbahn stehen,
- b) Einlagerung des Gutes bei der Eisenbahn oder seine Hinterlegung bei einem Spediteur oder in einem öffentlichen Lagerhaus.

§ 3. Die für den Bestimmungsbahnhof geltenden Vorschriften oder die Abmachungen mit dem Empfänger bestimmen, ob die Eisenbahn berechtigt oder verpflichtet ist, ihm das Gut anderswo als auf dem Bestimmungsbahnhof zuzustellen, sei es auf einem Anschlußgleis, an seinem Wohnsitz oder in einer Güternebenstelle der Eisenbahn. Wenn die Eisenbahn das Gut auf einem Anschlußgleis, am Wohnsitz des Empfängers oder in einer Güternebenstelle zustellt oder zustellen läßt, gilt das Gut mit dieser Zustellung als abgeliefert. Vorbehaltlich abweichender Abmachung zwischen der Eisenbahn und dem Anschlußgleisbenutzer fallen die von der Eisenbahn auf Rechnung und unter Leitung dieses Benutzers vorgenommenen Verrichtungen nicht unter den Beförderungsvertrag.

§ 4. Nach Ankunft des Gutes auf dem Bestimmungsbahnhof kann der Empfänger von der Eisenbahn die Übergabe des Frachtbriefes und die Ablieferung des Gutes verlangen.

Ist der Verlust des Gutes festgestellt oder ist das Gut innerhalb der in Artikel 39 § 1 vorgesehenen Frist nicht angekommen, so kann der Empfänger seine Rechte aus dem Frachtvertrag im eigenen Namen gegen die Eisenbahn geltend machen.

§ 5. Der Berechtigte kann die Annahme des Gutes auch nach Einlösung des Frachtbriefes und Zahlung der Kosten so lange verweigern, bis seinem Verlangen auf Feststellung eines behaupteten Schadens Folge geleistet ist.

§ 6. Im übrigen erfolgt die Ablieferung des Gutes gemäß den für den Bestimmungsbahnhof geltenden Vorschriften.

### Artikel 29. RICHTIGSTELLUNG ERHOBENER KOSTEN

§ 1. Ist ein Tarif unrichtig angewendet worden oder sind bei der Berechnung oder bei der Erhebung der Kosten Fehler vorgekommen, so muß der zuviel oder der zuwenig gezahlte Betrag von der Eisenbahn nur erstattet oder ihr nachgezahlt werden, wenn er 4 Rechnungseinheiten je Frachtbrief übersteigt. Die Erstattung erfolgt ohne weiteres.

§ 2. Wird der Frachtbrief nicht eingelöst, so hat der Absender der Eisenbahn die zuwenig gezahlten Beträge nachzuzahlen. Hat der Empfänger den Frachtbrief eingelöst oder den Frachtvertrag gemäß Artikel 31 abgeändert, so ist der Absender zur Nachzahlung nur bezüglich der Kosten verpflichtet, die gemäß dem Frankaturvermerk im Frachtbrief zu seinen Lasten gehen. Die Nachzahlung des Restbetrages obliegt dem Empfänger.

§ 3. Die gemäß diesem Artikel geschuldeten Beträge sind mit fünf Prozent jährlich zu verzinsen, und zwar vom Tage des Eingangs der Zahlungsaufforderung oder der in Artikel 53 vorgesehenen Reklamation oder, wenn keine Zahlungsaufforderung oder Reklamation vorangegangen ist, vom Tage der Klageerhebung an.

Legt der Berechtigte der Eisenbahn die zur abschließenden Behandlung der Reklamation erforderlichen Belege nicht innerhalb einer ihm gestellten angemessenen Frist vor, so ist der Lauf der Zinsen vom Ablauf dieser Frist an bis zur Übergabe dieser Belege gehemmt.

## TITEL III. ABÄNDERUNG DES FRACHTVERTRAGES

*Artikel 30. ABÄNDERUNG DURCH DEN ABSENDER*

§ 1. Der Absender kann den Frachtvertrag durch nachträgliche Verfügung abändern, indem er vorschreibt:

- a) die Rückgabe des Gutes auf dem Versandbahnhof;
- b) das Anhalten des Gutes unterwegs;
- c) das Aussetzen der Ablieferung des Gutes;
- d) die Ablieferung des Gutes an eine andere Person als den im Frachtbrief angegebenen Empfänger;
- e) die Ablieferung des Gutes auf einem anderen als dem im Frachtbrief angegebenen Bestimmungsbahnhof;
- f) die Rücksendung des Gutes zum Versandbahnhof;
- g) die Belastung mit einer Nachnahme;
- h) die Erhöhung, die Herabsetzung oder die Aufhebung einer Nachnahme;
- i) die Übernahme von Kosten einer unfrankierten Sendung oder die zusätzliche Übernahme von Kosten gemäß Artikel 15 § 2.

Die Tarife der Versandbahn können bestimmen, daß die Verfügungen gemäß Buchstabe g) bis i) nicht zulässig sind.

Die Zusatzbestimmungen oder die internationalen Tarife, die zwischen den an der Beförderung beteiligten Eisenbahnen gelten, können oben nicht angeführte Verfügungen zulassen.

Die Verfügungen dürfen nicht zu einer Teilung der Sendung führen.

§ 2. Diese Verfügungen sind dem Versandbahnhof durch schriftliche Erklärung gemäß dem von der Eisenbahn festgelegten und veröffentlichten Muster zu erteilen.

Diese Erklärung ist vom Absender auch im Frachtbriefdoppel, das der Eisenbahn zugleich mit der Erklärung vorzulegen ist, einzutragen und zu unterschreiben. Der Versandbahnhof bestätigt die Entgegennahme der Verfügung, indem er auf das Frachtbriefdoppel unterhalb der Erklärung des Absenders seinen Tagesstempel aufdrückt; das Doppel ist sodann dem Absender zurückzugeben.

Verlangt der Absender die Erhöhung, die Herabsetzung oder die Aufhebung einer Nachnahme, so muß er die ihm ausgestellte Bescheinigung vorweisen. Wird die Nachnahme erhöht oder herabgesetzt, so wird dem Absender diese Bescheinigung nach Berichtigung zurückgegeben; bei Aufhebung der Nachnahme wird die Bescheinigung nicht zurückgegeben.

Verfügungen, die diesen Formvorschriften nicht entsprechen, sind nichtig.

§ 3. Führt die Eisenbahn die Verfügungen des Absenders aus, ohne sich das Doppel vorlegen zu lassen, so haftet sie dem Empfänger für den dadurch verursachten Schaden, wenn der Absender ihm das Doppel übergeben hat. Sie hat aber in keinem Fall einen höheren Schadenersatz zu leisten als bei Verlust des Gutes.

§ 4. Das Recht des Absenders zur Abänderung des Frachtvertrages erlischt, auch wenn er das Frachtbriefdoppel besitzt, in den Fällen, in denen der Empfänger

- a) den Frachtbrief eingelöst,
- b) das Gut angenommen,
- c) seine Rechte gemäß Artikel 28 § 4 geltend gemacht hat oder
- d) gemäß Artikel 31 verfügungsberechtigt ist, sobald die Sendung in das Zollgebiet des Bestimmungslandes gelangt ist.

Von diesem Zeitpunkt an hat die Eisenbahn die Verfügungen und die Anweisungen des Empfängers zu befolgen.

*Artikel 31. ABÄNDERUNG DURCH DEN EMPFÄNGER*

§ 1. Hat der Absender die auf die Beförderung im Bestimmungsland entfallenden Kosten nicht übernommen und auch nicht den Vermerk « Empfänger nicht verfügungsberechtigt » im Frachtbrief angebracht, so kann der Empfänger den Frachtvertrag durch nachträgliche Verfügung abändern, indem er vorschreibt:

- a) das Anhalten des Gutes unterwegs;
- b) das Aussetzen der Ablieferung des Gutes;
- c) die Ablieferung des Gutes im Bestimmungsland an eine andere Person als den im Frachtbrief angegebenen Empfänger;
- d) die Ablieferung des Gutes im Bestimmungsland auf einem anderen als dem im Frachtbrief angegebenen Bestimmungsbahnhof, soweit die internationalen Tarife nichts anderes bestimmen;
- e) die Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften gemäß Artikel 26 § 3.

Die Zusatzbestimmungen oder die internationalen Tarife, die zwischen den an der Beförderung beteiligten Eisenbahnen gelten, können oben nicht angeführte Verfügungen zulassen.

Die Verfügungen dürfen nicht zu einer Teilung der Sendung führen.

Die Verfügungen des Empfängers werden erst wirksam, wenn die Sendung in das Zollgebiet des Bestimmungslandes gelangt ist.

§ 2. Diese Verfügungen sind dem Bestimmungsbahnhof oder dem Eintrittsbahnhof in das Bestimmungsland durch schriftliche Erklärung gemäß dem von der Eisenbahn festgelegten und veröffentlichten Muster zu erteilen.

Verfügungen, die diesen Formvorschriften nicht entsprechen, sind nichtig.

§ 3. Das Recht des Empfängers zur Abänderung des Frachtvertrages erlischt in den Fällen, in denen er

- a) den Frachtbrief eingelöst,
- b) das Gut angenommen,
- c) seine Rechte gemäß Artikel 28 § 4 geltend gemacht hat oder
- d) gemäß § 1 Buchstabe c) eine Person bezeichnet hat und sie den Frachtbrief eingelöst oder ihre Rechte gemäß Artikel 28 § 4 geltend gemacht hat.

§ 4. Hat der Empfänger vorgeschrieben, daß das Gut einer anderen Person abzuliefern ist, so ist sie nicht berechtigt, den Frachtvertrag abzuändern.

*Artikel 32. AUSFÜHRUNG DER NACHTRÄGLICHEN VERFÜGUNGEN*

§ 1. Die Eisenbahn darf die Ausführung der gemäß Artikel 30 oder 31 erteilten Verfügungen nur dann verweigern oder hinausschieben, wenn

- a) ihre Ausführung in dem Zeitpunkt nicht mehr möglich ist, in dem sie dem Bahnhof zugehen, der sie auszuführen hätte;
- b) durch ihre Ausführung der regelmäßige Beförderungsdienst gestört würde;
- c) ihrer Ausführung bei Änderung des Bestimmungsbahnhofes die Gesetze und Vorschriften eines Staates, insbesondere zoll- oder sonstige verwaltungsbehördliche Vorschriften, entgegenstehen;

d) bei Änderung des Bestimmungsbahnhofes der Wert des Gutes nach dem Ermessen der Eisenbahn nicht alle Kosten deckt, mit denen das Gut bis zum neuen Bestimmungsbahnhof belastet wird, es sei denn, diese Kosten werden sofort gezahlt oder ihre Zahlung gesichert.

Derjenige, der verfügt hat, ist so bald wie möglich von den Hindernissen zu verständigigen, die der Ausführung seiner Verfügung entgegenstehen.

Konnte die Eisenbahn diese Hindernisse nicht voraussehen, so trägt derjenige, der verfügt hat, alle Folgen, die sich daraus ergeben, daß die Eisenbahn seine Verfügung auszuführen begonnen hat.

§ 2. Die Kosten, die durch die Ausführung einer Verfügung entstehen, sind gemäß Artikel 15 zu zahlen, mit Ausnahme derjenigen, die auf ein Verschulden der Eisenbahn zurückzuführen sind.

§ 3. Trifft die Eisenbahn ein Verschulden, so haftet sie vorbehaltlich des § 1 für die Folgen, die sich daraus ergeben, daß sie eine Verfügung nicht oder nur mangelhaft ausführt. Sie hat aber in keinem Fall einen höheren Schadenersatz zu leisten als bei Verlust des Gutes.

### Artikel 33. BEFÖRDERUNGSHINDERNIS

§ 1. Bei einem Beförderungshindernis entscheidet die Eisenbahn, ob es zweckmäßig ist, das Gut ohne weiteres unter Abänderung des Beförderungsweges weiterzuleiten, oder ob es im Interesse des Absenders liegt, ihn um eine Anweisung zu ersuchen, wobei sie ihm alle nützlichen Angaben mitteilt, über die sie verfügt.

Trifft die Eisenbahn kein Verschulden, so kann sie die Fracht über den tatsächlichen Beförderungsweg erheben und die entsprechende Lieferfrist beanspruchen.

§ 2. Ist die Weiterbeförderung nicht möglich, so ersucht die Eisenbahn den Absender um eine Anweisung. Bei nur vorübergehenden Behinderungen auf Grund von Maßnahmen gemäß Artikel 3 § 4 ist sie nicht verpflichtet, eine Anweisung einzuholen.

§ 3. Der Absender kann im Frachtbrief für den Fall, daß ein Beförderungshindernis eintreten sollte, Anweisungen erteilen.

Ist die Eisenbahn der Ansicht, daß diese nicht ausgeführt werden können, so ersucht sie um neue Anweisungen.

§ 4. Der Absender kann auf die Benachrichtigung von einem Beförderungshindernis hin seine Anweisungen dem Versandbahnhof oder dem Bahnhof erteilen, auf dem sich das Gut befindet. Ändern diese Anweisungen die Bezeichnung des Empfängers oder des Bestimmungsbahnhofes oder werden sie dem Bahnhof erteilt, auf dem sich das Gut befindet, so muß der Absender die Anweisungen in das Frachtbriefdoppel eintragen und es der Eisenbahn vorlegen.

§ 5. Führt die Eisenbahn die Anweisungen des Absenders aus, ohne sich das Doppel vorlegen zu lassen, so haftet sie dem Empfänger für den dadurch verursachten Schaden, wenn der Absender ihm das Doppel übergeben hat. Sie hat aber in keinem Fall einen höheren Schadenersatz zu leisten als bei Verlust des Gutes.

§ 6. Erteilt der Absender auf die Benachrichtigung von einem Beförderungshindernis hin innerhalb angemessener Frist keine ausführbaren Anweisungen, so verfährt die Eisenbahn gemäß den Vorschriften über Ablieferungshindernisse, die an dem Ort gelten, an dem das Gut angehalten worden ist.

Ist das Gut verkauft worden, so ist der Erlös nach Abzug der Kosten, die das Gut belasten, zur Verfügung des Absenders zu halten. Ist der Erlös geringer als diese Kosten, so hat der Absender den Unterschied zu zahlen.

§ 7. Entfällt das Beförderungshindernis vor Eintreffen der Anweisungen des Absenders, so ist das Gut zum Bestimmungsbahnhof weiterzubefördern, ohne daß die

Anweisungen abgewartet werden; der Absender ist so bald wie möglich zu benachrichtigen.

§ 8. Tritt das Beförderungshindernis ein, nachdem der Empfänger den Frachtvertrag gemäß Artikel 31 abgeändert hat, so hat die Eisenbahn diesen Empfänger zu benachrichtigen. Die §§ 1, 2, 6, 7 und 9 gelten sinngemäß.

§ 9. Trifft die Eisenbahn kein Verschulden, so kann sie bei einem Beförderungshindernis Standgelder erheben.

§ 10. Für die gemäß Artikel 33 ausgeführten Beförderungen gilt Artikel 32.

#### *Artikel 34. ABLIEFERUNGSHINDERNIS*

§ 1. Bei einem Ablieferungshindernis hat der Bestimmungsbahnhof den Absender davon durch Vermittlung des Versandbahnhofes unverzüglich in Kenntnis zu setzen, um seine Anweisungen einzuholen. Der Absender ist unmittelbar schriftlich, telegraphisch oder fernschriftlich zu benachrichtigen, wenn er dies im Frachtbrief verlangt hat; die Kosten der Benachrichtigung belasten das Gut.

§ 2. Entfällt das Ablieferungshindernis, bevor Anweisungen des Absenders im Bestimmungsbahnhof eingetroffen sind, so ist das Gut dem Empfänger abzuliefern. Der Absender ist hiervon unverzüglich durch eingeschriebenen Brief zu benachrichtigen; die Kosten der Benachrichtigung belasten das Gut.

§ 3. Verweigert der Empfänger die Annahme des Gutes, so steht dem Absender das Anweisungsrecht auch dann zu, wenn er das Frachtbriefdoppel nicht vorlegen kann.

§ 4. Der Absender kann durch eine Angabe im Frachtbrief auch verlangen, daß ihm das Gut bei Eintritt eines Ablieferungshindernisses ohne weiteres zurückgesandt wird. Andernfalls bedarf es seines ausdrücklichen Einverständnisses.

§ 5. Sofern die Tarife nichts anderes bestimmen, müssen die Anweisungen des Absenders durch Vermittlung des Versandbahnhofes erteilt werden.

§ 6. Soweit oben nichts vorgesehen ist, verfährt die Eisenbahn, der die Ablieferung obliegt, gemäß den am Ort der Ablieferung geltenden Vorschriften.

Ist das Gut verkauft worden, so ist der Erlös nach Abzug der Kosten, die das Gut belasten, zur Verfügung des Absenders zu halten. Ist der Erlös geringer als diese Kosten, so hat der Absender den Unterschied zu zahlen.

§ 7. Tritt das Ablieferungshindernis ein, nachdem der Empfänger den Frachtvertrag gemäß Artikel 31 abgeändert hat, so hat die Eisenbahn diesen Empfänger zu benachrichtigen. Die §§ 1, 2 und 6 gelten sinngemäß.

§ 8. Für die gemäß Artikel 34 ausgeführten Beförderungen gilt Artikel 32.

#### TITEL IV. HAFTUNG

##### *Artikel 35. HAFTUNGSGEMEINSCHAFT DER EISENBAHNEN*

§ 1. Die Eisenbahn, die das Gut mit dem Frachtbrief zur Beförderung angenommen hat, haftet für die Ausführung der Beförderung auf der ganzen Strecke bis zur Ablieferung.

§ 2. Jede folgende Eisenbahn tritt dadurch, daß sie das Gut mit dem Frachtbrief übernimmt, in den Frachtvertrag nach Maßgabe dieses Frachtbriefes ein und übernimmt die sich daraus ergebenden Verpflichtungen, unbeschadet der die Empfangsbahn betreffenden Bestimmungen des Artikels 55 § 3.

##### *Artikel 36. UMFANG DER HAFTUNG*

§ 1. Die Eisenbahn haftet für den Schaden, der durch gänzlichen oder teilweisen Verlust oder durch Beschädigung des Gutes in der Zeit von der Annahme zur Beförderung bis zur Ablieferung sowie durch Überschreitung der Lieferfrist entsteht.



§ 2. Die Eisenbahn ist von dieser Haftung befreit, wenn der Verlust, die Beschädigung oder die Überschreitung der Lieferfrist durch ein Verschulden des Berechtigten, eine nicht von der Eisenbahn verschuldete Anweisung des Berechtigten, besondere Mängel des Gutes (inneren Verderb, Schwund usw.) oder Umstände verursacht worden ist, welche die Eisenbahn nicht vermeiden und deren Folgen sie nicht abwenden konnte.

§ 3. Die Eisenbahn ist von dieser Haftung befreit, wenn der Verlust oder die Beschädigung aus der mit einer oder mehreren der folgenden Tatsachen verbundenen besonderen Gefahr entstanden ist:

- a) Beförderung in offenen Wagen gemäß den maßgebenden Bestimmungen oder gemäß einer in den Frachtbrief aufgenommenen Abmachung zwischen dem Absender und der Eisenbahn;
- b) Fehlen oder Mängel der Verpackung bei Gütern, die ihrer Natur nach bei fehlender oder mangelhafter Verpackung Verlusten oder Beschädigungen ausgesetzt sind;
- c) Verladen der Güter durch den Absender oder Ausladen durch den Empfänger gemäß den maßgebenden Bestimmungen oder einer in den Frachtbrief aufgenommenen Abmachung zwischen dem Absender und der Eisenbahn oder einer Abmachung zwischen dem Empfänger und der Eisenbahn;
- d) mangelhafte Verladung, sofern die Verladung vom Absender gemäß den maßgebenden Bestimmungen oder einer in den Frachtbrief aufgenommenen Abmachung zwischen ihm und der Eisenbahn vorgenommen wurde;
- e) Erfüllung der zoll- oder sonstigen verwaltungsbehördlichen Vorschriften durch den Absender, den Empfänger oder einen Beauftragten;
- f) natürliche Beschaffenheit gewisser Güter, derzufolge sie gänzlichem oder teilweisem Verlust oder Beschädigung, insbesondere durch Bruch, Rost, inneren Verderb, Austrocknen, Verstreuen, ausgesetzt sind;
- g) unrichtige, ungenaue oder unvollständige Bezeichnung der von der Beförderung ausgeschlossenen oder nur bedingungsweise zugelassenen Gegenstände oder Nichtbeachtung der vorgeschriebenen Vorsichtsmaßnahmen für bedingungsweise zur Beförderung zugelassene Gegenstände durch den Absender;
- h) Beförderung lebender Tiere;
- i) Beförderung, die gemäß den maßgebenden Bestimmungen oder einer in den Frachtbrief aufgenommenen Abmachung zwischen dem Absender und der Eisenbahn unter Begleitung durchzuführen ist, wenn der Verlust oder die Beschädigung aus einer Gefahr entstanden ist, die durch die Begleitung abgewendet werden sollte.

#### Artikel 37. BEWEISLAST

§ 1. Der Beweis, daß der Verlust, die Beschädigung oder die Überschreitung der Lieferfrist durch eine der in Artikel 36 § 2 erwähnten Tatsachen verursacht worden ist, obliegt der Eisenbahn.

§ 2. Legt die Eisenbahn dar, daß der Verlust oder die Beschädigung nach den Umständen des Falles aus einer oder mehreren der in Artikel 36 § 3 erwähnten besonderen Gefahren entstehen konnte, so wird vermutet, daß der Schaden daraus entstanden ist. Der Berechtigte hat jedoch das Recht nachzuweisen, daß der Schaden nicht oder nicht ausschließlich aus einer dieser Gefahren entstanden ist.

Diese Vermutung gilt im Falle des Artikels 36 § 3 Buchstabe a) nicht bei außergewöhnlich großem Verlust oder bei Verlust ganzer Stücke.

#### Artikel 38. VERMUTUNG BEI NEUAUFGABE

§ 1. Wurde eine gemäß den Einheitlichen Rechtsvorschriften aufgegebene Sendung gemäß denselben Rechtsvorschriften neu aufgegeben und wird nach dieser Neuaufgabe ein teilweiser Verlust oder eine Beschädigung festgestellt, so wird vermutet, daß der teilweise

Verlust oder die Beschädigung während des letzten Frachtvertrages eingetreten ist, sofern die Sendung im Gewahrsam der Eisenbahn verblieben und unverändert in dem Zustand neu aufgegeben worden ist, in dem sie im Bahnhof der Neuaufgabe angekommen ist.

§ 2. Diese Vermutung gilt auch dann, wenn der der Neuaufgabe vorangehende Frachtvertrag den Einheitlichen Rechtsvorschriften nicht unterstellt war, sofern sie bei direkter Aufgabe vom ursprünglichen Versandbahnhof bis zum letzten Bestimmungsbahnhof anzuwenden gewesen wären.

#### Artikel 39. VERMUTUNG FÜR DEN VERLUST DES GUTES

§ 1. Der Berechtigte kann das Gut ohne weiteren Nachweis als verloren betrachten, wenn es nicht binnen 30 Tagen nach Ablauf der Lieferfrist dem Empfänger abgeliefert oder zu seiner Verfügung bereitgestellt worden ist.

§ 2. Der Berechtigte kann bei Empfang der Entschädigung für das verlorene Gut schriftlich verlangen, daß er unverzüglich benachrichtigt wird, wenn das Gut binnen einem Jahr nach Zahlung der Entschädigung wieder aufgefunden wird. Die Eisenbahn stellt eine Bescheinigung über dieses Verlangen aus.

§ 3. Der Berechtigte kann binnen 30 Tagen nach Empfang der Nachricht verlangen, daß das Gut auf einem Bahnhof der Beförderungsstrecke an ihn abgeliefert wird. In diesem Falle hat er die Kosten für die Beförderung vom Versandbahnhof bis zu dem Bahnhof zu zahlen, auf dem das Gut abgeliefert wird, und die erhaltene Entschädigung, abzüglich der ihm allenfalls erstatteten, in dieser Entschädigung enthaltenen Kosten, zurückzuzahlen. Er behält jedoch seine Ansprüche auf Entschädigung wegen Überschreitung der Lieferfrist gemäß Artikel 43 und 46.

§ 4. Wird das in § 2 erwähnte Verlangen nicht gestellt oder ist keine Anweisung in der in § 3 vorgesehenen Frist erteilt worden oder wird das Gut später als ein Jahr nach Zahlung der Entschädigung wieder aufgefunden, so verfügt die Eisenbahn darüber gemäß den Gesetzen und Vorschriften des Staates, dem sie angehört.

#### Artikel 40. ENTSCHÄDIGUNG BEI VERLUST

§ 1. Bei gänzlichem oder teilweisem Verlust des Gutes hat die Eisenbahn ohne weiteren Schadenersatz eine Entschädigung zu zahlen, die nach dem Börsenpreis, andernfalls nach dem Marktpreis, und mangels beider nach dem gemeinen Wert von Gütern gleicher Art und Beschaffenheit an dem Tag und an dem Ort, an dem das Gut zur Beförderung angenommen worden ist, berechnet wird.

§ 2. Die Entschädigung darf vorbehaltlich der in Artikel 45 vorgesehenen Begrenzung 17 Rechnungseinheiten je fehlendes Kilogramm Bruttomasse nicht übersteigen.

§ 3. Die Eisenbahn hat außerdem Fracht, Zölle und sonstige aus Anlaß der Beförderung des verlorenen Gutes gezahlte Beträge zu erstatten.

§ 4. Müssen bei der Berechnung der Entschädigung in ausländischer Währung ausgedrückte Beträge umgerechnet werden, so sind sie nach dem Kurs am Tag und am Ort der Zahlung der Entschädigung umzurechnen.

#### Artikel 41. HAFTUNG BEI SCHWUND

§ 1. Bei Gütern, die infolge ihrer natürlichen Beschaffenheit durch die Beförderung in der Regel einem Schwund ausgesetzt sind, haftet die Eisenbahn ohne Rücksicht auf die Länge der durchfahrenen Strecke nur für den Teil des Schwundes, der die folgenden Prozentsätze überschreitet:

a) zwei Prozent der Masse für die flüssigen oder in feuchtem Zustand aufgegebenen Güter sowie für die Folgenden Güter:

Farbhölzer, geraspelte oder gemahlene,  
Felle,

Fettwaren,  
Fische, getrocknete,

Früchte (Obst), frische, getrocknete oder gedörrte,	Rinden,
Gemüse, frische,	Salz,
Häute,	Schweinborsten,
Hautabfälle,	Seifen und harte Öle,
Hopfen,	Süßholz,
Hörner und Klauen,	Tabak, geschnittener,
Kitte, frische,	Tabakblätter, frische,
Knochen, ganze oder gemahlene,	Tierfleichen,
Kohle und Koks,	Torf,
Leder,	Wolle,
Pferdehaare,	Wurzeln;
Pilze, frische,	

b) ein Prozent der Masse für alle übrigen trockenen Güter.

§ 2. Auf die Einschränkung der Haftung gemäß § 1 kann sich die Eisenbahn nicht berufen, wenn nachgewiesen wird, daß der Verlust nach den Umständen des Falles nicht auf die Ursachen zurückzuführen ist, die für die zugelassenen Prozentsätze maßgebend gewesen sind.

§ 3. Werden mehrere Stücke mit demselben Frachtbrief befördert, so wird der Schwund für jedes Stück berechnet, sofern dessen Masse beim Versand entweder im Frachtbrief einzeln angegeben ist oder auf andere Weise festgestellt werden kann.

§ 4. Bei gänzlichem Verlust des Gutes wird bei der Berechnung der Entschädigung kein Abzug für Schwund gemacht.

§ 5. Durch diesen Artikel werden Artikel 36 und 37 nicht berührt.

#### *Artikel 42. ENTSCHÄDIGUNG BEI BESCHÄDIGUNG*

§ 1. Bei Beschädigung des Gutes hat die Eisenbahn ohne weiteren Schadenersatz eine Entschädigung zu zahlen, die der Wertminderung des Gutes entspricht. Der Berechnung dieses Betrages ist der Prozentsatz zugrunde zu legen, um den am Bestimmungsort der gemäß Artikel 40 ermittelte Wert des Gutes gemindert ist.

§ 2. Die Entschädigung darf nicht übersteigen:

- a) wenn die ganze Sendung durch die Beschädigung entwertet ist, den Betrag, der im Fall ihres gänzlichen Verlustes zu zahlen wäre;
- b) wenn nur ein Teil der Sendung durch die Beschädigung entwertet ist, den Betrag, der im Falle des Verlustes des entwerteten Teiles zu zahlen wäre.

§ 3. Die Eisenbahn hat außerdem in dem in § 1 bezeichneten Verhältnis die in Artikel 40 § 3 erwähnten Kosten zu erstatten.

#### *Artikel 43. ENTSCHÄDIGUNG BEI ÜBERSCHREITUNG DER LIEFERFRIST*

§ 1. Ist durch die Überschreitung der Lieferfrist ein Schaden, einschließlich einer Beschädigung, entstanden, so hat die Eisenbahn eine Entschädigung zu zahlen, die das Dreifache der Fracht nicht übersteigen darf.

§ 2. Bei gänzlichem Verlust des Gutes wird die Entschädigung gemäß § 1 nicht neben der des Artikels 40 geleistet.

§ 3. Bei teilweisem Verlust des Gutes darf die Entschädigung gemäß § 1 das Dreifache der auf den nicht verlorenen Teil der Sendung entfallenden Fracht nicht übersteigen.

§ 4. Bei einer Beschädigung des Gutes, die nicht Folge der Lieferfristüberschreitung ist, wird die Entschädigung gemäß § 1 gegebenenfalls neben der des Artikels 42 geleistet.

§ 5. In keinem Fall darf die Entschädigung gemäß § 1 zuzüglich derjenigen der Artikel 40 und 42 insgesamt höher sein als die Entschädigung bei gänzlichem Verlust des Gutes.

§ 6. Ist gemäß Artikel 27 § 1 die Lieferfrist auf Grund von Beförderungsplänen festgesetzt worden, so kann die Eisenbahn in internationalen Tarifen oder in besonderen Abmachungen eine von § 1 abweichende Entschädigungsregelung vorsehen.

Sind in diesem Falle die Lieferfristen gemäß Artikel 27 § 2 überschritten, so kann der Berechtigte entweder die im vorstehenden § 1 vorgesehene oder die in den angewandten internationalen Tarifen oder besonderen Abmachungen festgesetzte Entschädigung verlangen.

*Artikel 44. ENTSCHÄDIGUNG BEI VORSATZ ODER GROBER FAHRLÄSSIGKEIT*

Ist der Verlust, die Beschädigung oder die Überschreitung der Lieferfrist, die Nichterbringung oder die mangelhafte Erbringung von in den Einheitlichen Rechtsvorschriften vorgesehenen Nebenleistungen der Eisenbahn auf Vorsatz oder grobe Fahrlässigkeit der Eisenbahn zurückzuführen, so hat sie dem Berechtigten den nachgewiesenen vollen Schaden zu ersetzen.

Im Falle grober Fahrlässigkeit ist die Entschädigung jedoch auf das Doppelte der in Artikel 25, 26, 30, 32, 33, 40, 42, 43, 45 und 46 vorgesehenen Höchstbeträge begrenzt.

*Artikel 45. BEGRENZUNG DER ENTSCHÄDIGUNG DURCH BESTIMMTE TARIFE*

Gewährt die Eisenbahn durch Spezial- oder Ausnahmetarife besondere Beförderungsbedingungen, die gegenüber der gemäß den Regeltarifen berechneten Fracht eine Ermäßigung enthalten, so kann sie die dem Berechtigten bei Verlust, Beschädigung oder Überschreitung der Lieferfrist zu leistende Entschädigung der Höhe nach begrenzen, soweit eine solche Begrenzung im Tarif vorgesehen ist.

Sind diese besonderen Beförderungsbedingungen nur auf einem Teil der Strecke anzuwenden, so kann sich die Eisenbahn auf die Begrenzung nur berufen, wenn die die Entschädigung begründende Tatsache auf diesem Teil eingetreten ist.

*Artikel 46. ENTSCHÄDIGUNG BEI ANGABE DES INTERESSES AN DER LIEFERUNG*

Bei Angabe des Interesses an der Lieferung kann außer den in Artikel 40, 42, 43 und 45 vorgesehenen Entschädigungen der Ersatz des weiteren nachgewiesenen Schadens bis zur Höhe des angegebenen Betrages beansprucht werden.

*Artikel 47. VERZINSUNG DER ENTSCHÄDIGUNG*

§ 1. Der Berechtigte kann auf die Entschädigung Zinsen in Höhe von fünf Prozent jährlich beanspruchen, und zwar vom Tage der Reklamation gemäß Artikel 53 oder, wenn keine Reklamation vorangegangen ist, vom Tage der Klageerhebung an.

§ 2. Die Zinsen können nur beansprucht werden, wenn die Entschädigung 4 Rechnungseinheiten je Frachtbrief übersteigt.

§ 3. Legt der Berechtigte der Eisenbahn die zur abschließenden Behandlung der Reklamation erforderlichen Belege nicht innerhalb einer ihm gestellten angemessenen Frist vor, so ist der Lauf der Zinsen vom Ablauf dieser Frist an bis zur Übergabe dieser Belege gehemmt.

*Artikel 48. HAFTUNG IM EISENBAHN-SEEVERKEHR*

§ 1. Bei Eisenbahn-Seebeförderungen über die in Artikel 2 § 2 des Übereinkommens erwähnten Linien kann jeder Staat, indem er die Aufnahme eines entsprechenden Vermerkes in die Liste der den Einheitlichen Rechtsvorschriften unterstellten Linien verlangt, die Gründe für die Befreiung von der Haftung gemäß Artikel 36 durch die nachstehenden Gründe, jedoch nur in ihrer Gesamtheit, ergänzen.

Der Frachtführer kann sich auf diese Gründe nur berufen, wenn er beweist, daß der Verlust, die Beschädigung oder die Überschreitung der Lieferfrist auf der Seestrecke vom

Beginn des Einladens der Güter in das Schiff bis zu ihrer Ausladung aus dem Schiff entstanden ist.

Diese Gründe für die Befreiung von der Haftung sind die folgenden:

- a) Handlungen, Nachlässigkeit oder Unterlassungen des Kapitäns, der Schiffsbesatzung, des Lotsen oder der im Dienste des Frachtführers stehenden Personen bei der Führung oder beim Betrieb des Schiffes;
- b) Seeuntüchtigkeit des Schiffes, sofern der Frachtführer beweist, daß sie nicht auf einem Mangel an gehöriger Sorgfalt seinerseits beruht, um das Schiff seetüchtig zu machen oder um es gehörig zu bemannen, einzurichten oder zu verproviantieren oder um alle Teile des Schiffes, in denen Güter verladen werden, für deren Aufnahme, Beförderung und Erhaltung einzurichten und instandzusetzen;
- c) Feuer, sofern der Frachtführer beweist, daß es weder durch sein Verschulden noch durch Verschulden des Kapitäns, der Schiffsbesatzung, des Lotsen oder der in seinem Dienste stehenden Personen entstanden ist;
- d) Gefahren oder Unfälle der See oder anderer schiffbarer Gewässer;
- e) Rettung oder Versuch der Rettung von Leben oder Eigentum zur See;
- f) Verladung des Gutes auf Deck, sofern der Absender seine Einwilligung dazu im Frachtbrief gegeben hat und sofern das Gut nicht in Eisenbahnwagen befördert wird.

Die vorstehenden Gründe für die Befreiung von der Haftung haben weder eine Aufhebung noch eine Einschränkung der allgemeinen Verpflichtungen des Frachtführers zur Folge, insbesondere nicht seiner Verpflichtung, die gehörige Sorgfalt anzuwenden, um das Schiff seetüchtig zu machen oder um es gehörig zu bemannen, einzurichten oder zu verproviantieren oder um alle Teile des Schiffes, in denen Güter verladen werden, für deren Aufnahme, Beförderung und Erhaltung einzurichten und instandzusetzen.

Der Frachtführer ist jedoch auch in den genannten Fällen haftbar, wenn der Berechtigte beweist, daß der Verlust, die Beschädigung oder die Überschreitung der Lieferfrist auf einem Verschulden des Frachtführers, des Kapitäns, der Schiffsbesatzung, des Lotsen oder der im Dienste des Frachtführers stehenden Personen beruht, das nicht unter Buchstabe a) erwähnt ist.

§ 2. Wird eine Seestrecke durch mehrere Unternehmen bedient, die in der Liste gemäß Artikel 3 und 10 des Übereinkommens eingetragen sind, so müssen für alle Unternehmen die gleichen Haftungsvorschriften gelten.

Sind diese Unternehmen auf Antrag mehrerer Staaten in die Liste eingetragen worden, so muß außerdem über die Anwendung dieser Haftungsvorschriften vorher ein Einverständnis unter diesen Staaten erzielt werden.

§ 3. Die gemäß diesem Artikel getroffenen Maßnahmen sind dem Zentralamt bekanntzugeben. Sie treten frühestens nach Ablauf von 30 Tagen in Kraft, gerechnet vom Tage der vom Zentralamt an die anderen Staaten gerichteten Mitteilung über diese Maßnahmen.

Unterwegs befindliche Sendungen werden von diesen Maßnahmen nicht betroffen.

#### *Artikel 49. HAFTUNG BEI EINEM NUKLEAREN EREIGNIS*

Die Eisenbahn ist von der ihr gemäß den Einheitlichen Rechtsvorschriften obliegenden Haftung befreit, wenn der Schaden durch ein nukleares Ereignis verursacht worden ist und wenn gemäß den Gesetzen und Vorschriften eines Staates über die Haftung auf dem Gebiet der Kernenergie der Inhaber einer Kernanlage oder eine ihm gleichgestellte Person für diesen Schaden haftet.

#### *Artikel 50. HAFTUNG DER EISENBAHN FÜR IHRE LEUTE*

Die Eisenbahn haftet für ihre Bediensteten und für andere Personen, derer sie sich bei der Ausführung der Beförderung bedient.

Wenn jedoch diese Bediensteten und anderen Personen auf Verlangen eines Beteiligten Frachtbriefe ausstellen, Übersetzungen anfertigen oder sonstige der Eisenbahn nicht obliegende Verrichtungen besorgen, gelten sie als Beauftragte dessen, für den sie tätig sind.

#### *Artikel 51. SONSTIGE ANSPRÜCHE*

In allen Fällen, auf welche die Einheitlichen Rechtsvorschriften Anwendung finden, kann gegen die Eisenbahn ein Anspruch auf Schadenersatz, auf welchem Rechtsgrund er auch beruht, nur unter den darin vorgesehenen Voraussetzungen und Beschränkungen geltend gemacht werden.

Das gleiche gilt für Ansprüche gegen die Bediensteten und anderen Personen, für welche die Eisenbahn gemäß Artikel 50 haftet.

### TITEL V. GELTENDMACHUNG VON ANSPRÜCHEN

#### *Artikel 52. FESTSTELLUNG EINES TEILWEISEN VERLUSTES ODER EINER BESCHÄDIGUNG*

§ 1. Wird ein teilweiser Verlust oder eine Beschädigung von der Eisenbahn entdeckt oder vermutet oder vom Berechtigten behauptet, so hat die Eisenbahn je nach Art des Schadens den Zustand des Gutes, seine Masse und, soweit möglich, das Ausmaß und die Ursache des Schadens sowie den Zeitpunkt seines Entstehens unverzüglich in einer Tatbestandsaufnahme festzuhalten, und zwar wenn möglich in Gegenwart des Berechtigten.

Den Berechtigten ist eine Abschrift dieser Tatbestandsaufnahme unentgeltlich auszuhändigen.

§ 2. Erkennt der Berechtigte die Feststellungen in der Tatbestandsaufnahme nicht an, so kann er verlangen, daß der Zustand und die Masse des Gutes sowie die Ursache und der Betrag des Schadens von einem durch die Parteien oder ein Gericht bestellten Sachverständigen festgestellt werden. Das Verfahren richtet sich nach den Gesetzen und Vorschriften des Staates, in dem die Feststellung erfolgt.

#### *Artikel 53. REKLAMATIONEN*

§ 1. Reklamationen aus dem Frachtvertrag sind schriftlich bei der in Artikel 55 genannten Eisenbahn einzureichen.

§ 2. Zur Einreichung einer Reklamation sind die gemäß Artikel 54 zur gerichtlichen Geltendmachung von Ansprüchen gegen die Eisenbahn berechtigten Personen befugt.

§ 3. Reicht der Absender eine Reklamation ein, so hat er das Frachtbriefdoppel vorzulegen. Andernfalls muß er die Zustimmung des Empfängers beibringen oder nachweisen, daß dieser die Annahme der Sendung verweigert hat.

Reicht der Empfänger eine Reklamation ein, so hat er den Frachtbrief vorzulegen, wenn dieser ihm übergeben worden ist.

§ 4. Der Frachtbrief, das Frachtbriefdoppel und die sonstigen Belege, die der Berechtigte der Reklamation begeben will, sind im Original oder in Abschrift, auf Verlangen der Eisenbahn in gehörig beglaubigter Form, vorzulegen.

Bei der abschließenden Regelung der Reklamation kann die Eisenbahn die Vorlage des Frachtbriefes, des Frachtbriefdoppels oder der Bescheinigung über die Nachnahme im Original verlangen, um darauf die abschließende Regelung zu vermerken.

#### *Artikel 54. ZUR GERICHTLICHEN GELTENDMACHUNG VON ANSPRÜCHEN GEGEN DIE EISENBAHN BERECHTIGTE PERSONEN*

§ 1. Zur gerichtlichen Geltendmachung von Ansprüchen auf Erstattung von Beträgen, die auf Grund des Frachtvertrages gezahlt worden sind, ist nur berechtigt, wer die Zahlung geleistet hat.

§ 2. Zur gerichtlichen Geltendmachung von Ansprüchen aus Nachnahmen gemäß Artikel 17 ist nur der Absender berechtigt.

§ 3. Zur gerichtlichen Geltendmachung sonstiger Ansprüche aus dem Frachtvertrag sind berechtigt:

a) der Absender bis zu dem Zeitpunkt, in dem der Empfänger

1. den Frachtbrief eingelöst,
2. das Gut angenommen oder
3. die ihm gemäß Artikel 28 § 4 oder Artikel 31 zustehenden Rechte geltend gemacht hat;

b) der Empfänger von dem Zeitpunkt an, in dem er

1. den Frachtbrief eingelöst,
2. das Gut angenommen,
3. die ihm gemäß Artikel 28 § 4 zustehenden Rechte geltend gemacht oder
4. die ihm gemäß Artikel 31 zustehenden Rechte geltend gemacht hat; dieses Klagerecht erlischt jedoch, sobald die vom Empfänger gemäß Artikel 31 § 1 Buchstabe c) bezeichnete Person den Frachtbrief eingelöst, das Gut angenommen oder die ihr gemäß Artikel 28 § 4 zustehenden Rechte geltend gemacht hat.

§ 4. Der Absender hat bei der gerichtlichen Geltendmachung der Ansprüche das Frachtbriefdoppel vorzulegen. Andernfalls muß er zur gerichtlichen Geltendmachung der Ansprüche gemäß § 3 Buchstabe a) die Zustimmung des Empfängers beibringen oder nachweisen, daß dieser die Annahme der Sendung verweigert hat.

Der Empfänger hat bei der gerichtlichen Geltendmachung der Ansprüche den Frachtbrief vorzulegen, wenn er ihm übergeben worden ist.

#### *Artikel 55. EISENBAHNEN, GEGEN DIE ANSPRÜCHE GERICHTLICH GELTEND GEMACHT WERDEN KÖNNEN*

§ 1. Ansprüche auf Erstattung von Beträgen, die auf Grund des Frachtvertrages gezahlt worden sind, können gegen die Eisenbahn gerichtlich geltend gemacht werden, die den Betrag erhoben hat, oder gegen die Eisenbahn, zu deren Gunsten der Betrag erhoben worden ist.

§ 2. Ansprüche aus Nachnahmen gemäß Artikel 17 können nur gegen die Versandbahn gerichtlich geltend gemacht werden.

§ 3. Sonstige Ansprüche aus dem Frachtvertrag können gegen die Versandbahn, die Empfangsbahn oder diejenige Eisenbahn gerichtlich geltend gemacht werden, auf deren Linien die den Anspruch begründende Tatsache eingetreten ist.

Gegen die Empfangsbahn können diese Ansprüche auch dann gerichtlich geltend gemacht werden, wenn sie weder das Gut noch den Frachtbrief erhalten hat.

§ 4. Hat der Kläger die Wahl unter mehreren Eisenbahnen, so erlischt sein Wahlrecht, sobald die Klage gegen eine dieser Eisenbahnen eingereicht ist.

§ 5. Im Wege der Widerklage oder der Einrede können Ansprüche auch gegen eine andere als die in den §§ 1, 2 und 3 genannten Eisenbahnen geltend gemacht werden, wenn sich die Klage auf denselben Frachtvertrag gründet.

#### *Artikel 56. ZUSTÄNDIGKEIT*

Ist in Staatsverträgen oder Konzessionen nichts anderes bestimmt, so können auf die Einheitlichen Rechtsvorschriften gegründete Ansprüche nur vor den Gerichten des Staates geltend gemacht werden, dem die in Anspruch genommene Eisenbahn angehört.

Betreibt eine Eisenbahn mehrere selbständige Netze in verschiedenen Staaten, so wird jedes dieser Netze für die Anwendung dieses Artikels als gesonderte Eisenbahn angesehen.

*Artikel 57. ERLÖSCHEN DER ANSPRÜCHE GEGEN DIE EISENBAHN*

§ 1. Mit der Annahme des Gutes durch den Berechtigten sind alle Ansprüche gegen die Eisenbahn aus dem Frachtvertrag bei teilweisem Verlust, Beschädigung oder Überschreitung der Lieferfrist erloschen.

§ 2. Die Ansprüche erlöschen jedoch nicht:

- a) bei teilweisem Verlust oder bei Beschädigung, wenn
  - 1. der Verlust oder die Beschädigung vor der Annahme des Gutes durch den Berechtigten gemäß Artikel 52 festgestellt worden ist,
  - 2. die Feststellung, die gemäß Artikel 52 hätte erfolgen müssen, nur durch Verschulden der Eisenbahn unterblieben ist;
- b) bei äußerlich nicht erkennbarem Schaden, der erst nach der Annahme des Gutes durch den Berechtigten festgestellt worden ist, wenn er
  - 1. die Feststellung gemäß Artikel 52 sofort nach der Entdeckung des Schadens und spätestens sieben Tage nach der Annahme des Gutes verlangt und
  - 2. außerdem beweist, daß der Schaden in der Zeit zwischen der Annahme zur Beförderung und der Ablieferung entstanden ist;
- c) bei Überschreitung der Lieferfrist, wenn der Berechtigte binnen 60 Tagen seine Rechte bei einer der in Artikel 55 § 3 genannten Eisenbahnen geltend gemacht hat;
- d) wenn der Berechtigte nachweist, daß der Schaden auf Vorsatz oder grobe Fahrlässigkeit der Eisenbahn zurückzuführen ist.

§ 3. Ist das Gut gemäß Artikel 38 § 1 neu aufgegeben worden, so erlöschen die Ansprüche bei teilweisem Verlust oder bei Beschädigung aus einem der vorangehenden Frachtverträge, als würde es sich um einen einzigen Frachtvertrag handeln.

*Artikel 58. VERJÄHRUNG DER ANSPRÜCHE*

§ 1. Ansprüche aus dem Frachtvertrag verjähren in einem Jahr.

Die Verjährungsfrist beträgt jedoch zwei Jahre bei Ansprüchen

- a) auf Auszahlung einer Nachnahme, welche die Eisenbahn vom Empfänger eingezogen hat,
- b) auf Auszahlung des Erlöses eines von der Eisenbahn vorgenommenen Verkaufes,
- c) wegen eines auf Vorsatz zurückzuführenden Schadens,
- d) im Fall eines Betruges,
- e) aus einem der der Neuaufgabe vorangehenden Frachtverträge in dem in Artikel 38 § 1 vorgesehenen Falle.

§ 2. Die Verjährung beginnt bei Ansprüchen

- a) auf Entschädigung wegen gänzlichen Verlustes mit dem dreißigsten Tage nach Ablauf der Lieferfrist;
- b) auf Entschädigung wegen teilweisen Verlustes, Beschädigung oder Überschreitung der Lieferfrist mit dem Tage der Ablieferung;
- c) auf Zahlung oder Erstattung von Fracht, Nebengebühren, sonstigen Kosten oder Frachtzuschlägen oder auf Berichtigung bei unrichtiger Tarifierung, fehlerhafter Berechnung oder Erhebung:
  - 1. wenn eine Zahlung erfolgte, mit dem Tage der Zahlung;



2. wenn keine Zahlung erfolgte, mit dem Tage der Annahme des Gutes zur Beförderung, sofern die Zahlung dem Absender obliegt, oder mit dem Tage, an dem der Empfänger den Frachtbrief eingelöst hat, sofern die Zahlung ihm obliegt;
  3. wenn die Beträge Gegenstand einer Frankaturrechnung waren, mit dem Tage, an dem die Eisenbahn dem Absender die in Artikel 15 § 7 vorgesehene Kostenrechnung übergibt; wird diese nicht übergeben, so beginnt die Frist für die Geltendmachung der Ansprüche der Eisenbahn mit dem dreißigsten Tage nach Ablauf der Lieferfrist;
- d) der Eisenbahn auf Zahlung von Beträgen, die der Empfänger statt des Absenders oder die der Absender statt des Empfängers gezahlt hat und welche die Eisenbahn dem Berechtigten erstatten muß, mit dem Tage, an dem die Erstattung gefordert wird;
- e) aus einer Nachnahme gemäß Artikel 17 mit dem dreißigsten Tage nach Ablauf der Lieferfrist;
- f) auf Auszahlung eines Verkaufserlöses mit dem Tage des Verkaufes;
- g) auf eine von der Zoll- oder einer sonstigen Verwaltungsbehörde verlangte Nachzahlung mit dem Tage, an dem die betreffende Behörde das Verlangen gestellt hat;
- h) in allen anderen Fällen mit dem Tage, an dem das Recht geltend gemacht werden kann.

Der als Beginn der Verjährung bezeichnete Tag ist in keinem Fall in der Frist inbegriffen.

§ 3. Bei Einreichen einer Reklamation gemäß Artikel 53 mit den erforderlichen Belegen ist der Lauf der Verjährung bis zu dem Tage gehemmt, an dem die Eisenbahn die Reklamation durch schriftlichen Bescheid zurückweist und die Belege zurückgibt. Wird der Reklamation teilweise stattgegeben, so beginnt die Verjährung für den noch streitigen Teil der Reklamation wieder zu laufen. Wer sich auf die Einreichung einer Reklamation oder auf die Erteilung eines Bescheides und die Rückgabe der Belege beruft, hat dies zu beweisen.

Weitere Reklamationen, die denselben Anspruch betreffen, hemmen die Verjährung nicht.

§ 4. Verjährte Ansprüche können auch nicht im Wege der Widerklage oder der Einrede geltend gemacht werden.

§ 5. Vorbehaltlich vorstehender Bestimmungen gilt für die Hemmung und die Unterbrechung der Verjährung das Landesrecht.

## TITEL VI. BEZIEHUNGEN DER EISENBAHNEN UNTEREINANDER

### *Artikel 59. ABRECHNUNG UNTER DEN EISENBAHNEN*

§ 1. Jede Eisenbahn, die bei der Auf- oder Ablieferung des Gutes die Kosten oder sonstige auf dem Frachtvertrag beruhende Forderungen eingezogen hat, ist verpflichtet, den beteiligten Eisenbahnen den ihnen zukommenden Anteil zu zahlen.

Die Art und Weise der Zahlung wird durch Vereinbarungen zwischen den Eisenbahnen geregelt.

§ 2. Die Versandbahn haftet vorbehaltlich ihrer Ansprüche gegen den Absender für die Fracht und die sonstigen Kosten, die sie nicht erhoben hat, obwohl sie der Absender gemäß Artikel 15 übernommen hatte.

§ 3. Liefert die Empfangsbahn das Gut ab, ohne die Kosten oder sonstige auf dem Frachtvertrag beruhende Forderungen einzuziehen, so haftet sie gegenüber den Eisenbahnen, die an der Beförderung beteiligt gewesen sind, und gegenüber den anderen Beteiligten.

§ 4. Hat das Zentralamt auf Verlangen einer der Gläubigereisenbahnen festgestellt, daß eine Eisenbahn nicht zahlt, so haben alle anderen Eisenbahnen, die an der Beförderung beteiligt gewesen sind, den Ausfall im Verhältnis ihrer Frachtanteile zu tragen.

Der Rückgriff gegen die Eisenbahn, deren Säumnis festgestellt wurde, bleibt vorbehalten.

#### Artikel 60. RÜCKGRIFF BEI VERLUST ODER BESCHÄDIGUNG

§ 1. Hat eine Eisenbahn gemäß den Einheitlichen Rechtsvorschriften eine Entschädigung für gänzlichen oder teilweisen Verlust oder für Beschädigung geleistet, so steht ihr ein Rückgriffsrecht gegen die Eisenbahnen, die an der Beförderung beteiligt gewesen sind, gemäß den folgenden Bestimmungen zu:

- a) die Eisenbahn, die den Schaden verursacht hat, haftet ausschließlich dafür;
- b) haben mehrere Eisenbahnen den Schaden verursacht, so haftet jede Eisenbahn für den von ihr verursachten Schaden; ist eine Zuordnung nicht möglich, so wird die Entschädigung unter den Eisenbahnen gemäß Buchstabe c) aufgeteilt;
- c) wenn nicht nachgewiesen werden kann, daß eine oder mehrere Eisenbahnen den Schaden verursacht haben, wird die Entschädigung auf sämtliche Eisenbahnen, die an der Beförderung beteiligt gewesen sind, aufgeteilt, mit Ausnahme derjenigen, die beweisen, daß der Schaden nicht auf ihren Linien verursacht worden ist; die Aufteilung erfolgt im Verhältnis der Tarifkilometer.

§ 2. Bei Zahlungsunfähigkeit einer dieser Eisenbahnen wird der auf sie entfallende, aber von ihr nicht gezahlte Anteil unter alle anderen Eisenbahnen, die an der Beförderung beteiligt gewesen sind, im Verhältnis der Tarifkilometer aufgeteilt.

#### Artikel 61. RÜCKGRIFF BEI ÜBERSCHREITUNG DER LIEFERFRIST

§ 1. Artikel 60 findet bei Entschädigung für Überschreitung der Lieferfrist Anwendung. Wurde die Überschreitung durch mehrere Eisenbahnen verursacht, so ist die Entschädigung unter diese Eisenbahnen im Verhältnis der Dauer der auf ihren Linien entstandenen Verspätung aufzuteilen.

§ 2. Die in Artikel 27 festgesetzten Lieferfristen werden wie folgt aufgeteilt:

- a) wenn zwei Eisenbahnen an der Beförderung beteiligt gewesen sind, wird
  1. die Abfertigungsfrist zu gleichen Teilen aufgeteilt,
  2. die Beförderungsfrist im Verhältnis der Tarifkilometer aufgeteilt;
- b) wenn drei oder mehr Eisenbahnen an der Beförderung beteiligt gewesen sind, wird
  1. die Abfertigungsfrist zu gleichen Teilen unter die Versandbahn und die Empfangsbahn aufgeteilt,
  2. die Beförderungsfrist unter alle Eisenbahnen aufgeteilt:
    - ein Drittel zu gleichen Teilen,
    - zwei Drittel im Verhältnis der Tarifkilometer.

§ 3. Zuschlagsfristen, auf die eine Eisenbahn Anspruch hat, werden ihr zugeteilt.

§ 4. Die Zeit von der Aufgabe des Gutes bis zum Beginn der Abfertigungsfrist wird ausschließlich der Versandbahn zugeteilt.

§ 5. Die oben erwähnte Aufteilung kommt nur in Betracht, wenn die Lieferfrist im ganzen nicht eingehalten worden ist.

#### Artikel 62. RÜCKGRIFFSVERFAHREN

§ 1. Eine Eisenbahn, gegen die gemäß Artikel 60 oder 61 Rückgriff genommen wird, kann die Rechtmäßigkeit der durch die rückgriffnehmende Eisenbahn geleisteten Zahlung

nicht bestreiten, wenn die Entschädigung gerichtlich festgesetzt worden ist, nachdem der erstgenannten Eisenbahn durch gehörige Streitverkündung die Möglichkeit gegeben war, dem Rechtsstreit beizutreten. Das Gericht der Hauptsache bestimmt die Fristen für die Streitverkündung und für den Beitritt.

§ 2. Die rückgriffnehmende Eisenbahn hat sämtliche Eisenbahnen, mit denen sie sich nicht gütlich geeinigt hat, mit ein und derselben Klage zu belangen; andernfalls erlischt das Rückgriffsrecht gegen die nicht belangten Eisenbahnen.

§ 3. Das Gericht hat in ein und demselben Urteil über alle Rückgriffe, mit denen es befaßt ist, zu entscheiden.

§ 4. Den beklagten Eisenbahnen steht kein weiterer Rückgriff zu.

§ 5. Rückgriffsverfahren dürfen nicht in das Entschädigungsverfahren einbezogen werden, das der aus dem Frachtvertrag Berechtigte angestrengt hat.

#### *Artikel 63. ZUSTÄNDIGKEIT BEIM RÜCKGRIFF*

§ 1. Das Gericht des Sitzes der Eisenbahn, gegen die der Rückgriff genommen wird, ist für solche Klagen ausschließlich zuständig.

§ 2. Ist die Klage gegen mehrere Eisenbahnen zu erheben, so hat die klagende Eisenbahn die Wahl unter den gemäß § 1 zuständigen Gerichten.

#### *Artikel 64. VEREINBARUNGEN ÜBER DEN RÜCKGRIFF*

Die Eisenbahnen können durch Vereinbarungen von den Bestimmungen dieses Titels über den gegenseitigen Rückgriff, mit Ausnahme derjenigen des Artikels 62 § 5, abweichen.

### TITEL VII. AUSNAHMEBESTIMMUNGEN

#### *Artikel 65. VORÜBERGEHENDE ABWEICHUNGEN*

§ 1. Könnte die wirtschaftliche und finanzielle Lage eines Staates große Schwierigkeiten bei der Anwendung des Titels VI hervorrufen, so kann jeder Staat von Artikel 15, 17 und 30 abweichen, indem er für bestimmte Verkehre beschließt, daß

a) für Sendungen aus diesem Staat die Kosten

1. bis zu seinen Grenzen oder
  2. mindestens bis zu seinen Grenzen
- vom Absender übernommen werden müssen;

b) für Sendungen nach diesem Staat die Kosten

1. mindestens bis zu seinen Grenzen vom Absender übernommen werden müssen, sofern der Versandstaat nicht die Einschränkung gemäß Buchstabe a) Ziffer 1 auferlegt, oder
  2. höchstens bis zu seinen Grenzen vom Absender übernommen werden dürfen;
- c) Sendungen von oder nach diesem Staat nicht mit Nachnahme belastet werden dürfen und daß keine Barvorschüsse zugelassen sind oder daß Nachnahmen und Barvorschüsse nur bis zu bestimmten Beträgen zugelassen sind;
- d) der Absender den Frachtvertrag hinsichtlich des Bestimmungslandes, der Zahlung der Kosten und der Nachnahme nicht abändern darf.

§ 2. Unter den gleichen Voraussetzungen können die Staaten die Eisenbahnen ermächtigen, von Artikel 15, 17, 30 und 31 abzuweichen, indem sie für ihren gegenseitigen Verkehr beschließen, daß

a) die Bestimmungen über die Zahlung der Kosten im Einverständnis mit den beteiligten Eisenbahnen besonders festgelegt werden; diese Bestimmungen dürfen jedoch keine Zahlungsart vorsehen, die gemäß Artikel 15 nicht zugelassen ist;

b) bestimmte nachträgliche Verfügungen nicht zulässig sind.

§ 3. Die gemäß den §§ 1 und 2 getroffenen Maßnahmen werden dem Zentralamt mitgeteilt.

Die in § 1 genannten Maßnahmen treten frühestens nach Ablauf von acht Tagen in Kraft, gerechnet vom Tage der vom Zentralamt an die anderen Staaten gerichteten Mitteilung über diese Maßnahmen.

Die in § 2 genannten Maßnahmen treten frühestens nach Ablauf von zwei Tagen nach dem Tag in Kraft, an dem sie in den beteiligten Staaten veröffentlicht worden sind.

§ 4. Unterwegs befindliche Sendungen werden von diesen Maßnahmen nicht betroffen.

#### Artikel 66. ABWEICHUNGEN

Die Bestimmungen der Einheitlichen Rechtsvorschriften haben nicht den Vorrang gegenüber den Bestimmungen, die gewisse Staaten für ihren gegenseitigen Verkehr in Anwendung besonderer Verträge, wie etwa der Verträge über die Europäische Gemeinschaft für Kohle und Stahl und die Europäische Wirtschaftsgemeinschaft, zu treffen haben.

#### ANLAGE I (Artikel 4 und 5)

##### *Ordnung für die internationale Eisenbahnbeförderung gefährlicher Güter (RID)*

Diese Anlage erhält die Fassung, die der Fachmännische Ausschuss gemäß Artikel 69 § 4 des Internationalen Übereinkommens über den Eisenbahnfrachtverkehr (CIM) vom 7. Februar 1970 für die Internationale Ordnung für die Beförderung gefährlicher Güter mit der Eisenbahn (RID), Anlage I zur CIM, beschließt. Der Fachmännische Ausschuss beschließt auch die erforderlichen redaktionellen Anpassungen an das Übereinkommen über den internationalen Eisenbahnverkehr vom 9. Mai 1980.

#### ANLAGE II (Artikel 8 § 1)

##### *Ordnung für die internationale Eisenbahnbeförderung von Privatwagen (RIP)*

Diese Anlage erhält die Fassung, die der Fachmännische Ausschuss gemäß Artikel 69 § 4 des Internationalen Übereinkommens über den Eisenbahnfrachtverkehr (CIM) vom 7. Februar 1970 für die Internationale Ordnung für die Beförderung von Privatwagen (RIP), Anlage IV zur CIM, beschließt. Der Fachmännische Ausschuss beschließt auch die erforderlichen redaktionellen Anpassungen an das Übereinkommen über den internationalen Eisenbahnverkehr vom 9. Mai 1980.

#### ANLAGE III (Artikel 8 § 2)

##### *Ordnung für die internationale Eisenbahnbeförderung von Containern (RiCo)*

Diese Anlage erhält die Fassung, die der Fachmännische Ausschuss gemäß Artikel 69 § 4 des Internationalen Übereinkommens über den Eisenbahnfrachtverkehr (CIM) vom 7. Februar 1970 für die Internationale Ordnung für die Beförderung von Behältern (Containern) (RiCo), Anlage V zur CIM, beschließt. Der Fachmännische Ausschuss beschließt auch die erforderlichen redaktionellen Anpassungen an das Übereinkommen über den internationalen Eisenbahnverkehr vom 9. Mai 1980.

ANLAGE IV  
(Artikel 8 § 3)

*Ordnung für die internationale Eisenbahnbeförderung von Expressgut (RIEx)*

§ 1. Als Expressgut sind nur Güter anzusehen, die nach den Bedingungen eines internationalen Tarifes besonders schnell befördert werden.

Als Expressgut können nur Güter zugelassen werden, die ohne weiteres in den Gepäckwagen von Zügen verladen werden können, die der Beförderung von Personen dienen. Die internationalen Tarife dürfen von dieser Vorschrift abweichen.

§ 2. Von der Beförderung als Expressgut sind die in Artikel 4 der Einheitlichen Rechtsvorschriften bezeichneten Gegenstände ausgeschlossen. Die im RID oder in den gemäß Artikel 5 § 2 der Einheitlichen Rechtsvorschriften vereinbarten Abkommen und Tarifbestimmungen genannten Stoffe und Gegenstände sind zur Beförderung als Expressgut nur zugelassen, soweit dies im RID oder in den genannten Abkommen oder Tarifbestimmungen ausdrücklich vorgesehen ist. Die internationalen Tarife bestimmen, ob auch andere Güter von der Beförderung als Expressgut ausgeschlossen oder nur bedingungsweise zur Beförderung zugelassen werden können.

§ 3. Expressgut kann mit einer anderen Frachturkunde als dem Frachtbrief gemäß Artikel 12 § 2 der Einheitlichen Rechtsvorschriften zur Beförderung aufgegeben werden. Das zu verwendende Muster sowie die notwendigen oder zulässigen Angaben werden durch die internationalen Tarife festgesetzt. Diese Frachturkunde muß in jedem Fall enthalten:

- a) die Bezeichnung des Versand- und des Bestimmungsbahnhofes;
- b) den Namen und die Anschrift des Absenders und des Empfängers;
- c) die Bezeichnung des Gutes;
- d) die Anzahl der Frachtstücke und die Art der Verpackung;
- e) ein genaues Verzeichnis der durch die Zoll- oder sonstigen Verwaltungsbehörden vorgeschriebenen Papiere, die der Frachturkunde beigegeben sind.

§ 4. Expressgut muß mit schnellen Beförderungsmitteln innerhalb der in den internationalen Tarifen vorgesehenen Fristen befördert werden. Die Lieferfristen müssen stets kürzer sein als die für Eilgutsendungen vorgesehenen Lieferfristen.

§ 5. Die internationalen Tarife können auch andere als die vorstehend angeführten Abweichungen von den Einheitlichen Rechtsvorschriften vorsehen. Es darf jedoch von Artikel 35 bis 38, 40 bis 42, 44 und 47 bis 58 der Einheitlichen Rechtsvorschriften nicht abgewichen werden.

§ 6. Wenn die vorstehenden Bestimmungen oder die Bestimmungen der internationalen Tarife dem nicht entgegenstehen, finden auf Expressgut die Einheitlichen Rechtsvorschriften Anwendung.

[OFFICIAL TRANSLATION<sup>1</sup> — TRADUCTION OFFICIELLE<sup>2</sup>]

## CONVENTION<sup>3</sup> CONCERNING INTERNATIONAL CARRIAGE BY RAIL (COTIF)

### The Contracting Parties,

Meeting in accordance with Article 69, § 1 of the International Convention concerning the Carriage of Goods by Rail (CIM)<sup>4</sup> and of Article 64, § 1 of the International Convention concerning the Carriage of Passengers and Luggage by Rail (CIV) of 7 February 1970<sup>5</sup> and in accordance with Article 27 of the Additional Convention to the CIV of 26 February 1966 relating to the Liability of the Railway for Death of and Personal Injury to Passengers,<sup>6</sup>

Convinced of the value of an international organisation,

Recognising the need to adapt the provisions of transport law to economic and technical requirements,

Have agreed as follows:

### TITLE I. GENERAL PROVISIONS

#### Article 1. INTERGOVERNMENTAL ORGANISATION

§ 1. The Parties to this Convention shall constitute, as Member States, the Intergovernmental Organisation for International Carriage by Rail (OTIF), hereinafter referred to as “the Organisation”.

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.

<sup>3</sup> Came into force on 1 May 1985 in respect of the following States, after the deposit with the Government of Switzerland of 15 instruments of ratification, acceptance, approval or accession, in accordance with article 24 (1) of the Convention and paragraph 1 of the Protocol established by the Diplomatic Conference convened for the entry into force of the Convention concerning international carriage by rail:

State	Date of deposit of the instrument of ratification, accession (a) or approval (AA)	State	Date of deposit of the instrument of ratification, accession (a) or approval (AA)
Albania*	1 June 1984 a	Italy	1 March 1985
Austria*	8 March 1983	Lebanon	1 December 1983
Belgium	2 June 1983	Liechtenstein	30 January 1985
Bulgaria*	15 July 1982	Luxembourg	27 July 1983
Czechoslovakia*	28 January 1983	Netherlands	15 January 1982 AA
Denmark*	18 June 1981	(For the Kingdom of Europe.)	
Finland*	15 August 1984	Norway	12 September 1984
France	3 September 1982 AA	Poland*	7 January 1985
German Democratic Republic*	5 November 1981	Romania*	14 June 1983
Germany, Federal Republic of	27 February 1985	Spain	15 January 1982
(With a declaration of application to Berlin (West).)		Sweden*	25 March 1985
Hungary	14 January 1982	Switzerland	8 November 1983
Iraq*	8 November 1984	Tunisia	2 July 1984
		United Kingdom of Great Britain and Northern Ireland	10 May 1983
		Yugoslavia	2 August 1982

\* See p. 630 of this volume for the texts of the declarations and reservations made upon ratification or accession.

<sup>4</sup> United Nations, *Treaty Series*, vol. 1101, p. 164.

<sup>5</sup> *Ibid.*, p. 340.

<sup>6</sup> *Ibid.*, p. 82.

The headquarters of the Organisation shall be at Berne.

§ 2. The Organisation shall have legal personality. It shall in particular have the capacity to enter into contracts, to acquire and dispose of movable and immovable assets and to be a party to legal proceedings.

The Organisation, members of its staff, experts called in by it and representatives of Member States shall enjoy such privileges and immunities as are necessary to discharge their duties, subject to the conditions laid down in the Protocol annexed to the Convention, of which the Protocol shall form an integral part.

Relations between the Organisation and the State in which it has its headquarters shall be regulated by a Headquarters Agreement.

§ 3. The working languages of the Organisation shall be French and German.

#### *Article 2. AIM OF THE ORGANISATION*

§ 1. The principal aim of the Organisation shall be to establish a uniform system of law applicable to the carriage of passengers, luggage and goods in international through traffic by rail between Member States, and to facilitate the application and development of this system.

§ 2. The system of law provided for in § 1 may also be applied to international through traffic using in addition to services on railway lines, land and sea services and inland waterways.

#### *Article 3. CIV AND CIM UNIFORM RULES*

§ 1. Carriage in international through traffic shall be subject to:

- The “Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV)”, forming Appendix A to the Convention;
- The “Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM)”, forming Appendix B to the Convention.

§ 2. The lines or services referred to in Article 2, on which such carriage is undertaken, shall be included in two lists: a list of CIV lines and a list of CIM lines.

§ 3. The undertakings responsible for the services referred to in Article 2, § 2 and included in the lists, shall have the same rights and obligations as those arising for railways under the CIV and CIM Uniform Rules, subject to such derogations as result from the operating conditions peculiar to each mode of transport, which shall be published in the same form as the tariffs.

Nevertheless, the rules as to liability may not be made the subject of derogations.

§ 4. The CIV and CIM Uniform Rules, including their Annexes, shall form an integral part of the Convention.

#### *Article 4. DEFINITION OF THE EXPRESSION “CONVENTION”*

In the following texts the expression “Convention” covers the Convention itself, the Protocol referred to in Article 1, § 2, second sub-paragraph, and Appendices A and B including their Annexes, referred to in Article 3, §§ 1 and 4.

## TITLE II. STRUCTURE AND FUNCTIONING

*Article 5. ORGANS*

The functioning of the Organisation shall be ensured by the following organs:

- General Assembly;
- Administrative Committee;
- Revision Committee;
- Committee of Experts for the Carriage of Dangerous Goods;
- Central Office for International Carriage by Rail (OCTI).

*Article 6. GENERAL ASSEMBLY*

§ 1. The General Assembly shall be composed of representatives of the Member States.

§ 2. The General Assembly shall:

- (a) Establish its rules of procedure;
- (b) Determine the composition of the Administrative Committee in accordance with Article 7, § 1;
- (c) Issue directives concerning the work of the Administrative Committee and the Central Office;
- (d) Fix, for five-year periods, the maximum figure for the annual expenditure of the Organisation, or issue directives relating to the limitation of that expenditure;
- (e) Take decisions, in accordance with Article 19, § 2, on proposals to amend the Convention;
- (f) Take decisions on applications for accession submitted to the General Assembly in accordance with Article 23, § 2;
- (g) Take decisions on other questions placed on the agenda in accordance with § 3.

§ 3. The Central Office shall convene the General Assembly once every five years or at the request of one-third of the Member States, as well as in the cases provided for in Articles 19, § 2 and 23, § 2, and shall send the draft agenda to the Member States at least three months before the opening of the session.

§ 4. There shall be a quorum in the General Assembly when a majority of the Member States are represented there.

A Member State may arrange to be represented by another Member State; no State may however represent more than two other States.

§ 5. Decisions of the General Assembly shall be taken by a majority vote of the Member States represented at the time of the vote.

However, for the purposes of § 2, (d) and (e), in the latter case where there are proposals to amend the Convention itself or the Protocol, the majority shall be two-thirds.

§ 6. With the agreement of a majority of the Member States, the Central Office shall also invite non-Member States to attend sessions of the General Assembly in an advisory capacity.



With the agreement of a majority of the Member States, the Central Office shall invite international organisations concerned with transport matters or with problems which have been placed on the agenda to attend sessions of the General Assembly in an advisory capacity.

§ 7. Before sessions of the General Assembly and as directed by the Administrative Committee, the Revision Committee shall be convened for preliminary consideration of the proposals referred to in Article 19, § 2.

#### *Article 7. ADMINISTRATIVE COMMITTEE*

§ 1. The Administrative Committee shall be composed of representatives of eleven Member States.

The Swiss Confederation shall have a permanent seat and shall assume the Chairmanship of the Committee. Other States shall be appointed for five years. The composition of the Committee shall be determined for each five-year period, having regard in particular to an equitable geographical distribution of seats. No Member State may sit on the Committee for more than two consecutive periods.

If a vacancy occurs, the Committee shall appoint another Member State for the remainder of the period.

Each Member State with a seat on the Committee shall appoint one delegate; it may also appoint an alternate.

§ 2. The Committee shall:

- (a) Establish its rules of procedure;
- (b) Conclude the Headquarters Agreement;
- (c) Make regulations to govern the organisation, and functioning of the Central Office and the conditions of service of its staff;
- (d) Appoint, taking account of the ability of the candidates and an equitable geographical distribution, the Director General, Deputy Director General, Counsellors and Assistant Counsellors of the Central Office. The Central Office shall inform the Member States in good time of any vacancy which may occur in those posts; the Swiss Government shall propose candidates for the posts of Director General and Deputy Director General;
- (e) Exercise both administrative and financial control over the affairs of the Central Office;
- (f) Ensure the correct application by the Central Office of the Convention and of decisions taken by the other organs; it shall, if necessary, recommend measures to be taken to facilitate the application of the Convention and of the decisions;
- (g) Give reasoned opinions on questions which may affect the work of the Central Office and are submitted to the Committee by a Member State or by the Director General of the Central Office;
- (h) Approve the Central Office's annual programme of work;
- (i) Approve the annual budget of the Organisation, the annual report and the annual accounts;
- (j) Send to the Member States the annual report, the annual statement of accounts as well as of its decisions and recommendations;

- (k) Prepare and send to the Member States, at least two months before the opening of the session of the General Assembly which is to decide the Committee's composition, a report on its work and proposals as to how it should be reconstituted.

§ 3. Unless it decides otherwise, the Committee shall meet at the headquarters of the Organisation.

It shall hold two meetings each year; it shall also meet if the Chairman so decides or at the request of four of its Members.

The minutes of its meetings shall be sent to all Member States.

#### *Article 8. COMMITTEES*

§ 1. The Revision Committee and the Committee of Experts on the Carriage of Dangerous Goods, hereinafter called the "Committee of Experts", shall be composed of representatives of the Member States.

The Director General of the Central Office or his representative shall attend the meetings in an advisory capacity.

§ 2. The Revision Committee shall:

- (a) Take decisions in accordance with article 19, § 3 on proposals to amend the Convention;
- (b) Consider in accordance with article 6, § 7 proposals submitted to the General Assembly.

The Committee of Experts shall:

Take decisions in accordance with article 19, § 4 on proposals to amend the Convention.

§ 3. The Central Office shall convene the Committees either on its own initiative or at the request of five Member States, or in the case provided for in article 6, § 7, and shall send the draft agenda to the Member States at least two months before the opening of the meeting.

§ 4. There shall be a quorum in the Revision Committee when a majority of the Member States are represented there; there shall be a quorum in the Committee of Experts when one-third of the Member States are represented there.

A Member State may arrange to be represented by another Member State; no State may however represent more than two other States.

§ 5. Each Member State represented shall have one vote; voting shall take place by show of hands or, on request, by nominal vote.

A proposal shall be adopted if the number of votes in favour is:

- (a) Equal to at least one-third of the number of Member States represented at the time of the vote;
- (b) Greater than the number of votes against.

§ 6. With the agreement of a majority of the Member States the Central Office shall invite non-Member States, and international organisations having competence in transport matters or with problems which have been placed on the agenda, to attend meetings of the Committees in an advisory capacity. Under

the same conditions, independent experts may be invited to meetings of the Committee of Experts.

§ 7. The Committees shall elect a Chairman and one or two Deputy Chairmen for each meeting.

§ 8. The proceedings shall be conducted in the working languages. The substance of what is said during a meeting in one of the working languages shall be translated into the other; proposals and decisions shall be translated in full.

§ 9. The minutes shall summarise the proceedings. Proposals and decisions shall be reproduced in full. With regard to decisions, the French text shall prevail.

Copies of the minutes shall be distributed to Member States.

§ 10. The Committees may appoint working groups to deal with specific questions.

§ 11. The Committees may establish their own rules of procedure.

#### *Article 9. CENTRAL OFFICE*

§ 1. The Central Office for International Carriage by Rail shall provide the Secretariat of the Organisation.

§ 2. The Central Office shall, in particular,

- (a) Carry out the duties entrusted to it by the other organs of the Organisation;
- (b) Examine proposals to amend the Convention, if necessary with the assistance of experts;
- (c) Convene the Committees;
- (d) Send to Member States, in due time, the documents necessary for the meetings of the various organs;
- (e) Maintain and publish the lists of lines provided for in article 3, § 2;
- (f) Receive communications from the Member States and from transport undertakings, and communicate them, where appropriate, to the other Member States and other transport undertakings;
- (g) Maintain and publish a card-index of legal precedents;
- (h) Publish a periodical bulletin;
- (i) Represent the Organisation in relations with other international organisations competent to deal with questions relevant to the aims of the Organisation;
- (j) Draw up the Organisation's draft annual budget and submit it to the Administrative Committee for approval;
- (k) Manage the financial affairs of the Organisation within the limits of the approved budget;
- (l) Endeavour, at the request of a Member State or transport undertaking, by using its good offices, to settle disputes between such States or undertakings arising from the interpretation or application of the Convention;
- (m) Give, at the request of the parties concerned — Member States, transport undertakings or users — an opinion on disputes arising from the interpretation or application of the Convention;

- (n) Collaborate in the settlement of disputes by arbitration in accordance with Title III;
- (o) Facilitate, as between transport undertakings, financial relations arising from international traffic and the recovery of outstanding debts.

§ 3. The periodical bulletin shall contain the information necessary for the application of the Convention, as well as studies, judgments and important information for the interpretation, application and development of railway transport law; it shall be published in the working languages.

#### *Article 10. LISTS OF LINES OR SERVICES*

§ 1. Member States shall send to the Central Office notifications concerning the inclusion of lines or services in or deletion of lines or services from the lists provided for in Article 3, § 2.

In so far as they link Member States, the lines or services referred to in Article 2, § 2 shall only be included in the lists with the agreement of those States; for the deletion of such a line or service, notification by one of those States shall suffice.

The Central Office shall notify all the Member States of the inclusion or deletion of any line or service.

§ 2. A line or service shall become subject to the Convention one month after the date of notification of its inclusion.

§ 3. A line or service shall cease to be subject to the Convention one month after the date of notification of its deletion, except for traffic already in transit, which shall be carried to its destination.

#### *Article 11. FINANCES*

§ 1. The expenditure of the Organisation shall be fixed for each financial year by the Administrative Committee on the basis of a proposal by the Central Office.

The expenditure of the Organisation shall be financed by the Member States in proportion to the length of the lines listed. However, services on sea routes and inland waterways shall count only in respect of one-half of the length of their routes; in the case of other lines or services operated under special conditions, the contribution may be reduced by up to one half by agreement between the Government concerned and the Central Office, subject to the approval of the Administrative Committee.

§ 2. When sending its annual report and statement of accounts to the Member States, the Central Office shall invite them to pay their contributions towards the expenditure of the past financial year as soon as possible and not later than 31 December of the year in which the documents are sent out.

After that date, the amounts due shall bear interest at the rate of five per cent per annum.

If, two years after that date, a Member State has not paid its contribution, its right to vote shall be suspended until it has fulfilled its obligation to pay.

On expiry of a further period of two years, the General Assembly shall consider whether the attitude of that State should be regarded as a tacit

denunciation of the Convention and, where necessary shall determine the effective date thereof.

§ 3. Contributions that have fallen due shall remain payable in the cases of denunciation referred to in § 2 and in Article 25, and in cases of suspension of the right to vote.

§ 4. Sums not recovered shall as far as possible be made good out of the resources of the Organisation; they may be spread over four financial years. Any remaining deficit shall be debited in a special account to the other Member States, in so far as they were parties to the Convention during the period of non-payment; the debit shall be proportional to the length of their lines listed on the date on which the special account is opened.

§ 5. A State which has denounced the Convention may become a Member State again by accession, provided that it has paid the sum due.

§ 6. A charge shall be made by the Organisation to cover the special expenses arising from activities provided for in Article 9, § 2, (l) to (n); in the cases provided for in Article 9, § 2, (l) and (m), the charge shall be determined by the Administrative Committee, on the basis of a proposal by the Central Office; in the case provided for in Article 9, § 2 (n), Article 15, § 2 shall apply.

§ 7. The reconciliation of the accounting records and vouchers shall be audited by the Swiss Government, which shall present a report to the Administrative Committee.

### TITLE III. ARBITRATION

#### Article 12. COMPETENCE

§ 1. Disputes between Member States arising from the interpretation or application of the Convention, as well as disputes between Member States and the Organisation arising from the interpretation or application of the Protocol on privileges and immunities may, at the request of one of the parties, be referred to an Arbitration Tribunal. The parties shall freely determine the composition of the Arbitration Tribunal and the arbitration procedure.

#### § 2. Disputes

- (a) Between transport undertakings,
- (b) Between transport undertakings and users,
- (c) Between users,

arising from the application of the CIV Uniform Rules and the CIM Uniform Rules, if not settled amicably or brought before the ordinary tribunals may, by agreement between the parties concerned, be referred to an Arbitration Tribunal. Articles 13 to 16 shall apply to the composition of the Arbitration Tribunal and the arbitration procedure.

§ 3. Any State may, on signing the Convention or depositing its instrument of ratification, acceptance, approval or accession reserve the right not to apply all or part of the provisions of § 1 and § 2.

§ 4. Any State which has made a reservation in pursuance of § 3 may withdraw it at any time by informing the depositary Government. The withdrawal

of the reservation shall take effect one month after the date on which the depositary Government notifies it to the States.

*Article 13. AGREEMENT TO REFER TO ARBITRATION. REGISTRY*

The Parties shall conclude an agreement to refer to arbitration, which shall, in particular, specify:

- (a) The subject matter of the dispute;
- (b) The composition of the Tribunal and the agreed period for nomination of the arbitrator or arbitrators;
- (c) The place where it is agreed that the Tribunal is to sit.

The agreement to refer to arbitration must be communicated to the Central Office which shall act as Registry.

*Article 14. ARBITRATORS*

§ 1. A panel of arbitrators shall be established and kept up to date by the Central Office. Each Member State may nominate to the panel of arbitrators two of its nationals who are specialists in international transport law.

§ 2. The Arbitration Tribunal shall be composed of one, three or five arbitrators in accordance with the agreement to refer to arbitration.

The arbitrators shall be selected from persons who are on the panel referred to in § 1. Nevertheless, if the agreement to refer to arbitration provides for five arbitrators, each of the parties may select one arbitrator who is not on the panel.

If the agreement to refer to arbitration provides for a sole arbitrator, he shall be selected by mutual agreement between the parties.

If the agreement to refer to arbitration provides for three or five arbitrators, each party shall select one or two arbitrators as the case may be; these, by mutual agreement, shall appoint the third or fifth arbitrator, who shall be President of the Arbitration Tribunal.

If the parties cannot agree on the selection of a sole arbitrator, or the selected arbitrators cannot agree on the appointment of a third or fifth arbitrator, the appointment shall be made by the Director-General of the Central Office.

§ 3. The sole arbitrator, or the third or fifth arbitrator, must be of a nationality other than that of either party, unless both are of the same nationality.

The intervention of a third party in the dispute shall not affect the composition of the Arbitration Tribunal.

*Article 15. PROCEDURE. COSTS*

§ 1. The Arbitration Tribunal shall decide the procedure to be followed having regard in particular to the following provisions:

- (a) It shall enquire into and determine cases on the basis of the evidence submitted by the parties, but will not be bound by their interpretations when it is called upon to decide a question of law;
- (b) It may not award more than the claimant has claimed, nor anything of a different nature, nor may it award less than the defendant has acknowledged as due;

- (c) The arbitration award, setting forth the reasons for the decision, shall be drawn up by the Arbitration Tribunal and notified to the parties by the Central Office;
- (d) Save where the mandatory provisions of the law of the place where the Arbitration Tribunal is sitting otherwise provide and subject to contrary agreement by the parties, the arbitration award shall be final.

§ 2. The fees of the arbitrators shall be determined by the Director-General of the Central Office.

The Tribunal shall determine in its award the amount of costs and expenses and shall decide how they and the fees of the arbitrators are to be apportioned between the parties.

#### *Article 16. LIMITATION. ENFORCEMENT*

§ 1. The commencement of arbitration proceedings shall have the same effect, as regards the interruption of periods of limitation, as that attributed by the applicable provisions of substantive law to the institution of an action in the ordinary courts.

§ 2. The Arbitration Tribunal's award in relation to transport undertakings or users becomes enforceable in each of the Member States on completion of the formalities required in the State where enforcement is to take place. The merits of the case shall not be subject to review.

#### TITLE IV. MISCELLANEOUS PROVISIONS

##### *Article 17. RECOVERY OF DEBTS OUTSTANDING BETWEEN TRANSPORT UNDERTAKINGS*

§ 1. Outstanding accounts in respect of transport operations subject to the Uniform Rules may be forwarded to the Central Office by the creditor transport undertaking for assistance in securing payment; to that end the Central Office shall formally call upon the debtor transport undertaking to pay the sum due or state the reasons for its refusal to pay.

§ 2. If the Central Office considers that the grounds for refusal are adequate, it shall advise the parties to have recourse either to the competent court or to the Arbitration Tribunal in accordance with Article 12, § 2.

§ 3. If the Central Office considers that the whole or part of the sum is properly due it may, after taking expert advice where appropriate, call upon the debtor transport undertaking to pay the whole or part of the debt to the Central Office; the sum so paid shall be retained until the competent court or the Arbitration Tribunal has given a final decision on the merits of the case.

§ 4. If within a fortnight the undertaking does not pay the sum fixed by the Central Office, the latter shall send a further formal notice and draw attention to the consequences of non-compliance.

§ 5. If no payment is received within two months after such further notice, the Central Office shall notify the Member State having jurisdiction over the undertaking, of the action taken and of the grounds therefor, inviting that Member State to take further action and in particular to consider whether the lines or services of that undertaking should remain on the list.

§ 6. If the Member State declares that, notwithstanding the failure to pay, it wishes the undertaking's lines or services to remain on the lists, or if it fails to reply to the Central Office communication within a period of six weeks, it shall be deemed to guarantee the settlement of all debts arising from transport operations subject to the Uniform Rules.

*Article 18. JUDGMENTS. ATTACHMENT. SECURITY FOR COSTS*

§ 1. Judgments pronounced by the competent court under the provisions of the Convention after trial or by default shall, when they have become enforceable under the law applied by that court, become enforceable in each of the other Member States on completion of the formalities required in the State where enforcement is to take place. The merits of the case shall not be subject to review.

This provision shall apply neither to judgments which are provisionally enforceable, nor to awards of damages in addition to costs against a plaintiff who fails in his action.

The first subparagraph shall apply equally to judicial settlements.

§ 2. Debts arising from a transport operation subject to the Uniform Rules, owed to one transport undertaking by another transport undertaking not under the jurisdiction of the same Member State, may only be attached under a judgment given by the judicial authority of the Member State which has jurisdiction over the undertaking entitled to payment of the debt sought to be attached.

§ 3. Rolling stock belonging to a railway, as well as all transport equipment belonging to that railway, such as containers, loading tackle and sheets may not be seized on any territory other than that of the Member State having jurisdiction over the owner railway, except under a judgment given by the judicial authority of that State.

Private owners' wagons, as well as all transport equipment contained in such wagons and belonging to the owner of the wagon, may not be seized on any territory other than that of the State in which the owner is domiciled, except under a judgment given by the judicial authority of that State.

§ 4. Security for costs shall not be required in proceedings founded on the provisions of the Convention.

TITLE V. AMENDMENT OF THE CONVENTION

*Article 19. COMPETENCE*

§ 1. Member States shall send their proposals for amending the Convention to the Central Office, which shall immediately bring them to the notice of the other Member States.

§ 2. The General Assembly shall take decisions on proposals to amend provisions of the Convention not referred to in §§ 3 and 4.

The inclusion of a proposal for an amendment on the agenda for a session of the General Assembly must be supported by one-third of the Member States.

When seized of a proposal for an amendment the General Assembly may decide, by the majority required under article 6, § 5, that such proposal is closely linked with one or more provisions the amendment of which is within the competence of the Revision Committee in accordance with § 3. In that case the



General Assembly is also empowered to take decisions on the amendment of such provision or provisions.

§ 3. Subject to decisions taken by the General Assembly in accordance with § 2, subparagraph 3, the Revision Committee shall take decisions on proposals to amend the provisions listed below:

(a) *CIV Uniform Rules:*

- Articles 1, § 3, 4, § 2; 5 (except § 2), 6, 9 to 14, 15 (except § 6), 16 to 21, 22, § 3; 23 to 25, 37, 43 (except § 2 and § 4), 48, 49, 56 to 58 and 61;
- The amounts expressed in units of account in Articles 30, 31, 38, 40 and 41, where the purpose of the amendment is to increase those amounts;

(b) *CIM Uniform Rules:*

- Articles 1, § 2; 3 §§ 2 to 5; 4, 5, 6 (except § 3), 7, 8, 11 to 13, 14 (except § 7), 15 to 17, 19 (except § 4), 20 (except § 3), 21 to 24, 25 (except § 3), 26 (except § 2), 27, 28 §§ 3 and 6; 29, 30 (except § 3), 31, 32 (except § 3), 33 (except § 5), 34, 38, 39, 41, 45, 46, 47 (except § 3), 48 (only in so far as it is a question of adaptation to international maritime transport law), 52, 53, 59 to 61, 64 and 65;
- The amount expressed in units of account in Article 40, where the purpose of the amendment is to increase that amount;
- Regulations concerning the International Haulage of Private Owners' Wagons by Rail (RIP), Annex II;
- Regulations concerning the International Carriage of Containers by Rail (RiCo), Annex III;
- Regulations concerning the International Carriage of Express Parcels by Rail (RIEx) Annex IV.

§ 4. The Committee of Experts shall take decisions on proposals to amend the provisions of the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID), Annex I to the CIM Uniform Rules.

*Article 20. DECISIONS OF THE GENERAL ASSEMBLY*

§ 1. Amendments decided upon by the General Assembly shall be recorded in a Protocol signed by the representatives of the Member States. The Protocol shall be subject to ratification, acceptance or approval; instruments of ratification, acceptance or approval shall be deposited as soon as possible with the depositary Government.

§ 2. When the Protocol has been ratified, accepted or approved by more than two-thirds of the Member States, the decisions shall come into force on the expiry of a period of time determined by the General Assembly.

§ 3. As soon as the decisions enter into force, the application of the CIV and CIM Uniform Rules shall be suspended in respect of traffic with and between those Member States which, one month before the date fixed for such entry into force, have not yet deposited their instruments of ratification, acceptance or approval. Such suspension shall be notified to Member States by the Central Office; it shall end one month after the date of notification by the Central Office of the ratification, acceptance or approval of the said decisions by the States concerned.

Such suspension shall not apply to Member States which notify the Central Office that, without having deposited their instruments of ratification, acceptance or approval, they will apply the amendments decided upon by the General Assembly.

*Article 21.* DECISIONS OF THE COMMITTEES

§ 1. Amendments decided upon by the Committees shall be notified to the Member States by the Central Office.

§ 2. Such decisions shall come into force for all Member States on the first day of the twelfth month following the month in which the Central Office notifies them to the Member States, unless one-third of the Member States have objected within four months from the date of such notification.

However, if a Member State lodges objections to a decision of the Revision Committee within the period of four months and denounces the Convention not later than two months before the date fixed for the entry into force of that decision, the latter shall only come into force at the time when the denunciation by the State concerned takes effect.

TITLE VI. FINAL PROVISIONS

*Article 22.* SIGNATURE, RATIFICATION, ACCEPTANCE  
AND APPROVAL OF THE CONVENTION

§ 1. The Convention shall remain open at Berne, with the Swiss Government, until 31 December 1980, for signature by the States which have been invited to the 8th Ordinary Revision Conference for the CIM and CIV Conventions.

§ 2. The Convention shall be subject to ratification, acceptance or approval; instruments of ratification, acceptance or approval shall be deposited with the Swiss Government, the Depositary Government.

*Article 23.* ACCESSION TO THE CONVENTION

§ 1. Those States which have been invited to the 8th Ordinary Revision Conference for the CIM and CIV Conventions but have not signed the new Convention within the period specified in Article 22, § 1, may nevertheless signify their accession to the Convention before it comes into force. The instrument of accession shall be deposited with the Depositary Government.

§ 2. Any State wishing to accede to this Convention after it comes into force shall address its application to the Depositary Government together with a note on the situation of its rail transport undertakings from the standpoint of international traffic. The Depositary Government shall communicate them to the Member States and to the Central Office.

The application shall be deemed to be accepted six months after the aforesaid communication, unless five Member States lodge objections with the Depositary Government. The Depositary Government shall inform the applicant State as well as the Member States and the Central Office accordingly. The new Member State shall comply with the provisions of Article 10 without delay.

In the event of an objection, the Depositary Government shall submit the application for accession to the General Assembly for decision.

Following the deposit of the instrument of accession, this shall take effect on the first day of the second month following the month during which the Central Office has notified the Member States of the list of lines and services of the new Member State.

§ 3. Any accession to the Convention may only relate to the Convention and amendments in force at that time.

*Article 24. ENTRY INTO FORCE OF THE CONVENTION*

§ 1. When the instruments of ratification, acceptance, approval or accession have been deposited by fifteen States, the Depositary Government shall contact the Governments concerned with a view to reaching agreement on the entry into force of the Convention.

§ 2. The entry into force of the Convention shall have the effect of abrogating the International Conventions concerning the Carriage of Goods by Rail (CIM) and the Carriage of Passengers and Luggage by Rail (CIV) of 7 February 1970 as well as the Additional Convention to the CIV relating to the Liability of the Railway for Death of and Personal Injury to Passengers of 26 February 1966.

*Article 25. DENUNCIATION OF THE CONVENTION*

Any State which wishes to denounce the Convention shall inform the Depositary Government. The denunciation shall take effect on 31 December of the following year.

*Article 26. FUNCTIONS OF THE DEPOSITARY GOVERNMENT*

The Depositary Government shall inform the States which have been invited to the 8th Ordinary Revision Conference for the CIM and CIV Conventions, any other States which have acceded to the Convention, and the Central Office:

- (a) Of signatures to the Convention, of the deposit of instruments of ratification, acceptance, approval or accession and of notifications of denunciation;
- (b) Of the date on which the Convention is to enter into force pursuant to Article 24;
- (c) Of the deposit of instruments of ratification, acceptance or approval of the protocols referred to in Article 20.

*Article 27. RESERVATIONS TO THE CONVENTION*

Reservations to the Convention may only be made if there is provision for them in the Convention.

*Article 28. TEXTS OF THE CONVENTION*

The Convention shall be concluded and signed in the French language.

The French text shall be accompanied by official translations in German, English, Arabic, Italian and Dutch.

The French text alone shall prevail.

IN WITNESS WHEREOF the undersigned, being duly authorised by their respective Governments, have signed this Convention.

DONE at Berne, this ninth day of May one thousand nine hundred and eighty, in a single original in the French language, which shall remain deposited in the archives of the Swiss Confederation. A certified copy shall be sent to each of the Member States.

[For the signature pages, see vol. 1396, p. 18.]

## PROTOCOL ON THE PRIVILEGES AND IMMUNITIES OF THE INTER-GOVERNMENTAL ORGANISATION FOR INTERNATIONAL CARRIAGE BY RAIL (OTIF)

### *Article 1*

§ 1. Within the scope of its official activities, the Organisation shall enjoy immunity from jurisdiction and execution save:

- (a) To the extent that the Organisation shall have expressly waived such immunity in a particular case;
- (b) In the case of a civil action for damages brought by a third party arising from an accident caused by a motor vehicle or other means of transport belonging to, or operated on behalf of, the Organisation, or in respect of a traffic offence involving such a means of transport;
- (c) In the case of a counter-claim directly connected with proceedings initiated by the Organisation;
- (d) In the case of attachment by court order, of the salary, wages and emoluments payable by the Organisation to a staff member.

§ 2. The property and assets of the Organisation, wherever situated, shall be immune from any form of requisition, confiscation, sequestration or any other form of seizure or distraint, except to the extent that this is rendered necessary as a temporary measure for the prevention of accidents involving motor vehicles belonging to or operated on behalf of the Organisation, or by enquiries in connection with such accidents.

However, if expropriation is necessary in the public interest, all the appropriate steps must be taken to avoid interference in the exercise by the Organisation of its activities and adequate prompt compensation must be paid in advance.

§ 3. In respect of the exercise of its official activities, the Organisation and its property and income shall be exempted from direct taxes by each Member State. Where purchase or services of substantial value and strictly necessary for the exercise of the official activities of the Organisation are made or used by the Organisation and where the price of such purchases or services includes taxes or duties, appropriate measures shall, whenever possible, be taken by the Member States to grant exemption from such taxes and duties or to reimburse the amount thereof.

No exemption shall be granted in respect of taxes or charges which are no more than payment for services rendered.

Goods imported or exported by the Organisation and strictly necessary for the exercise of its official activities, shall be exempt from all duties and charges levied on import or export.

No exemption shall be granted under this Article in respect of goods purchased or imported, or services provided, for the personal benefit of the staff members of the Organisation.

§ 4. Goods acquired or imported under § 3 may not be sold or given away, nor used otherwise than in accordance with the conditions laid down by the Member States which have granted the exemptions.

§ 5. The official activities of the Organisation referred to in this Protocol are those activities which correspond to the aims defined in Article 2 of the Convention.

#### Article 2

§ 1. The Organisation may receive and hold any kind of funds, currency, cash or securities; it may dispose of them freely for any purpose provided for in the Convention and hold accounts in any currency to the extent required to meet its obligations.

§ 2. For its official communications and the transmission of all its documents, the Organisation shall enjoy treatment no less favourable than that accorded by each Member State to other comparable international organisations.

#### Article 3

Representatives of Member States shall, while exercising their functions and during journeys made on official business, enjoy the following privileges and immunities in the territory of each Member State:

- (a) Immunity from jurisdiction, even after the termination of their mission, in respect of acts, including words spoken and written, done by them in the exercise of their functions; such immunity shall not apply, however, in the case of damage arising from an accident caused by a motor vehicle or other means of transport belonging to or driven by a representative of a State, nor in the case of a traffic offence involving such a means of transport;
- (b) Immunity from arrest and from detention pending trial, save when apprehended *flagrante delicto*;
- (c) Immunity from seizure of their personal luggage save when apprehended *flagrante delicto*;
- (d) Inviolability for all their official papers and documents;
- (e) Exemption for themselves and their spouses from all measures restricting entry and from all aliens' registration formalities;
- (f) The same facilities regarding currency and exchange control as those accorded to representatives of foreign Governments on temporary official mission.

#### Article 4

The staff members of the Organisation shall, while exercising their functions, enjoy the following privileges and immunities in the territory of each Member State:

- (a) Immunity from jurisdiction in respect of acts, including words spoken and written, done by them in the exercise of their functions, and within the limits of their prerogatives, even after they have left the service of the Organisation; such immunity shall not apply, however, in the case of damage arising from an accident caused by a motor vehicle or other means of transport belonging to or driven by a staff member of the Organisation, nor in the case of a traffic offence involving such a means of transport;
- (b) Inviolability for all their official papers and documents;
- (c) The same facilities as regards exemption from measures restricting immigration and governing aliens' registration as are normally accorded to staff members of international organisations; members of their families forming part of their households shall enjoy the same facilities;
- (d) Exemption from national income tax, subject to the introduction for the benefit of the Organisation of an internal tax on salaries, wages and emoluments paid by the Organisation; nevertheless the Member States may take these salaries, wages and emoluments into account for the purpose of assessing the amount of tax to be charged on income from other sources; Member States shall not be obliged to apply this exemption from tax to payments, retirement pensions and survivor's pensions paid by the Organisation to its former staff members or their assigns;
- (e) In respect of exchange control, the same privileges as are normally accorded to staff members of international organisations;
- (f) In time of international crisis, the same repatriation facilities for themselves and the members of their families forming part of their households as are normally accorded to staff members of international organisations.

#### *Article 5*

Experts upon whose services the Organisation may call shall, while exercising their functions in relation to, or undertaking missions on behalf of, the Organisation, enjoy the following privileges and immunities to the extent that these are necessary for the exercise of their functions, including during journeys made in the exercise of their functions and in the course of such missions:

- (a) Immunity from jurisdiction in respect of acts, including words written and spoken, done by them in the exercise of their functions; such immunity shall not apply, however, in the case of damage arising from an accident caused by a motor vehicle or other means of transport belonging to or driven by an expert, nor in the case of a traffic offence involving such a means of transport; experts shall continue to enjoy such immunity even after they have ceased to exercise their functions in relation to the Organisation;
- (b) Inviolability for all their official papers and documents;
- (c) The exchange control facilities necessary for the transfer of their remuneration;
- (d) The same facilities, in respect of personal luggage, as are accorded to agents of foreign Governments on temporary official mission.

#### *Article 6*

§ 1. The privileges and immunities provided for in this Protocol are instituted solely to ensure, in all circumstances, the unimpeded functioning of the

Organisation and the complete independence of the persons to whom they are accorded. The competent authorities shall waive any immunity in all cases where retaining it might impede the course of justice and where it can be waived without prejudicing the achievement of the purpose for which it was accorded.

§ 2. The competent authorities for the purposes of § 1 shall be:

- The Member States, in respect of their representatives,
- The Administrative Committee, in respect of the Director General,
- The Director General, in respect of other staff members and of experts upon whose services the Organisation may call.

#### *Article 7*

§ 1. Nothing in this Protocol shall call into question the right of each Member State to take every necessary precaution in the interests of its public security.

§ 2. The Organisation shall cooperate at all times with the competent authorities of the Member States in order to facilitate the proper administration of justice, to ensure the observance of the laws and regulations of the Member States concerned and to prevent any abuse arising out of the privileges and immunities provided for in this Protocol.

#### *Article 8*

No Member State shall be obliged to accord the privileges and immunities referred to in this Protocol under

- Article 3, excluding item (d)
- Article 4, excluding items (a), (b) and (d)
- Article 5, excluding items (a) and (b)

to its own nationals or to persons who are permanent residents of that State.

#### *Article 9*

The Organisation may conclude with one or more Member States complementary agreements to give effect to the provisions of this Protocol as regards such Member State or Member States, and other agreements to ensure the efficient functioning of the Organisation.

### APPENDIX A TO THE CONVENTION CONCERNING INTERNATIONAL CARRIAGE BY RAIL (COTIF) OF 9 MAY 1980

#### *UNIFORM RULES CONCERNING THE CONTRACT FOR INTERNATIONAL CARRIAGE OF PASSENGERS AND LUGGAGE BY RAIL (CIV)*

##### TITLE I. GENERAL PROVISIONS

###### *Article 1. SCOPE*

§ 1. Subject to the exceptions provided for in Articles 2, 3 and 33, the Uniform Rules shall apply to any carriage of passengers and luggage under international transport documents made out for a journey over the territories of at least two States and exclusively over lines or services included in the list provided for in Articles 3 and 10 of the Convention.

The Uniform Rules shall also apply, as far as the liability of the railway in case of death of, or personal injury to, passengers is concerned, to persons accompanying consignments effected in accordance with the Uniform Rules concerning the Contract for the International Carriage of Goods by Rail (CIM).

§ 2. The international tariffs shall determine the places between which international transport documents shall be issued.

§ 3. In the Uniform Rules, the term "station" covers: railway stations, ports used by shipping services and all other establishments of transport undertakings, open to the public for the execution of the contract of carriage.

#### *Article 2. EXCEPTIONS FROM SCOPE*

§ 1. Carriage between stations of departure and destination situated in the territory of the same State, performed over the territory of another State only in transit, shall not be subject to the Uniform Rules:

- (a) If the lines or services over which the transit occurs are exclusively operated by a railway of the State of departure; or
- (b) If the States or railways concerned have agreed not to regard such carriage as international.

§ 2. Carriage between stations in two adjacent States and carriage between stations in two States involving transit through the territory of a third State shall, in cases where the lines or services over which the carriage is performed are exclusively operated by a railway of one of those three States and where there is nothing to the contrary in the laws and regulations of any of the said States, be governed by the internal traffic regulations applicable to that railway.

#### *Article 3. RESERVATION CONCERNING LIABILITY IN CASE OF DEATH OF, OR PERSONAL INJURY TO, PASSENGERS*

§ 1. Each State may, at the time when it signs the Convention or deposits its instrument of ratification, acceptance, approval or accession reserve the right not to apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in case of death of or personal injury to passengers, when such passengers are nationals of or have their usual place of residence in that State.

§ 2. Each State which has made the reservation mentioned above may withdraw it at any time by informing the Depositary Government. Withdrawal of the reservation shall take effect one month after the date on which the Swiss Government notifies Member States of it.

#### *Article 4. OBLIGATION TO CARRY*

§ 1. The railway shall be bound to undertake the carriage of any passengers and luggage subject to the terms of the Uniform Rules, provided that:

- (a) The passenger complies with the Uniform Rules, the supplementary provisions and the international tariffs;
- (b) Carriage can be undertaken by the normal staff and transport resources which suffice to meet usual traffic requirements;
- (c) Carriage is not prevented by circumstances which the railway cannot avoid and which it is not in a position to remedy.

§ 2. When the competent authority decides that a service shall be discontinued or suspended totally or partially, such measures shall, without delay, be brought to the notice of the public and of the railways; the latter shall inform the railways of the other States of the measures with a view to their publication.



§ 3. Any contravention of this Article by the railway may constitute a cause of action for compensation for the loss or damage caused.

*Article 5. TARIFFS. PRIVATE AGREEMENTS*

§ 1. The international tariffs shall contain all the special conditions applicable to carriage, in particular the information necessary for calculating fares and other charges and, where necessary, the conditions for conversion of currencies.

The conditions of international tariffs may not derogate from the Uniform Rules unless the latter expressly so provide.

§ 2. The international tariffs shall be applied to all users on the same conditions.

§ 3. Railways may enter into private agreements for reduced fares or charges or other concessions, provided that comparable conditions are afforded to passengers in comparable circumstances.

Reductions in fares or charges or other concessions may be granted for the purpose of the railway or public services, or for charitable, educational or instructional purposes.

Publication of the measures taken under the first and second subparagraphs shall not be compulsory.

§ 4. The publication of international tariffs shall be compulsory only in those States whose railways are parties to such tariffs as railways of departure or destination. The tariffs and amendments thereto shall come into force on the date specified when they are published. Increases in fares or charges, and any other measures that have the effect of making the conditions of carriage prescribed in such tariffs more rigorous, shall come into force six days after their publication at the earliest.

Modifications to the fares and other charges provided for in the international tariffs made in order to take account of fluctuations in rates of exchange, as well as corrections of obvious errors, shall come into force on the day after their publication.

§ 5. At every station which is open for international traffic, the passenger should be able to acquaint himself with the international tariffs or with extracts therefrom showing the prices for international tickets on sale at that station and the corresponding registered luggage charges.

*Article 6. UNIT OF ACCOUNT. RATE OF EXCHANGE OR OF ACCEPTANCE OF FOREIGN CURRENCY*

§ 1. The unit of account referred to in the Uniform Rules shall be the Special Drawing Right as defined by the International Monetary Fund.

The value in Special Drawing Right of the national currency of a State which is a member of the International Monetary Fund shall be calculated in accordance with the method of valuation applied by the International Monetary Fund for its own operations and transactions.

§ 2. The value in Special Drawing Right of the national currency of a State which is not a member of the International Monetary Fund shall be calculated by the method determined by that State.

The calculation must express in the national currency a real value approximating as closely as possible to that which would result from the application of § 1.

§ 3. In the case of a State which is not a member of the International Monetary Fund and whose legislation does not permit the application of § 1 or § 2 above, the unit of account referred to in the Uniform Rules shall be deemed to be equal to three gold francs.

The gold franc is defined as 10/31 of a gramme of gold of millesimal fineness 900.

The conversion of the gold franc must express in the national currency a real value approximating as closely as possible to that which would result from the application of § 1.

§ 4. Within three months after the entry into force of the Convention and each time that a change occurs in their method of calculation or in the value of their national currency in relation to the unit of account, States shall notify the Central Office of their method of calculation in accordance with § 2, or of the results of the conversion in accordance with § 3.

The Central Office shall notify the States of this information.

§ 5. The railway shall publish the rates at which:

- (a) It converts sums expressed in foreign currencies but payable in domestic currency (rates of conversion);
- (b) It accepts payment in foreign currencies (rates of acceptance).

#### *Article 7. SUPPLEMENTARY PROVISIONS*

§ 1. Two or more States or two or more railways may make supplementary provisions for the execution of the Uniform Rules. They may not derogate from the Uniform Rules unless the latter expressly so provide.

§ 2. The supplementary provisions shall be put into force and published in the manner required by the laws and regulations of each State. The Central Office shall be notified of the supplementary provisions and of their coming into force.

#### *Article 8. NATIONAL LAW*

§ 1. In the absence of provisions in the Uniform Rules, supplementary provisions or international tariffs, national law shall apply.

§ 2. "National law" means the law of the State in which the person entitled asserts his rights, including the rules relating to conflict of laws.

§ 3. For the application of provisions relating to the liability of the railway in case of death of or personal injury to, passengers, national law shall be the law of the State on whose territory the accident to the passenger happened, including the rules relating to conflict of laws.

## TITLE II. THE CONTRACT OF CARRIAGE

### Chapter I. *CARRIAGE OF PASSENGERS*

#### *Article 9. TIMETABLES AND USE OF TRAINS*

§ 1. The railways shall bring the train timetables to the notice of the public in an appropriate manner.

§ 2. The timetables or the tariffs shall indicate restrictions on the use of certain trains or of certain classes of carriage.

#### *Article 10. REFUSAL TO CARRY. ACCEPTANCE SUBJECT TO CONDITIONS*

§ 1. The following persons shall not be permitted to travel or may be required to discontinue their journey:

- (a) Persons in an intoxicated condition or whose behaviour is improper or who infringe the provisions in force in individual States; such persons shall not be entitled to a refund of their fares or of any registered luggage charges they may have paid;
- (b) Persons who because of sickness or other cause appear likely to inconvenience other passengers, unless a whole compartment has been reserved for them or can be put at their disposal on payment therefor. However, persons who fall ill during a journey must be carried at least as far as the nearest station where they can be given the necessary attention; their fares shall be refunded in accordance with Article 25, subject to

deduction of the amounts due for the distance travelled; where appropriate, the same shall apply to registered luggage charges.

§ 2. The carriage of persons suffering from infectious or contagious diseases shall be subject to international conventions and regulations or, failing that, to the laws and regulations of each State.

#### *Article 11. TICKETS*

§ 1. Tickets issued for international carriage shall bear the initials CIV. As a transitional measure the mark  $\Phi$  shall be permitted.

§ 2. The international tariffs or agreements between railways shall determine the form and content of tickets and the language and characters in which they are to be printed and made out.

§ 3. Save where the international tariffs otherwise provide, tickets must indicate:

- (a) The stations of departure and destination;
- (b) The route; if a choice of routes or modes of transport is permitted, that facility shall be stated;
- (c) The category of train and class of carriage;
- (d) The fare;
- (e) The first day of validity;
- (f) The period of validity.

§ 4. Covers containing sectional coupons issued under an international tariff shall be deemed to be a single ticket for the purposes of the Uniform Rules.

§ 5. Save where the international tariffs otherwise provide, tickets shall be transferable if they are not made out in the passenger's name and if the journey has not begun.

§ 6. The passenger must ensure, on receipt of the ticket, that it has been made out in accordance with his instructions.

§ 7. The period of validity of tickets and breaks of journey shall be governed by the international tariffs.

#### *Article 12. RIGHT TO BE CARRIED. PASSENGERS WITHOUT VALID TICKETS*

§ 1. The passenger shall, from the start of his journey, be in possession of a valid ticket; he shall retain it throughout the journey and, if required, produce it to railway staff responsible for inspecting tickets and give it up at the end of the journey. The international tariffs may make provision for exceptions.

§ 2. Tickets which have been altered without authority are invalid and shall be withdrawn by the railway staff responsible for inspecting tickets.

§ 3. A passenger who cannot produce a valid ticket shall pay, in addition to the fare, a surcharge calculated according to the provisions of the railway requiring such payment.

§ 4. A passenger who refuses to pay the fare or the surcharge upon demand may be required to discontinue his journey. Such a passenger shall not be entitled to collect his registered luggage at any station other than the destination station.

#### *Article 13. REDUCED FARES FOR CHILDREN*

§ 1. Children under five years of age for whom separate seats are not claimed shall be carried free without a ticket.

§ 2. Children of five or more years of age but under ten years of age, and children under five for whom separate seats are claimed, shall be carried at reduced fares. These

shall not exceed one-half of the fare charged for adults, save for supplements charged for the use of certain trains or certain carriages, without prejudice to the rounding-up of amounts in accordance with the provisions applied by the railway issuing the ticket.

This reduction need not be made in the case of tickets issued at a rate below that of the normal single fare.

§ 3. However, the international tariffs may provide for different age limits from those laid down in §§ 1 and 2 provided that such age limits are not less than four years of age in respect of free travel under § 1, nor less than ten years of age in respect of reduced fares under § 2.

#### *Article 14. OCCUPATION OF SEATS*

§ 1. The occupation, allocation and reservation of seats in trains shall be governed by the provisions applied by the railway.

§ 2. In accordance with the conditions laid down by the international tariffs, the passenger may occupy a seat of a higher class or travel on a train of a higher fare category than shown on the ticket, or may alter his route.

#### *Article 15. TAKING OF HAND LUGGAGE AND ANIMALS INTO CARRIAGES*

§ 1. The passenger may take with him into carriages, without extra charge, articles which can be handled easily (hand luggage).

Each passenger is entitled only to the space above and below his seat for his hand luggage, or another corresponding space where the carriages are of a special type, in particular, those containing a luggage area.

§ 2. The following shall not be taken into carriages:

- (a) Substances and articles which are not acceptable for carriage as luggage under Article 18 (e), save where supplementary provisions or the tariffs otherwise provide;
- (b) Articles likely to annoy or inconvenience passengers or cause damage;
- (c) Articles which it is forbidden by the requirements of Customs or of other administrative authorities to take into carriages;
- (d) Live animals, save where the supplementary provisions or the tariffs otherwise provide.

§ 3. The international tariffs may prescribe the conditions under which articles taken into carriages contrary to §§ 1 and 2 (b) shall nevertheless be carried as hand luggage or as registered luggage.

§ 4. The railway shall have the right to satisfy itself, in the presence of the passenger, with the nature of any articles taken into carriages, when there is good reason to suspect a contravention of § 2 (a), (b) or (d). If it is not possible to identify the passenger who has taken with him the articles to be examined, the railway shall carry out the examination in the presence of two witnesses not connected with the railway.

§ 5. The passenger shall himself be responsible for the care of any articles and animals which he takes with him into the carriage, save when he cannot exercise such care because he is in a carriage of a special type referred to in § 1.

§ 6. The passenger shall be liable for all loss or damage caused by articles or animals which he has taken with him into the carriage unless he can prove that the loss or damage was caused by the fault of the railway or of a third party, or by circumstances which he could not avoid and the consequences of which he was unable to prevent.

This provision shall not affect any liability which may be incurred by the railway pursuant to Article 26.

*Article 16. MISSED CONNECTIONS. CANCELLATION OF TRAINS*

§ 1. When a connection is missed owing to late running or when a train is cancelled for all or part of its route, and a passenger wishes to continue his journey, the railway shall convey him with his hand luggage and registered luggage, without extra charge and in so far as may be practicable, in a train proceeding towards the same destination station on the same line or any other line operated by the railways of the original route, so as to enable him to reach his destination with the least delay.

§ 2. The railway shall, where necessary, certify on the ticket that the connection has been missed or the train cancelled, extend the validity of the ticket so far as may be necessary and make it available by the new route, for a higher class or for a train of a higher fare category. Nevertheless, the tariffs or timetables may exclude the use of certain trains.

*Chapter II. CARRIAGE OF REGISTERED LUGGAGE**Article 17. ACCEPTABLE ARTICLES*

§ 1. Articles appropriate for travel purposes, contained in trunks, baskets, suitcases, travelling bags and other similar receptacles, as well as the receptacles themselves, shall be accepted for carriage as registered luggage.

§ 2. The international tariffs may provide for the acceptance as registered luggage, on specified conditions, of animals and articles not mentioned in § 1, in particular accompanied motor vehicles handed over for carriage with or without a trailer.

§ 3. The tariffs or timetables may exclude or restrict the carriage of registered luggage on certain trains or certain categories of trains.

*Article 18. UNACCEPTABLE ARTICLES*

The following shall not be accepted for carriage as registered luggage:

- (a) Articles the carriage of which is prohibited in any one of the territories in which the luggage would be carried;
- (b) Articles the carriage of which is a monopoly of the postal authorities in any one of the territories in which the luggage would be carried;
- (c) Goods intended for sale;
- (d) Bulky or excessively heavy articles;
- (e) Dangerous substances or articles, in particular loaded firearms, explosive or inflammable substances or articles, oxidising, toxic, radioactive, or corrosive substances, or substances that are repugnant or likely to cause infection; the international tariffs may provide for the acceptance as registered luggage, subject to conditions, of certain of these substances and articles.

*Article 19. REGISTRATION AND CARRIAGE OF REGISTERED LUGGAGE*

§ 1. Luggage shall be registered only on production of tickets available at least as far as the destination of the luggage and for the route indicated on the ticket.

If the ticket is available for more than one route, or if the destination is served by more than one station, the passenger shall specify precisely the route to be followed or the station to which the luggage is to be registered. The railway shall not be liable for the consequences of the passenger's failure to comply with this requirement.

§ 2. If the tariffs so provide, the passenger may, during the period of validity of his ticket, register luggage for the whole journey or for any portion thereof.

§ 3. The tariffs shall determine whether, and on what conditions, registered luggage may be accepted for carriage without production of a ticket or by a route other than that indicated on the ticket produced. Where the tariffs provide that registered luggage may be

accepted for carriage without production of a ticket, the provisions of the Uniform Rules determining the rights and obligations of passengers in respect of their registered luggage shall apply by analogy to the consignor of registered luggage.

§ 4. The carriage charges for luggage must be paid on registration.

§ 5. In all other respects, the formalities with regard to registration of luggage shall be determined by the provisions in force at the registering station.

§ 6. The passenger may, in accordance with the provisions in force at the registering station, indicate the train by which his luggage is to be carried. If he does not do so, the luggage shall be forwarded by the first appropriate train.

If the luggage has to be transferred at a junction, it must be carried by the first train providing a regular service for registered luggage.

Luggage shall only be forwarded in the above-mentioned manner if the formalities required by Customs or other administrative authorities at departure or during the journey so permit.

#### *Article 20. LUGGAGE REGISTRATION VOUCHER*

§ 1. A registration voucher shall be issued to the passenger at the time when the luggage is registered.

§ 2. Luggage registration vouchers issued for international traffic shall bear the initials CIV. As a transitional measure the mark  $\text{C}$  shall be permitted.

§ 3. The international tariffs or agreements between railways shall determine the form and content of luggage registration vouchers and the language and characters in which they are to be printed and made out.

§ 4. Save where the international tariffs otherwise provide, registration vouchers must indicate:

- (a) The forwarding and destination stations;
- (b) The route;
- (c) The day on which the luggage is handed in for carriage and the train by which it is to be despatched;
- (d) The number of passengers;
- (e) The number of items of luggage and their mass;\*
- (f) The carriage and other charges.

§ 5. The passenger must ensure, on receipt of the luggage registration voucher, that it has been made out in accordance with his instructions.

#### *Article 21. CONDITION, PACKAGING, PACKING AND MARKING OF REGISTERED LUGGAGE*

§ 1. Items of registered luggage of which the condition or packaging is defective or which are inadequately packed or show obvious signs of damage may be refused by the railway. If they are nevertheless accepted, the railway may make an appropriate note on the luggage registration voucher. Acceptance by the passenger of a voucher bearing such a note shall be taken as evidence that the passenger has acknowledged its correctness.

§ 2. The passenger must indicate on each item of registered luggage in a clearly visible place, in a sufficiently durable, clear and indelible manner so as to avoid any possible confusion:

- (a) His name and address,
- (b) The station and country of destination.

\* Mass, for the purpose of this Convention within the U.K., should be analogous to weight.

Out-of-date details must be made illegible or removed by the passenger.

The railway may refuse to accept items which do not bear the prescribed details.

*Article 22. LIABILITY OF THE PASSENGER. VERIFICATION. SURCHARGE*

§ 1. The passenger shall be liable for all consequences of any failure to observe Articles 17, 18 and 21, § 2.

§ 2. When there is good reason to suspect a contravention, the railway shall have the right to verify that the contents of registered luggage comply with these provisions unless the laws or regulations of the State in which the examination would take place prohibit such verification. The passenger shall be invited to attend the verification. If he fails to attend or cannot be found, the verification shall be carried out in the presence of two witnesses not connected with the railway.

§ 3. If any contravention is established, the passenger must pay the costs arising from the verification.

In the event of any contravention of Articles 17 or 18, the railway may collect a surcharge as laid down in the international tariffs, as well as any difference in carriage charges and compensation for any loss or damage caused.

*Article 23. DELIVERY*

§ 1. Registered luggage shall be delivered on surrender of the luggage registration voucher and, where appropriate, on payment of the amounts chargeable against the consignment. The railway shall be entitled, but not obliged, to verify that the holder of the voucher is entitled to take delivery.

§ 2. It shall be equivalent to delivery to the holder of the voucher if, in accordance with the provisions in force at the station of delivery:

- (a) The luggage has been handed over to the Customs or Octroi authorities at their premises or warehouses, when these are not subject to railway supervision;
- (b) Live animals have been handed over to third parties.

§ 3. The holder of the voucher may require delivery of the luggage at the office of the destination station as soon as sufficient time has elapsed, after the arrival of the train on which it was due to be carried, for it to be put at his disposal and, where appropriate, for the completion of any formalities required by Customs or other administrative authorities.

§ 4. Failing surrender of the voucher, the railway shall only be obliged to deliver the luggage to the person proving his right thereto; if the proof offered appears insufficient, the railway may require security to be given.

§ 5. Luggage shall be delivered at the station to which it has been registered. Nevertheless, if the holder of the voucher so requests in good time, if circumstances permit and if Customs requirements or the requirements of other administrative authorities are not thereby contravened, luggage may be handed back at the forwarding station or delivered at an intermediate station on surrender of the registration voucher and, if the tariffs so require, on production of the ticket.

§ 6. The holder of a voucher whose luggage has not been delivered in accordance with § 3 may require the date and time when he requested delivery to be endorsed on the voucher.

§ 7. If the person entitled so requires, the railway must carry out an examination of the registered luggage in his presence in order to establish any alleged damage. The person entitled may refuse to accept the luggage if the railway does not comply with his request.

§ 8. In all other respects delivery of luggage shall be in accordance with the provisions in force at the station of delivery.

### Chapter III. *PROVISIONS APPLICABLE TO THE CARRIAGE OF BOTH PASSENGERS AND REGISTERED LUGGAGE*

#### *Article 24. COMPLETION OF ADMINISTRATIVE FORMALITIES*

The passenger must comply with the requirements of Customs or other administrative authorities, both concerning his own person and any animals he takes with him and concerning the examination of his hand luggage and registered luggage. The passenger shall be present at such examinations save where otherwise provided by the laws or regulations of each State. The railway shall not be liable to the passenger for loss or damage arising from the passenger's disregard of these obligations.

#### *Article 25. REFUNDS, REPAYMENTS AND ADDITIONAL PAYMENTS*

§ 1. Carriage charges shall be refunded wholly or in part, when:

- (a) A ticket has not been used or has been only partially used;
- (b) The ticket, owing to shortage of seats, has been used in a class or on a train of a lower fare category than shown on the ticket;
- (c) Luggage has been withdrawn at the forwarding station or delivered at an intermediate station.

§ 2. The international tariffs shall prescribe the documents and certificates which must be produced in support of a claim for refund, the amounts to be refunded and the charges to be deducted.

In specified cases, the tariffs may exclude refunds of carriage charges or make such refunds subject to certain conditions.

§ 3. No claim for a refund based on the preceding paragraphs or on Article 10, § 1 (b) will be accepted unless made to the railway within six months. In the case of tickets the time allowed shall run from the day after the expiry of the period of validity and in the case of luggage registration vouchers from the date of issue.

§ 4. In case of incorrect application of a tariff, or of error made in the calculation or collection of the carriage and other charges, overcharges shall be repaid by the railway or undercharges paid to the railway only when they exceed one unit of account per ticket or per luggage registration voucher.

§ 5. Overcharges or undercharges shall be calculated at the official rate of exchange for the day on which the carriage charges were collected. If the adjusting payment is made in a currency other than that in which the original charges were collected, the rate applicable shall be that for the day on which the adjusting payment is made.

§ 6. In all cases not provided for by this Article, and in the absence of agreements between railways, the provisions in force in the State of departure shall apply.

### TITLE III. LIABILITY

#### Chapter I. *LIABILITY OF THE RAILWAY IN CASE OF DEATH OF, OR PERSONAL INJURY TO, PASSENGERS*

##### *Article 26. BASIS OF LIABILITY*

§ 1. The railway shall be liable for the loss or damage resulting from the death of, personal injuries to, or any other bodily or mental harm to, a passenger, caused by an accident arising out of the operation of the railway and happening while the passenger is in, entering or alighting from railway vehicles.

The railway shall also be liable for the loss or damage resulting from the total or partial loss of, or damage to, any articles which the passenger, victim of such an accident, had on him or with him as hand luggage, including any animals.



§ 2. The railway shall be relieved of liability:

- (a) If the accident has been caused by circumstances not connected with the operation of the railway and which the railway, in spite of having taken the care required in the particular circumstances of the case, could not avoid and the consequences of which it was unable to prevent;
- (b) Wholly or partly, to the extent that the accident is due to the passenger's fault or to behaviour on his part not in conformity with the normal conduct of passengers;
- (c) If the accident is due to a third party's behaviour which the railway, in spite of having taken the care required in the particular circumstances of the case, could not avoid and the consequences of which it was unable to prevent; if the railway is not thereby relieved of liability, it shall be wholly liable up to the limits laid down in the Uniform Rules but without prejudice to any right of recourse which the railway may have against the third party.

§ 3. The Uniform Rules shall not affect any liability which may be incurred by the railway in cases not provided for in § 1.

§ 4. For the purposes of this chapter, the railway that is liable shall be that which, according to the list of lines or services provided for in Articles 3 and 10 of the Convention, operates the line on which the accident occurred. If, according to that list, there is joint operation of the line by two railways, each of them shall be liable.

#### *Article 27. DAMAGES IN CASE OF DEATH*

§ 1. In the case of the death of the passenger the damages shall include:

- (a) Any necessary costs following on the death, in particular those of transport of the body, burial and cremation;
- (b) If death does not occur at once, the damages provided for in Article 28.

§ 2. If, through the death of the passenger, persons whom he had, or would have had in the future, a legal duty to maintain are deprived of their support, such persons shall also be indemnified for their loss. Rights of action for damages by persons whom the passenger was maintaining without being legally bound to do so shall be governed by national law.

#### *Article 28. DAMAGES IN CASE OF PERSONAL INJURY*

In the case of personal injury or any other bodily or mental harm to the passenger the damages shall include:

- (a) Any necessary costs, in particular those of treatment and transport;
- (b) Compensation for financial loss due to total or partial incapacity to work, or to increased needs.

#### *Article 29. COMPENSATION FOR OTHER INJURIES*

National law shall determine whether and to what extent the railway shall pay damages for injuries other than that for which there is provision in Articles 27 and 28, in particular for mental or physical pain and suffering (*pretium doloris*) and for disfigurement.

#### *Article 30. FORM AND LIMIT OF DAMAGES IN CASE OF DEATH OR PERSONAL INJURY*

§ 1. The damages under Article 27, § 2 and Article 28 (b) shall be awarded in the form of a lump sum. However, if national law permits payment of an annuity, damages shall be awarded in that form if so requested by the injured passenger or by the persons entitled referred to in Article 27, § 2.

§ 2. The amount of damages to be awarded under § 1 shall be determined in accordance with national law. However, for the purposes of the Uniform Rules, the upper limit per passenger shall be set at 70,000 units of account in the form of a lump sum or an

annuity corresponding to that sum, where national law provides for an upper limit of less than that amount.

*Article 31. LIMIT OF DAMAGES IN CASE OF LOSS OF OR DAMAGE TO ARTICLES*

When the railway is liable under Article 26, § 1 subparagraph 2, it shall pay compensation up to the sum of 700 units of account per passenger.

*Article 32. PROHIBITION ON LIMITING LIABILITY*

Any provisions of tariffs or of special agreements concluded between the railway and the passenger which purport to exempt the railway in advance, either wholly or partly, from liability in case of death of, or personal injury to, passengers, or which have the effect of reversing the burden of proof resting on the railway, or which set limits lower than those laid down in Articles 30, § 2 and 31, shall be null and void. Such nullity shall not, however, affect the validity of the contract of carriage.

*Article 33. CARRIAGE BY MORE THAN ONE MODE OF TRANSPORT*

§ 1. Subject to § 2, the provisions relating to the liability of the railway in case of death of, or personal injury to, passengers shall not apply to loss or damage arising in the course of carriage by non-railway services, included in the list of lines or services referred to in Articles 3 and 10 of the Convention.

§ 2. However, where railway vehicles are carried by ferry, the provisions relating to the liability of the railway in case of death of, or personal injury to, passengers shall apply to loss or damage covered by Article 26, § 1, caused by an accident arising out of the operation of the railway and happening while the passenger is in, entering or alighting from the said vehicles.

For the purposes of the preceding sub-paragraph the “State on whose territory the accident to the passenger happened” means the State whose flag is flown by the ferry.

§ 3. When, because of exceptional circumstances, the railway finds itself obliged temporarily to suspend operations and itself carries the passengers or has them carried by another mode of transport, it shall be liable in accordance with the law relating to that mode of transport. Nevertheless, Article 18 of the Convention and Articles 8, 48-53 and 55 of the Uniform Rules shall remain applicable.

*Chapter II. LIABILITY OF THE RAILWAY IN RESPECT OF REGISTERED LUGGAGE*

*Article 34. COLLECTIVE RESPONSIBILITY OF RAILWAYS*

§ 1. The railway which has accepted luggage for carriage by issuing a luggage registration voucher shall be responsible for the carriage over the entire route up to delivery.

§ 2. Each succeeding railway, by the very act of taking over the registered luggage, shall become a party to the contract of carriage and shall assume the obligations arising therefrom without prejudice to the provisions of Article 51, § 3 relating to the railway of destination.

*Article 35. EXTENT OF LIABILITY*

§ 1. The railway shall be liable for loss or damage resulting from the total or partial loss of, or damage to, registered luggage between the time of acceptance for carriage and the time of delivery as well as from delay in delivery.

§ 2. The railway shall be relieved of such liability if the loss, damage or delay in delivery was caused by a fault on the part of the passenger, by an order given by the passenger other than as a result of a fault on the part of the railway, by inherent vice of

the registered luggage or by circumstances which the railway could not avoid and the consequences of which it was unable to prevent.

§ 3. The railway shall be relieved of such liability when the loss or damage arises from the special risks inherent in one or more of the following circumstances:

- (a) The absence or inadequacy of packing;
- (b) The special nature of the registered luggage;
- (c) The despatch as registered luggage of articles not acceptable for carriage.

#### *Article 36. BURDEN OF PROOF*

§ 1. The burden of proving that the loss, damage or delay in delivery was due to one of the causes specified in Article 35, § 2 shall rest upon the railway.

§ 2. When the railway establishes that, having regard to the circumstances of a particular case, the loss or damage could have arisen from one or more of the special risks referred to in Article 35, § 3, it shall be presumed that it did so arise. The person entitled shall, however, have the right to prove that the loss or damage was not attributable either wholly or partly to one of those risks.

#### *Article 37. PRESUMPTION OF LOSS OF REGISTERED LUGGAGE*

§ 1. The person entitled may, without being required to furnish further proof, consider an item of luggage as lost when it has not been delivered or placed at his disposal within fourteen days after a request for delivery has been made in accordance with Article 23, § 3.

§ 2. If an item of luggage deemed to have been lost is recovered within one year after the request for delivery, the railway shall notify the person entitled if his address is known or can be ascertained.

§ 3. Within thirty days after receipt of such notification, the person entitled may require the item of luggage to be delivered to him at any station on the route. In that case he must pay the charges in respect of carriage of the item from the forwarding station to the station where delivery is effected and shall refund the compensation received less any charges included therein. Nevertheless he shall retain his rights to claim compensation for delay in delivery under Article 40.

§ 4. If the item of luggage recovered has not been claimed within the period stated in § 3 or if it is recovered more than one year after the request for delivery, the railway shall dispose of it in accordance with the laws and regulations of the State having jurisdiction over the railway.

#### *Article 38. COMPENSATION FOR LOSS*

§ 1. In case of total or partial loss of registered luggage, the railway shall pay, to the exclusion of all other damages:

- (a) If the amount of the loss or damage suffered is established: compensation equal to that amount but not exceeding 34 units of account per kilogramme of gross mass missing, or 500 units of account per item of luggage;
- (b) If the amount of the loss or damage suffered is not established: liquidated damages of 10 units of account per kilogramme of gross mass missing or 150 units of account per item of luggage.

The method of compensation, by mass or by item of luggage, shall be determined by the international tariffs.

§ 2. The railway shall in addition refund carriage charges, Customs duties and other sums incurred in respect of carriage of the lost item of luggage.

*Article 39. COMPENSATION IN CASE OF DAMAGE*

§ 1. In case of damage to registered luggage, the railway must pay compensation equivalent to the loss in value of the registered luggage, to the exclusion of all other damages.

§ 2. The compensation may not exceed:

- (a) If all the luggage has lost value through damage, the amount which would have been payable in case of total loss;
- (b) If only part of the luggage has lost value through damage, the amount which would have been payable had that part been lost.

*Article 40. COMPENSATION FOR DELAY IN DELIVERY*

§ 1. In case of delay in delivery of registered luggage, the railway shall pay in respect of each whole period of twenty-four hours after delivery has been requested, but subject to a maximum of fourteen days:

- (a) If the person entitled proves that loss or damage has been suffered thereby; compensation equal to the amount of the loss or damage, up to a maximum of 0.40 units of account per kilogramme of gross mass of the luggage or seven units of account per item of luggage, delivered late;
- (b) If the person entitled does not prove that loss or damage has been suffered thereby; liquidated damages of 0.07 units of account per kilogramme of gross mass of the luggage or 1.40 units of account per item of luggage, delivered late.

The method of compensation, by mass or by item of luggage, shall be determined by the international tariffs.

§ 2. In case of total loss of luggage, the compensation provided for in § 1 shall not be payable in addition to that provided for in Article 38.

§ 3. In case of partial loss of luggage, the compensation provided for in § 1 shall be payable in respect of that part of the luggage which has not been lost.

§ 4. In case of damage to luggage not resulting from delay in delivery the compensation provided for in § 1 shall, where appropriate, be payable in addition to that provided for in Article 39.

§ 5. In no case shall the compensation payable under § 1 together with that payable under Articles 38 and 39 exceed the compensation which would be payable in the event of total loss of the luggage.

*Article 41. ACCOMPANIED MOTOR VEHICLES*

§ 1. In case of delay in loading for a reason attributable to the railway or delay in delivery of an accompanied motor vehicle, the railway shall, if the person entitled proves that loss or damage has been suffered thereby, pay compensation the amount of which shall not exceed the charge for carriage of the vehicle.

§ 2. If, in case of delay in loading for a reason attributable to the railway the person entitled elects not to proceed with the contract of carriage, the carriage charges for carriage of the vehicle and of the passengers shall be refunded to him. In addition the person entitled may, if he proves that loss or damage has been suffered as a result of the delay, claim compensation not exceeding the carriage charges for carriage of the vehicle.

§ 3. In case of total or partial loss of a vehicle, the compensation payable to the person entitled for the loss or damage proved shall be calculated on the usual value of the vehicle and may not exceed 4,000 units of account. A loaded or unloaded trailer shall be considered as a vehicle.

§ 4. In respect of articles left inside the vehicle the railway shall be liable only for loss or damage caused by a fault on its part. The total compensation payable may not exceed 700 units of account. The railway shall not be liable in respect of articles left on the vehicle.

§ 5. The other provisions relating to liability in respect of registered luggage shall also apply to the carriage of accompanied motor vehicles.

### Chapter III. COMMON PROVISIONS CONCERNING LIABILITY

#### *Article 42. COMPENSATION IN CASE OF WILFUL MISCONDUCT OR GROSS NEGLIGENCE*

The provisions of Articles 30, 31 and 38 to 41 of the Uniform Rules or those of national law, limiting compensation to a fixed amount, shall not apply if the loss or damage results from wilful misconduct or gross negligence on the part of the railway.

In the case of gross negligence, compensation for loss, damage or delay in delivery of registered luggage shall nevertheless be limited to twice the maxima specified in Articles 38 to 41.

#### *Article 43. INTEREST ON COMPENSATION*

§ 1. The person entitled may claim interest on compensation payable, calculated at five per cent per annum, from the day of the claim referred to in Article 49 or, if no such claim has been made, from the day on which legal proceedings are instituted.

§ 2. However, in the case of compensation payable under Articles 27 and 28, interest shall accrue only from the day on which the events relevant to the assessment of the amount occurred, if that day is later than that of the claim or the day when legal proceedings were instituted.

§ 3. In the case of registered luggage, interest shall only be payable if the compensation exceeds four units of account per luggage registration voucher.

§ 4. In the case of registered luggage, if the person entitled does not submit to the railway, within a reasonable period allotted to him, the supporting documents required for the amount of the claim to be finally settled, no interest shall accrue between the expiry of the period laid down and the actual submission of such documents.

#### *Article 44. LIABILITY IN CASE OF NUCLEAR INCIDENTS*

The railway shall be relieved of liability under the Uniform Rules for loss or damage caused by a nuclear incident when the operator of a nuclear installation or another person who is substituted for him is liable for the loss or damage pursuant to a State's laws and regulations governing liability in the field of nuclear energy.

#### *Article 45. LIABILITY OF THE RAILWAY FOR ITS SERVANTS*

§ 1. The railway shall be liable for its servants and for any other persons whom it employs to perform the carriage.

If however such servants and other persons, at the request of a passenger, render services which the railway itself is under no obligation to render, they shall be deemed to be acting on behalf of the passenger to whom the services are rendered.

#### *Article 46. OTHER ACTIONS*

In all cases to which the Uniform Rules apply, any action in respect of liability on any grounds whatsoever, may be brought against the railway only subject to the conditions and limitations laid down in those Rules.

The same shall apply to any action brought against those servants and other persons for whom the railway is liable under Article 45.

*Article 47. SPECIAL PROVISIONS*

§ 1. Subject to Article 41, the liability of the railway in respect of loss or damage resulting from the late running or cancellation of a train or from a missed connection shall be determined by the laws and regulations of the State in which the incident occurred.

§ 2. Subject to Article 26, the railway shall not be liable in respect of articles and animals the care of which is the responsibility of the passenger under Article 15, § 5 or of articles which the passenger has on him, unless the loss or damage is caused by a fault on the part of the railway.

§ 3. The other Articles of Title III, and Title IV, shall not apply to the cases in §§ 1 and 2.

## TITLE IV. ASSERTION OF RIGHTS

*Article 48. ASCERTAINMENT OF PARTIAL LOSS OF, OR DAMAGE TO, REGISTERED LUGGAGE*

§ 1. When partial loss of, or damage to, registered luggage is discovered or presumed by the railway or alleged by the person entitled, the railway must without delay, and if possible in the presence of the person entitled, draw up a report stating, according to the nature of the loss or damage, the condition of the registered luggage, its mass and, as far as possible, the extent of the loss or damage, its cause and the time of its occurrence.

A copy of the report must be supplied free of charge to the person entitled.

§ 2. Should the person entitled not accept the findings in the report, he may request that the condition and mass of the registered luggage and the cause and amount of the loss or damage be ascertained by an expert appointed either by the parties or by a court. The procedure to be followed shall be governed by the laws and regulations of the State in which such ascertainment takes place.

§ 3. In case of loss of an item of registered luggage, the person entitled must, to facilitate the enquiries to be made by the railway, give as accurate a description as possible of the missing item of luggage.

*Article 49. CLAIMS*

§ 1. Claims relating to the liability of the railway in case of death of, or personal injury to, passengers shall be made in writing to one of the following railways:

- (a) To the railway that is liable; if, in accordance with Article 26, § 4, two railways are liable, to one of them;
- (b) To the railway of departure;
- (c) To the railway of destination;
- (d) To the railway of the passenger's domicile or of his usual place of residence, provided that the headquarters of that railway is on the territory of a Member State.

§ 2. Other claims relating to the contract of carriage shall be made in writing to the railway specified in Article 51, §§ 2 and 3.

On settlement of the claim, the railway may require the surrender of tickets or luggage registration vouchers.

§ 3. A claim may be made by persons who have the right to bring an action against the railway under Article 50.

§ 4. Tickets, luggage registration vouchers and other documents which the person entitled thinks fit to submit with the claim shall be produced either in the original or as copies, the copies to be duly authenticated if the railway so requires.

*Article 50. PERSONS WHO MAY BRING AN ACTION AGAINST THE RAILWAY*

An action may be brought against the railway by the person who produces the ticket or luggage registration voucher, as the case may be, or failing that, furnishes other proof of his right to sue.

*Article 51. RAILWAYS AGAINST WHICH AN ACTION MAY BE BROUGHT*

§ 1. An action based on the liability of the railway in case of death of, or personal injury to, passengers may only be brought against the railway that is liable within the meaning of Article 26, § 4. In the case of joint operation by two railways the person entitled may elect to sue either of them.

§ 2. An action for the recovery of a sum paid under the contract of carriage may be brought against the railway which has collected that sum or against the railway on whose behalf it was collected.

§ 3. Other actions arising from the contract of carriage may be brought against the railway of departure, the railway of destination or the railway on which the event giving rise to the proceedings occurred.

Such actions may be brought against the railway of destination even if it has not received the registered luggage.

§ 4. If the plaintiff can choose between several railways, his right to choose shall be extinguished as soon as he brings an action against any one of them.

§ 5. An action may be brought against a railway other than those specified in §§ 2 and 3 when instituted by way of counter-claim or by way of exception to the principal claim based on the same contract of carriage.

*Article 52. COMPETENCE*

§ 1. Actions based on the liability of the railway in case of death of, or personal injury to, passengers may only be instituted in the competent court of the State in whose territory the accident to the passenger happened unless otherwise provided in agreements between States or in acts of concession.

§ 2. Other actions brought under the Uniform Rules may only be instituted in the competent court of the State having jurisdiction over the defendant railway, unless otherwise provided in agreements between States or in acts of concession.

When a railway operates independent railway systems in different States, each system shall be regarded as a separate railway for the purposes of this paragraph.

*Article 53. EXTINCTION OF RIGHT OF ACTION ARISING FROM LIABILITY IN CASE OF DEATH OF, OR PERSONAL INJURY TO, PASSENGERS*

§ 1. Any right of action by the person entitled based on the liability of the railway in case of death of, or personal injury to, passengers shall be extinguished if notice of the accident to the passenger is not given by the person entitled, within three months of his becoming aware of the loss or damage, to one of the railways to which a claim may be made in accordance with Article 49, § 1.

Where the person entitled gives oral notice of the accident to the railway, the railway shall furnish him with an acknowledgement of such oral notice.

§ 2. Nevertheless the right of action shall not be extinguished if:

- (a) Within the period of time specified in § 1 the person entitled has made a claim to one of the railways designated in Article 49, § 1;
- (b) Within the period of time specified in § 1 the railway that is liable, or one of the two railways if in accordance with Article 26, § 4 two railways are liable, has learned of the accident to the passenger in some other way;

- (c) Notice of the accident has not been given, or has been given late, as a result of circumstances for which the person entitled is not responsible;
- (d) The person entitled proves that the accident was caused by a fault of the railway.

*Article 54. EXTINCTION OF RIGHT OF ACTION ARISING FROM THE CONTRACT OF CARRIAGE OF REGISTERED LUGGAGE*

§ 1. Acceptance of the luggage by the person entitled shall extinguish all rights of action against the railway arising from the contract of carriage in case of partial loss, of damage or of delay in delivery.

§ 2. Nevertheless, the right of action shall not be extinguished:

- (a) In the case of partial loss or of damage, if:
  - (i) The loss or damage was ascertained before the acceptance of the luggage in accordance with Article 48 by the person entitled;
  - (ii) The ascertainment which should have been carried out under Article 48 was omitted solely through the fault of the railway;
- (b) In the case of loss or damage which is not apparent and is not ascertained until after acceptance of the luggage by the person entitled, provided that he:
  - (i) Asks for ascertainment in accordance with Article 48 immediately after discovery of the loss or damage and not later than three days after the acceptance of the luggage;
  - (ii) And, in addition, proves that the loss or damage occurred between the time of acceptance for carriage and the time of delivery;
- (c) In the case of delay in delivery, if the person entitled has, within twenty-one days, asserted his rights against one of the railways referred to in Article 51, § 3;
- (d) If the person entitled furnishes proof that the loss or damage was caused by wilful misconduct or gross negligence on the part of the railway.

*Article 55. LIMITATION OF ACTIONS*

§ 1. The period of limitation for actions for damages based on the liability of the railway in case of death of, or personal injury to, passengers shall be:

- (a) In the case of a passenger, three years from the day after the accident;
- (b) In the case of other persons entitled, three years from the day after the death of the passenger, subject to a maximum of five years from the day after the accident.

§ 2. The period of limitation for other actions arising from the contract of carriage shall be one year.

Nevertheless the period of limitation shall be two years in the case of an action for:

- (a) Loss or damage caused by wilful misconduct;
- (b) Fraud.

§ 3. The period of limitation provided for in § 2 shall run:

- (a) In actions for compensation for total loss, from the fourteenth day after the expiry of the period of time referred to in Article 23, § 3;
- (b) In actions for compensation for partial loss, for damage or for delay in delivery, from the day when delivery took place;
- (c) In actions for payment or refund of carriage charges, supplementary charges or surcharges, or for correction of charges in the event of a tariff being wrongly applied or of an error in calculation or collection: from the day of payment or, if payment has not been made, from the day when payment should have been made;



- (d) In actions to recover additional duty demanded by Customs or other administrative authorities, from the day of the demand made by such authorities;
- (e) In all other cases involving the carriage of passengers, from the day of expiry of validity of the ticket.

The day indicated for the commencement of the period of limitation shall not be included in the period.

§ 4. When a claim is presented to a railway in accordance with Article 49 together with the necessary supporting documents, the period of limitation shall be suspended until the day that the railway rejects the claim by notification in writing and returns the documents. If part of the claim is admitted, the period of limitation shall recommence in respect of that part of the claim still in dispute. The burden of proof of receipt of the claim or of the reply and of the return of the documents shall rest on the party who relies on those facts.

The period of limitation shall not be suspended by further claims having the same object.

§ 5. A right of action which has become time-barred may not be exercised by way of counterclaim or relied upon by way of exception.

§ 6. Subject to the foregoing provisions, the suspension and interruption of periods of limitation shall be governed by national law.

#### TITLE V. RELATIONS BETWEEN RAILWAYS

##### *Article 56. SETTLEMENT OF ACCOUNTS BETWEEN RAILWAYS*

Any railway which has collected or ought to have collected carriage charges must pay to the railways concerned their respective shares of such charges.

##### *Article 57. RECOURSE IN CASE OF LOSS OR DAMAGE*

§ 1. A railway which has paid compensation in accordance with the Uniform Rules, for total or partial loss of, or for damage to, registered luggage, has a right of recourse against the other railways which have taken part in the carriage, in accordance with the following provisions:

- (a) The railway which has caused the loss or damage shall be solely liable for it;
- (b) When the loss or damage has been caused by more than one railway, each shall be liable for the loss or damage it has caused: if such distinction cannot be made, the compensation shall be apportioned between those railways in accordance with (c);
- (c) If it cannot be proved that the loss or damage has been caused by one or more railways in particular, the compensation shall be apportioned between all the railways which have taken part in the carriage, except those which can prove that the loss or damage was not caused on their lines; such apportionment shall be in proportion to the kilometric distances contained in the tariffs.

§ 2. In the case of the insolvency of any one of the railways, the unpaid share due from it shall be apportioned among all the other railways which have taken part in the carriage, in proportion to the kilometric distances contained in the tariffs.

##### *Article 58. RECOURSE IN CASE OF DELAY IN DELIVERY*

Article 57 shall apply where compensation is paid for delay in delivery. If the delay has been caused by more than one railway, the compensation shall be apportioned between such railways in proportion to the length of the delay occurring on their respective lines.

##### *Article 59. PROCEDURE FOR RECOURSE*

§ 1. The validity of the payment made by the railway exercising one of the rights of recourse under Articles 57 and 58 may not be disputed by the railway against which the

right of recourse is exercised, when compensation has been determined by a court and when the latter railway, duly served with notice, has been afforded an opportunity to intervene in the proceedings. The court seized of the main proceedings shall determine what time shall be allowed for such notification and for intervention in the proceedings.

§ 2. A railway exercising its right of recourse must take proceedings by one and the same action against all the railways concerned, with which it has not reached a settlement, failing which it shall lose its right of recourse in the case of those against which it has not taken proceedings.

§ 3. The court shall give its decision in one and the same judgment on all recourse claims brought before it.

§ 4. The railways against which such action has been brought shall have no further right of recourse.

§ 5. Recourse proceedings may not be joined with proceedings for compensation taken by the person entitled on the basis of the contract of carriage.

#### *Article 60. COMPETENCE FOR RECOURSE CLAIMS*

§ 1. The courts of the country in which the railway, against which the recourse claim has been made, has its headquarters shall have exclusive competence for all recourse claims.

§ 2. When the action is to be brought against several railways, the plaintiff railway shall be entitled to choose the court in which it will bring the proceedings from among those having competence under § 1.

#### *Article 61. AGREEMENTS CONCERNING RECOURSE*

By agreement, railways may derogate from the provisions concerning reciprocal rights of recourse set out in Title V, apart from that contained in Article 59, § 5.

### TITLE VI. EXCEPTIONAL PROVISIONS

#### *Article 62. DEROGATIONS*

The provisions of the Uniform Rules shall not prevail over these provisions which certain States are obliged to adopt, in traffic among themselves, in pursuance of certain Treaties such as the Treaties relating to the European Coal and Steel Community<sup>1</sup> and the European Economic Community.<sup>2</sup>

## APPENDIX B TO THE CONVENTION CONCERNING INTERNATIONAL CARRIAGE BY RAIL (COTIF) OF 9 MAY 1980

### *UNIFORM RULES CONCERNING THE CONTRACT FOR INTERNATIONAL CARRIAGE OF GOODS BY RAIL (CIM)*

#### TITLE I. GENERAL PROVISIONS

##### *Article 1. SCOPE*

§ 1. Subject to the exceptions provided for in Article 2, the Uniform Rules shall apply to all consignments of goods for carriage under a through consignment note made out for a route over the territories of at least two States and exclusively over lines or services included in the list provided for in Articles 3 and 10 of the Convention.

<sup>1</sup> United Nations, *Treaty Series*, vol. 261, p. 140.

<sup>2</sup> *Ibid.*, vol. 298, p. 3.

§ 2. In the Uniform Rules the expression “station” covers: railway stations, ports used by shipping services and all other establishments of transport undertakings, open to the public for the execution of the contract of carriage.

*Article 2. EXCEPTIONS FROM SCOPE*

§ 1. Consignments between sending and destination stations situated in the territory of the same State, which pass through the territory of another State only in transit, shall not be subject to the Uniform Rules:

- (a) If the lines or services over which the transit occurs are exclusively operated by a railway of the State of departure; or
- (b) If the States or the railways concerned have agreed not to regard such consignments as international.

§ 2. Consignments between stations in two adjacent States and between stations in two States in transit through the territory of a third State shall, if the lines over which the consignments are carried are exclusively operated by a railway of one of those three States, be subject to the internal traffic regulations applicable to that railway if the sender, by using the appropriate consignment note, so elects and where there is nothing to the contrary in the laws and regulations of any of the States concerned.

*Article 3. OBLIGATION TO CARRY*

§ 1. The railway shall be bound to undertake all carriage of any goods in complete wagon-loads, subject to the terms of the Uniform Rules, provided that:

- (a) The sender complies with the Uniform Rules, the supplementary provisions and the tariffs;
- (b) Carriage can be undertaken by the normal staff and transport resources which suffice to meet usual traffic requirements;
- (c) Carriage is not prevented by circumstances which the railway cannot avoid and which it is not in a position to remedy.

§ 2. The railway shall not be obliged to accept goods of which the loading, transshipment or unloading requires the use of special facilities unless the stations concerned have such facilities at their disposal.

§ 3. The railway shall only be obliged to accept goods the carriage of which can take place without delay; the provisions in force at the forwarding station shall determine the circumstances in which goods not complying with that condition must be temporarily stored.

§ 4. When the competent authority decides that:

- (a) A service shall be discontinued or suspended totally or partially,
- (b) Certain consignments shall be refused or accepted only subject to conditions,

these measures shall, without delay, be brought to the notice of the public and the railways; the latter shall inform the railways of the other States with a view to their publication.

§ 5. The railways may, by joint agreement, concentrate goods traffic between certain places on specified frontier points and transit countries.

These measures shall be notified to the Central Office. They shall be entered by the railways in special lists, published in the manner laid down for international tariffs, and shall come into force one month after the date of notification to the Central Office.

§ 6. Any contravention of this Article by the railway may constitute a cause of action for compensation for loss or damage caused.

*Article 4. ARTICLES NOT ACCEPTABLE FOR CARRIAGE*

The following shall not be accepted for carriage:

- (a) Articles the carriage of which is prohibited in any one of the territories in which the articles would be carried;
- (b) Articles the carriage of which is a monopoly of the postal authorities in any one of the territories in which the articles would be carried;
- (c) Articles which, by reason of their dimensions, their mass,\* or their packaging, are not suitable for the carriage proposed, having regard to the installations or rolling stock of any one of the railways which would be used;
- (d) Substances and articles which are not acceptable for carriage under the Regulations concerning the international carriage of dangerous goods by rail (RID), Annex 1 to the Uniform Rules, subject to the exceptions provided for in Article 5, § 2.

*Article 5. ARTICLES ACCEPTABLE FOR CARRIAGE SUBJECT TO CONDITIONS*

§ 1. The following shall be acceptable for carriage subject to conditions:

- (a) Substances and articles acceptable for carriage subject to the conditions laid down in the RID or in the agreements and tariff clauses provided for in § 2.
- (b) Funeral consignments, railway rolling stock running on its own wheels, live animals and consignments the carriage of which presents special difficulties by reason of their dimensions, their mass or their packaging: subject to the conditions laid down in the supplementary provisions; these may derogate from the Uniform Rules.

Live animals must be accompanied by an attendant provided by the consignor. Nevertheless an attendant shall not be required when the international tariffs permit or when the railways participating in the carriage so permit at the consignor's request; in such cases, unless there is an agreement to the contrary, the railway shall not be liable for any loss or damage resulting from any risk which the attendant was intended to avert.

§ 2. Two or more States, by agreement, or two or more railways, by tariff clauses, may jointly determine the conditions with which certain substances or articles not acceptable for carriage under the RID must comply if they are nevertheless to be accepted.

States or railways may, in the same manner, make the conditions for acceptance laid down in the RID less rigorous.

Such agreements and tariff clauses must be published and notified to the Central Office which will bring them to the notice of the States.

*Article 6. TARIFFS. PRIVATE AGREEMENTS*

§ 1. Carriage charges, whether or not calculated separately for different sections of the route, and supplementary charges shall be calculated in accordance with the tariffs which are legally in force and duly published in each State and which are applicable at the time when the contract of carriage is made.

§ 2. The tariffs must indicate all the special conditions applicable to the carriage, in particular the information necessary for calculating carriage and supplementary charges and, where appropriate, the conditions governing the conversion of currencies.

The conditions of the tariffs may not derogate from the Uniform Rules unless the latter expressly so provide.

§ 3. The tariffs must be applied to all users on the same conditions.

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\* Mass, for the purpose of this Convention within the U.K., should be analogous to weight.

§ 4. Railways may enter into private agreements for reduced charges or other concessions, provided that comparable conditions are granted to users in comparable circumstances.

Reductions in charges or other concessions may be granted for the purpose of railway or public services, or for charitable purposes.

Publication of the measures taken under the first and second subparagraphs shall not be compulsory.

§ 5. International tariffs may be declared compulsorily applicable in international traffic to the exclusion of the internal tariffs.

The application of an international tariff may be made conditional on there being an express request for it in the consignment note.

§ 6. The tariffs and amendments to the tariffs shall be regarded as duly published from the time when the railway makes all the details thereof available to the users.

The publication of international tariffs shall be compulsory only in those States whose railways are parties to such tariffs as railways of departure or destination.

§ 7. Increases in international tariff charges and any other provisions which would have the effect of making the conditions of carriage laid down by such tariffs more rigorous shall not come into force until at least fifteen days after their publication, except in the following cases:

- (a) If an international tariff makes provision for the extension of an internal tariff to cover the whole route, the periods for publication of such internal tariff shall be applicable;
- (b) If increases in the charges contained in an international tariff follow a general increase in the charges contained in the internal tariffs of a participating railway, they shall come into force on the day after their publication, on condition that the adjustment of the international tariff charges caused by such general increase has been announced at least fifteen days in advance; nevertheless, such announcement may not be made prior to the publication of the increase in the internal tariff charges in question;
- (c) If the carriage and supplementary charges provided for in the international tariffs have to be modified to take account of fluctuations in rates of exchange or if obvious errors have to be corrected, such adjustments and corrections shall come into force on the day after their publication.

§ 8. In States where there is no obligation to publish certain tariffs or to apply them to all users under the same conditions, the provisions of this Article, to the extent that they contain such an obligation, shall not be binding.

§ 9. The railways may not charge any amount over and above the carriage and supplementary charges laid down in the tariffs other than the amounts disbursed by them. Such amounts shall be duly noted and entered separately in the consignment note, together with any relevant supporting information. When this information is provided in documents attached to the consignment note and if the corresponding amounts are to be paid by the consignor, the documents shall not be delivered to the consignee with the consignment note, but shall be forwarded to the consignor with the account of charges referred to in Article 15, § 7.

#### *Article 7. UNIT OF ACCOUNT. RATE OF EXCHANGE OR OF ACCEPTANCE OF FOREIGN CURRENCY*

§ 1. The unit of account referred to in the Uniform Rules shall be the Special Drawing Right as defined by the International Monetary Fund.

The value in Special Drawing Right of the national currency of a State which is a Member of the International Monetary Fund shall be calculated in accordance with the method of valuation applied by the International Monetary Fund for its own operations and transactions.

§ 2. The value in Special Drawing Right of the national currency of a State which is not a member of the International Monetary Fund shall be calculated by the method determined by that State.

The calculation must express in the national currency a real value approximating as closely to that which would result from the application of § 1.

§ 3. In the case of a State which is not a member of the International Monetary Fund and whose legislation does not permit the application of § 1 or § 2 above, the unit of account referred to in the Uniform Rules shall be deemed to be equal to three gold francs.

The gold franc is defined as 10/31 of a gramme of gold of millesimal fineness 900.

The conversion of the gold franc must express in the national currency a real value approximating as closely to that which would result from the application of § 1.

§ 4. Within three months after the entry into force of the Convention and each time that a change occurs in their method of calculation or in the value of their national currency in relation to the unit of account, States shall notify the Central Office of their method of calculation in accordance with § 2, or of the results of the conversion in accordance with § 3.

The Central Office shall notify the States of this information.

§ 5. The railway shall publish the rates at which:

- (a) It converts sums expressed in foreign currencies but payable in domestic currency (rates of conversion);
- (b) It accepts payment in foreign currencies (rates of acceptance).

#### *Article 8. SPECIAL PROVISIONS FOR CERTAIN TYPES OF TRANSPORT*

§ 1. In the case of the haulage of privately owned wagons, special provisions are laid down in the Regulations concerning the international haulage of private owners' wagons by rail (RIP), Annex II to the Uniform Rules.

§ 2. In the case of the carriage of containers, special provisions are laid down in the Regulations concerning the international carriage of containers by rail (RICO), Annex III to the Uniform Rules.

§ 3. In the case of express parcels traffic, railways may, by tariff clauses, agree on special provisions in accordance with the Regulations concerning the international carriage of express parcels by rail (RIEx), Annex IV to the Uniform Rules.

§ 4. Two or more States, by special agreement, or two or more railways by supplementary provisions or by tariff clauses, may agree on terms derogating from the Uniform Rules for the following types of consignments:

- (a) Consignments under cover of a negotiable document;
- (b) Consignments to be delivered only against return of the duplicate of the consignment note;
- (c) Consignments of newspapers;
- (d) Consignments intended for fairs or exhibitions;
- (e) Consignments of loading tackle and of equipment for protection of goods in transit against heat or cold;
- (f) Consignments over all or part of the route under cover of consignment notes which are not used for charging and billing;
- (g) Consignments sent under cover of an instrument suitable for automatic data transmission.

*Article 9. SUPPLEMENTARY PROVISIONS*

§ 1. Two or more States or two or more railways may make supplementary provisions for the execution of the Uniform Rules. They may not derogate from the Uniform Rules unless the latter expressly so provide.

§ 2. The supplementary provisions shall be put into force and published in the manner required by the laws and regulations of each State. The Central Office shall be notified of the supplementary provisions and of their coming into force.

*Article 10. NATIONAL LAW*

§ 1. In the absence of provisions in the Uniform Rules, supplementary provisions or international tariffs, national law shall apply.

§ 2. "National law" means the law of the State in which the person entitled asserts his rights, including the rules relating to conflict of laws.

## TITLE II. MAKING AND EXECUTION OF THE CONTRACT OF CARRIAGE

*Article 11. MAKING OF THE CONTRACT OF CARRIAGE*

§ 1. The contract of carriage shall come into existence as soon as the forwarding railway has accepted the goods for carriage together with the consignment note. Acceptance is established by the application to the consignment note and, where appropriate, to each additional sheet, of the stamp of the forwarding station, or accounting machine entry, showing the date of acceptance.

§ 2. The procedure laid down in § 1 must be carried out immediately after all the goods to which the consignment note relates have been handed over for carriage and — where the provisions in force at the forwarding station so require — such charges as the consignor has undertaken to pay have been paid or a security deposited in accordance with Article 15, § 7. The procedure shall be carried out in the presence of the consignor if he so requests.

§ 3. When the stamp has been affixed or the accounting machine entry has been made, the consignment note shall be evidence of the making and content of the contract.

§ 4. Nevertheless, when the loading of the goods is the duty of the consignor in accordance with tariffs or agreements existing between him and the railway, and provided that such agreements are authorised at the forwarding station, the particulars in the consignment note relating to the mass of the goods or to the number of packages shall only be evidence against the railway when that weight or number of packages has been verified by the railway and certified in the consignment note. If necessary these particulars may be proved by other means.

If it is obvious that there is no actual deficiency corresponding to the discrepancy between the mass or number of packages and the particulars in the consignment note, the latter shall not be evidence against the railway. This shall apply in particular when the wagon is handed over to the consignee with the original seals intact.

§ 5. The railway shall certify receipt of the goods and the date of acceptance for carriage by affixing the date stamp to or making the accounting machine entry on the duplicate of the consignment note before returning the duplicate to the consignor.

The duplicate shall not have effect as the consignment note accompanying the goods, nor as a bill of lading.

*Article 12. CONSIGNMENT NOTE*

§ 1. The consignor shall present a consignment note duly completed.

A separate consignment note shall be made out for each consignment. One and the same consignment note may not relate to more than a single wagon load. The supplementary provisions may derogate from these rules.

§ 2. The railways shall prescribe, for both *petite vitesse* and *grande vitesse* traffic, a standard form of consignment note, which must include a duplicate for the consignor.

The choice of consignment note by the consignor shall indicate whether the goods are to be carried by *petite vitesse* or by *grande vitesse*. A request for *grande vitesse* over one part of the route and *petite vitesse* over the remainder will not be allowed except by agreement between all the railways concerned.

In the case of certain traffic, notably between adjacent countries, the railways may prescribe, in the tariffs, the use of a simplified form of consignment note.

§ 3. The consignment note must be printed in two or where necessary in three languages, at least one of which shall be one of the working languages of the Organisation.

International tariffs may determine the language in which the particulars to be filled in by the consignor in the consignment note shall be entered. In the absence of such provisions, they must be entered in one of the official languages of the State of departure and a translation in one of the working languages of the Organisation must be added unless the particulars have been entered in one of those languages.

The particulars entered by the consignor in the consignment note shall be in Roman lettering, save where the supplementary provisions or international tariffs otherwise provide.

#### Article 13. WORDING OF THE CONSIGNMENT NOTE

§ 1. The consignment note must contain:

- (a) The name of the destination station;
- (b) The name and address of the consignee; only one individual or legal person shall be shown as consignee;
- (c) The description of the goods;
- (d) The mass, or failing that, comparable information in accordance with the provisions in force at the forwarding station;
- (e) The number of packages and a description of the packing in the case of consignments in less than wagon loads, and in the case of complete wagon loads comprising one or more packages, forwarded by rail-sea and requiring to be trans-shipped;
- (f) The number of the wagon and also, for privately-owned wagons, the tare, in the case of goods where the loading is the duty of the consignor;
- (g) A detailed list of the documents which are required by Customs or other administrative authorities and are attached to the consignment note or shown as held at the disposal of the railway at a named station or at an office of the Customs or of any other authority;
- (h) The name and address of the consignor; only one individual or legal person shall be shown as the consignor; if the provisions in force at the forwarding station so require, the consignor shall add to his name and address his written, printed or stamped signature.

The provisions in force at the forwarding station shall determine the meanings of the terms "wagon load" and "less than wagon load" for the whole of the route.

§ 2. The consignment note must, where appropriate, contain all the other particulars provided for in the Uniform Rules. It shall not contain other particulars unless they are required or allowed by the laws and regulations of a State, the supplementary provisions or the tariffs, and are not contrary to the Uniform Rules.

§ 3. Nevertheless, the consignor may insert in the consignment note in the space set apart for the purpose, but as information for the consignee, remarks relating to the consignment, without involving the railway in any obligation or liability.



§ 4. The consignment note shall not be replaced by other documents or supplemented by documents other than those prescribed or allowed by the Uniform Rules, the supplementary provisions or the tariffs.

*Article 14. ROUTE AND TARIFFS APPLICABLE*

§ 1. The consignor may stipulate in the consignment note the route to be followed, indicating it by reference to frontier points or frontier stations and where appropriate, to transit stations between railways. He may only stipulate frontier points and frontier stations which are open to traffic between the forwarding and destination places concerned.

§ 2. The following shall be regarded as routeing instructions:

- (a) Designation of stations where formalities required by Customs or other administrative authorities are to be carried out, and of stations where special care is to be given to the goods (attention to animals, re-icing etc);
- (b) Designation of the tariffs to be applied, if this is sufficient to determine the stations between which the tariffs requested are to be applied;
- (c) Instructions as to the payment of the whole or a part of the charges up to X (X indicating by name the point at which the tariffs of adjacent countries are applied).

§ 3. Except in the cases specified in Article 3, §§ 4 and 5 and Article 33, § 1 the railway may not carry the goods by a route other than that stipulated by the consignor unless both:

- (a) The formalities required by Customs or other administrative authorities, as well as the special care to be given to the goods, will in any event be carried out at the stations indicated by the consignor; and
- (b) The charges and the transit periods will not be greater than the charges and transit periods calculated according to the route stipulated by the consignor.

Sub-paragraph (a) shall not apply to consignments in less than wagon loads if one of the participating railways is unable to adhere to the route chosen by the consignor by virtue of the routeing instructions arising from its arrangements for the international carriage of consignments in less than wagon loads.

§ 4. Subject to the provisions of § 3, the charges and transit periods shall be calculated according to the route stipulated by the consignor or, in the absence of any such indication, according to the route chosen by the railway.

§ 5. The consignor may stipulate in the consignment note which tariffs are to be applied. The railway must apply such tariffs if the conditions laid down for their application have been fulfilled.

§ 6. If the instructions given by the consignor are not sufficient to indicate the route or tariffs to be applied, or if any of those instructions are inconsistent with one another, the railway shall choose the route or tariffs which appear to it to be the most advantageous to the consignor.

§ 7. The railway shall not be liable for any loss or damage suffered as a result of the choice made in accordance with § 6, except in the case of wilful misconduct or gross negligence.

§ 8. If an international tariff exists from the forwarding to the destination station and if, in the absence of adequate instructions from the consignor, the railway has applied that tariff, the railway shall, at the request of the person entitled, refund him the difference between the carriage charges thus applied and those which the application of other tariffs would have produced over the same route, when such difference exceeds four units of account per consignment note.

The same shall apply if, in the absence of adequate instructions from the consignor, the railway has applied consecutive tariffs, even though there is an international tariff offering a more advantageous charge, all other conditions being the same.

*Article 15. PAYMENT OF CHARGES*

§ 1. The charges (carriage charges, supplementary charges, Customs duties and other charges incurred from the time of acceptance for carriage to the time of delivery) shall be paid by the consignor or the consignee in accordance with the following provisions.

In applying these provisions, charges which, according to the applicable tariff, must be added to the standard rates or special rates when calculating the carriage charges, shall be deemed to be carriage charges.

§ 2. A consignor who undertakes to pay a part or all of the charges shall indicate this on the consignment note by using one of the following phrases:

- (a) (i) "Carriage charges paid", if he undertakes to pay carriage charges only;
- (ii) "Carriage charges paid including...", if he undertakes to pay charges additional to those for carriage; he shall give an exact description of those charges; additional indications, which may relate only to the supplementary charges or other charges incurred from the time of acceptance for carriage until the time of delivery as well as to sums collected either by Customs or other administrative authorities shall not result in any division of the total amount of any one category of charges (for example, the total amount of Customs duties and of other amounts payable to Customs, value added tax being regarded as a separate category);
- (iii) "Carriage charges paid to X", (X indicating by name the point at which the tariffs of adjacent countries are applied), if he undertakes to pay carriage charges to X;
- (iv) "Carriage charges paid to X including..." (X indicating by name the point at which the tariffs of adjacent countries are applied), if he undertakes to pay charges additional to those for carriage to X, but excluding all charges relating to the subsequent country or railway; the provisions of (ii) shall apply analogously;
- (b) "All charges paid", if he undertakes to pay all charges (carriage charges, supplementary charges, Customs duties and other charges);
- (c) "Charges paid not exceeding...", if he undertakes to pay a fixed sum; save where the tariffs otherwise provide, this sum shall be expressed in the currency of the country of departure.

Supplementary and other charges which, according to the provisions in force at the forwarding station, are to be calculated for the whole of the route concerned, and the charge for interest in delivery laid down in Article 16, § 2, shall always be paid in full by the consignor in the case of payment of the charges in accordance with (a) (iv).

§ 3. The international tariffs may, as regards payment of charges, prescribe the exclusive use of certain phrases set out in § 2 of this Article or the use of other phrases.

§ 4. The charges which the consignor has not undertaken to pay shall be deemed to be payable by the consignee. Nevertheless, such charges shall be payable by the consignor if the consignee has not taken possession of the consignment note nor asserted his rights under Article 28, § 4, nor modified the contract of carriage in accordance with Article 31.

§ 5. Supplementary charges, such as charges for demurrage and standage, warehousing and weighing, which arise from an act attributable to the consignee or from a request which he has made, shall always be paid by him.

§ 6. The forwarding railway may require the consignor to prepay the charges in the case of goods which in its opinion are liable to undergo rapid deterioration or which, by reason of their low value or their nature, do not provide sufficient cover for such charges.

§ 7. If the amount of the charges which the consignor undertakes to pay cannot be ascertained exactly at the time the goods are handed over for carriage, such charges shall be entered in a charges note and a settlement of accounts shall be made with the consignor not later than thirty days after the expiry of the transit period. The railway may require as security a deposit approximating to the amount of such charges, for which a receipt shall be given. A detailed account of charges drawn up from the particulars in the charges note shall be delivered to the consignor in return for the receipt.

§ 8. The forwarding station shall specify, in the consignment note and in the duplicate, the charges which have been prepaid, unless the provisions in force at the forwarding station provide that those charges are only to be specified in the duplicate. In the case provided for in § 7 of this Article these charges are not to be specified either in the consignment note or in the duplicate.

#### *Article 16. INTEREST IN DELIVERY*

§ 1. Any consignment may be the subject of a declaration of interest in delivery. The amount declared shall be shown in figures in the consignment note in the currency of the country of departure, in another currency determined by the tariffs or in units of account.

§ 2. The charge for interest in delivery shall be calculated for the whole of the route concerned, in accordance with the tariffs of the forwarding railway.

#### *Article 17. CASH ON DELIVERY AND DISBURSEMENTS*

§ 1. The consignor may make the goods subject to a cash on delivery payment not exceeding their value at the time of acceptance at the forwarding station. The amount of such cash on delivery payment shall be expressed in the currency of the country of departure; the tariffs may provide for exceptions.

§ 2. The railway shall not be obliged to pay over any amount representing a cash on delivery payment unless the amount in question has been paid by the consignee. That amount shall be placed at the consignor's disposal within thirty days of payment by the consignee; interest at five per cent per annum shall be payable from the date of the expiry of that period.

§ 3. If the goods have been delivered, wholly or in part, to the consignee without prior collection of the amount of the cash on delivery payment, the railway shall pay the consignor the amount of any loss or damage sustained up to the total amount of the cash on delivery payment without prejudice to any right of recovery from the consignee.

§ 4. Cash on delivery consignments shall be subject to a collection fee laid down in the tariffs; such fee shall be payable notwithstanding cancellation or reduction of the amount of the cash on delivery payment by modification of the contract of carriage in accordance with Article 30, § 1.

§ 5. Disbursements shall only be allowed if made in accordance with the provisions in force at the forwarding station.

§ 6. The amounts of the cash on delivery payment and of disbursements shall be entered in figures on the consignment note.

#### *Article 18. RESPONSIBILITY FOR PARTICULARS FURNISHED IN THE CONSIGNMENT NOTE*

The consignor shall be responsible for the correctness of the particulars inserted by, or for, him, in the consignment note. He shall bear all the consequences in the event of those particulars being irregular, incorrect, incomplete, or not entered in the allotted space. If that space is insufficient, the consignor shall indicate therein the place in the consignment note where the rest of the particulars are to be found.

*Article 19. CONDITION, PACKING AND MARKING OF GOODS*

§ 1. When the railway accepts for carriage goods showing obvious signs of damage, it may require the condition of such goods to be indicated in the consignment note.

§ 2. When the nature of the goods is such as to require packing, the consignor shall pack them in such a way as to protect them from total or partial loss and from damage in transit and to avoid risk of injury or damage to persons, equipment or other goods.

Moreover the packing shall comply with the provisions in force at the forwarding station.

§ 3. If the consignor has not complied with the provisions of § 2, the railway may either refuse the goods or require the sender to acknowledge in the consignment note the absence of packing or the defective condition of the packing, with an exact description thereof.

§ 4. The consignor shall be liable for all the consequences of the absence of packing or defective condition of packing and shall in particular make good any loss or damage suffered by the railway from this cause. In the absence of any particulars in the consignment note, the burden of proof of such absence of packing or defective condition of the packing shall rest upon the railway.

§ 5. Save where the tariffs otherwise provide, the consignor of a consignment amounting to less than a wagon load shall indicate on each package or on a label approved by the railway in a clear and indelible manner which will avoid confusion and correspond exactly with the particulars in the consignment note:

- (a) The name and address of the consignee;
- (b) The destination station.

The details required under (a) and (b) above shall also be shown on each article or package comprised in a wagon load forwarded by rail/sea and requiring to be trans-shipped.

Old markings or labels shall be obliterated or removed by the consignor.

§ 6. Save where the supplementary provisions or the tariffs otherwise provide, goods which are fragile or may become scattered in wagons and goods which may taint or damage other goods shall be carried only in complete wagon loads, unless packed or fastened together in such a manner that they cannot become broken or lost, or taint or damage other goods.

*Article 20. HANDING OVER OF GOODS FOR CARRIAGE AND LOADING OF GOODS*

§ 1. The handing over of goods for carriage shall be governed by the provisions in force at the forwarding station.

§ 2. Loading shall be the duty of the railway or the consignor according to the provisions in force at the forwarding station, unless otherwise provided in the Uniform Rules or unless the consignment note includes a reference to a special agreement between the consignor and the railway.

When the loading is the responsibility of the consignor, he shall comply with the load limit. If different load limits are in force on the lines traversed, the lowest load limit shall be applicable to the whole route. The provisions laying down load limits shall be published in the same manner as tariffs. If the consignor so requests, the railway shall inform him of the permitted load limit.

§ 3. The consignor shall be liable for all the consequences of defective loading carried out by him and shall, in particular, make good any loss or damage suffered by the railway through this cause. Nevertheless Article 15 shall apply to the payment of costs arising from the reloading of goods in the event of defective loading. The burden of proof of defective loading shall rest upon the railway.

§ 4. Unless otherwise provided in the Uniform Rules, goods shall be carried in covered wagons, open wagons, sheeted open wagons or specially equipped wagons according to the international tariffs. If there are no international tariffs, or if they do not contain any provisions on the subject, the provisions in force at the forwarding station shall apply throughout the whole of the route.

§ 5. The affixing of seals to wagons shall be governed by the provisions in force at the forwarding station.

The consignor shall indicate in the consignment note the number and description of the seals affixed to the wagons by him.

#### *Article 21. VERIFICATION*

§ 1. The railway shall always have the right to verify that the consignment corresponds with the particulars furnished in the consignment note by the consignor and that the provisions relating to the carriage of goods accepted subject to conditions have been complied with.

§ 2. If the contents of the consignment are examined for this purpose, the consignor or the consignee, according to whether the verification takes place at the forwarding station or the destination station, shall be invited to be present. Should the interested party not attend, or should the verification take place in transit, it shall be carried out in the presence of two witnesses not connected with the railway, unless the laws or regulations of the State where the verification takes place provide otherwise. The railway may not however carry out the verification in transit unless compelled to do so by operational necessities or by the requirements of the Customs or of other administrative authorities.

§ 3. The result of the verification of the particulars in the consignment note shall be entered therein. If verification takes place at the forwarding station, the result shall also be recorded in the duplicate of the consignment note if it is held by the railway.

If the consignment does not correspond with the particulars in the consignment note or if the provisions relating to the carriage of goods accepted subject to conditions have not been complied with, the costs of the verification shall be charged against the goods, unless paid at the time.

#### *Article 22. ASCERTAINMENT OF WEIGHT AND NUMBER OF PACKAGES*

§ 1. The provisions in force in each State shall determine the circumstances in which the railway must ascertain the mass of the goods or the number of packages and the actual tare of the wagons.

The railway shall enter in the consignment note the results ascertained.

§ 2. If weighing by the railway, after the contract of carriage has been made, reveals a difference, the mass ascertained by the forwarding station or, failing that, the mass declared by the consignor, shall still be the basis for calculating the carriage charges:

- (a) If the difference is manifestly due to the nature of the goods or to atmospheric conditions; or
- (b) The weighing takes place on a weighbridge and does not reveal a difference exceeding two per cent of the mass ascertained by the forwarding station or, failing that, of that declared by the consignor.

#### *Article 23. OVERLOADING*

§ 1. When overloading of a wagon is established by the forwarding station or by an intermediate station, the excess load may be removed from the wagon even if no surcharge is payable. Where necessary the consignor or, if the contract of carriage has been modified in accordance with Article 31, the consignee shall be asked without delay to give instructions concerning the excess load.

§ 2. Without prejudice to the payment of surcharges under Article 24, the excess load shall be charged for the distance covered in accordance with the carriage charges applicable to the main load. If the excess load is unloaded, the charge for unloading shall be determined by the tariffs of the railway which carries out the unloading.

If the person entitled directs that the excess load be forwarded to the same destination station as the main load or to another destination station, or directs that it be returned to the forwarding station, the excess load shall be treated as a separate consignment.

#### Article 24. SURCHARGES

§ 1. Without prejudice to the railway's entitlement to the difference in carriage charges and to compensation for any possible loss or damage, the railway may impose:

- (a) A surcharge equal to one unit of account per kilogramme of gross mass of the whole package;
  - (i) In the case of irregular, incorrect or incomplete description of substances and articles not acceptable for carriage under the RID;
  - (ii) In the case of irregular, incorrect or incomplete description of substances and articles which under the RID are acceptable for carriage subject to conditions, or in the case of failure to observe such conditions;
- (b) A surcharge equal to five units of account per 100 kilogrammes of mass in excess of the load limit, where the wagon has been loaded by the consignor;
- (c) A surcharge equal to twice the difference:
  - (i) Between the carriage charge which should have been payable from the forwarding station to the destination station and that which had been charged, in the case of irregular, incorrect or incomplete description of goods other than those referred to in (a), or in general where the description of the consignment would enable it to be carried at a lower tariff than the one that is actually applicable;
  - (ii) Between the carriage charge for the mass declared and that for the ascertained mass, where the mass declared is less than the real mass.

When a consignment is composed of goods charged at different rates and their mass can be separately determined without difficulty, the surcharge shall be calculated on the basis of the rates respectively applicable to such goods if this method of calculation results in a lower surcharge.

§ 2. Should there be both an under-declaration of mass and overloading in respect of one and the same wagon, the surcharges payable in respect thereof shall be cumulative.

§ 3. The surcharges shall be charged against the goods irrespective of the place where the facts giving rise to the surcharges were established.

§ 4. The amount of the surcharges and the reason for imposing them must be entered in the consignment note.

§ 5. No surcharge shall be due in the case of:

- (a) An incorrect declaration of mass, if the railway is bound to weigh the goods under the provisions in force at the forwarding station;
- (b) An incorrect declaration of mass, or overloading, if the consignor has requested in the consignment note that the railway should weigh the goods;
- (c) Overloading arising in the course of carriage from atmospheric conditions if it is proved that the load on the wagon did not exceed the load limit when it was consigned;
- (d) An increase in mass during carriage, without overloading, if it is proved that the increase was due to atmospheric conditions;

- (e) An incorrect declaration of mass, without overloading, if the difference between the mass indicated in the consignment note and the ascertained mass does not exceed three per cent of the declared mass;
- (f) Overloading of a wagon when the railway has neither published nor informed the consignor of the load limit in a way which would enable him to observe it.

*Article 25. DOCUMENTS FOR COMPLETION OF ADMINISTRATIVE FORMALITIES.  
CUSTOMS SEALS*

§ 1. The consignor must attach to the consignment note the documents necessary for the completion of formalities required by Customs or other administrative authorities before delivery of the goods. Such documents shall relate only to goods which are the subject of one and the same consignment note, unless otherwise provided by the requirements of Customs or of other administrative authorities or by the tariffs.

However, when these documents are not attached to the consignment note or if they are to be provided by the consignee, the consignor shall indicate in the consignment note the station, the Customs office or the office of any other authority where the respective documents will be made available to the railway and where the formalities must be completed. If the consignor will himself be present or be represented by an agent when the formalities required by Customs or other administrative authorities are carried out, it will suffice for the documents to be produced at the time when those formalities are carried out.

§ 2. The railway shall not be obliged to check whether the documents furnished are sufficient and correct.

§ 3. The consignor shall be liable to the railway for any loss or damage resulting from the absence or insufficiency of or any irregularity in such documents, save in the case of fault by the railway.

The railway shall, where it is at fault, be liable for any consequences arising from the loss, non-use or misuse of the documents referred to in the consignment note and accompanying it or deposited with the railway; nevertheless any compensation shall not exceed that payable in the event of loss of the goods.

§ 4. The consignor must comply with the requirements of Customs or of other administrative authorities with respect to the packing and sheeting of the goods. If the consignor has not packed or sheeted the goods in accordance with those requirements the railway shall be entitled to do so; the resulting costs shall be charged against the goods.

§ 5. The railway may refuse consignments when the seals affixed by Customs or other administrative authorities are damaged or defective.

*Article 26. COMPLETION OF ADMINISTRATIVE FORMALITIES*

§ 1. In transit, the formalities required by Customs or other administrative authorities shall be completed by the railway. The railway may, however, delegate that duty to an agent.

§ 2. In completing such formalities, the railway shall be liable for any fault committed by itself or by its agent; nevertheless, any compensation shall not exceed that payable in the event of loss of the goods.

§ 3. The consignor, by so indicating in the consignment note, or the consignee by giving orders as provided for in Article 31, may ask:

- (a) To be present himself or to be represented by an agent when such formalities are carried out, for the purpose of furnishing any information or explanations required;
- (b) To complete such formalities himself or to have them completed by an agent, in so far as the laws and regulations of the State in which they are to be carried out so permit;

- (c) To pay Customs duties and other charges, when he or his agent is present at or completes such formalities, in so far as the laws and regulations of the State in which they are carried out permit such payment.

Neither the consignor, nor the consignee who has the right of disposal, nor the agent of either may take possession of the goods.

§ 4. If, for the completion of the formalities, the consignor designated a station where the provisions in force do not permit of their completion, or if he has stipulated for the purpose any other procedure which cannot be followed, the railway shall act in the manner which appears to it to be the most favourable to the interests of the person entitled and shall inform the consignor of the measures taken.

If the consignor, by an entry in the consignment note, has undertaken to pay charges including Customs duty, the railway shall have the choice of completing Customs formalities either in transit or at the destination station.

§ 5. Subject to the exception provided for in the second subparagraph § 4, the consignee may complete Customs formalities at the destination station if that station has a Customs office and the consignment note requests Customs clearance on arrival, or, in the absence of such request, if the goods arrive under Customs control. The consignee may also complete these formalities at a destination station that has no Customs office if the national laws and regulations so permit or if the prior authority of the railway and the Customs authorities has been obtained. If the consignee exercises any of these rights, he shall pay in advance the amounts chargeable against the goods.

Nevertheless, the railway may proceed in accordance with § 4 if the consignee has not taken possession of the consignment note within the period fixed by the provisions in force at the destination station.

#### Article 27. TRANSIT PERIODS

§ 1. The transit periods shall be specified either by agreement between the railways participating in the carriage, or by the international tariffs applicable from the forwarding station to the destination station. For certain special types of traffic and on certain routes these periods may also be established on the basis of transport plans applicable between the railways concerned; in that case they must be included in international tariffs or special agreements which, where appropriate, may provide for derogations from §§ 3 to 9 below.

Such periods shall not in any case exceed those which would result from the application of the following paragraphs.

§ 2. In the absence of any indication in regard to the transit periods as provided for in § 1, and subject to the following paragraphs, the transit periods shall be as follows:

- (a) For wagon-load consignments:

- (i) By *grande vitesse*:

Period for despatch.....	12 hours
Period for carriage, for each 400 km or fraction thereof.....	24 hours

- (ii) By *petite vitesse*:

Period for despatch.....	24 hours
Period for carriage, for each 300 km or fraction thereof.....	24 hours

- (b) For less than wagon-load consignments:

- (i) By *grande vitesse*:

Period for despatch.....	12 hours
Period for carriage, for each 300 km or fraction thereof.....	24 hours

- (ii) By *petite vitesse*:

Period for despatch.....	24 hours
Period for carriage, for each 200 km or fraction thereof.....	24 hours



All these distances shall relate to the kilometric distances contained in the tariffs.

§ 3. The period for carriage shall be calculated on the total distance between the forwarding station and the destination station. The period for despatch shall be counted only once, irrespective of the number of systems traversed.

§ 4. The railway may fix additional transit periods of specified duration in the following cases:

- (a) Consignments handed in for carriage, or to be delivered, at places other than stations;
- (b) Consignments to be carried:
  - (i) By a line or system not equipped to deal rapidly with consignments;
  - (ii) By a junction line connecting two lines of the same system or of different systems;
  - (iii) By a secondary line;
  - (iv) By lines of different gauge;
  - (v) By sea or inland navigable waterway;
  - (vi) By road if there is no rail link;
- (c) Consignments charged at reduced rates in accordance with special or exceptional internal tariffs;
- (d) Exceptional circumstances causing an exceptional increase in traffic or exceptional operating difficulties.

§ 5. The additional transit period provided for in § 4 (a) to (c) shall be shown in the tariffs or in the provisions duly published in each State.

Those provided for in § 4 (d) must be published and may not come into force before their publication.

§ 6. The transit period shall run from midnight next following acceptance of the goods for carriage. In the case, however, of traffic consigned *grande vitesse*, the period shall start twenty-four hours later if the day which follows the day of acceptance for carriage is a Sunday or a statutory holiday and if the forwarding station is not open for *grande vitesse* traffic on that Sunday or statutory holiday.

§ 7. Except in the case of any fault by the railway, the transit period shall be extended by the duration of the period necessitated by:

- (a) Verification or ascertainment in accordance with Article 21 and Article 22, § 1, which reveals differences from the particulars shown in the consignment note;
- (b) Completion of the formalities required by Customs or other administrative authorities;
- (c) Modification of the contract of carriage under Article 30 or 31;
- (d) Special care to be given to the goods;
- (e) The trans-shipment or reloading of any goods loaded defectively by the consignor;
- (f) Any interruption of traffic temporarily preventing the commencement or continuation of carriage.

The reason for and the duration of such extensions shall be entered in the consignment note. If necessary proof may be furnished by other means.

§ 8. The transit period shall be suspended for:

- (a) *Petite vitesse*, on Sundays and statutory holidays;
- (b) *Grande vitesse*, on Sundays and certain statutory holidays when the provisions in force in any State provide for the suspension of domestic railway transit periods on those days;

(c) *Grande vitesse* and *petite vitesse*, on Saturdays when the provisions in force in any State provide for the suspension of domestic railway transit periods on those days.

§ 9. When the transit period ends after the time at which the destination station closes, the period shall be extended until two hours after the time at which the station next opens.

In addition, in the case of *grande vitesse* consignments, if the transit period ends on a Sunday or a holiday as defined in § 8 (b) the period shall be extended until the same time on the next working day.

§ 10. The transit period is observed if, before its expiry:

- (a) In cases where consignments are to be delivered at a station and notice of arrival must be given, such notice is given and the goods are held at the disposal of the consignee;
- (b) In cases where consignments are to be delivered at a station and notice of arrival need not be given, the goods are held at the disposal of the consignee;
- (c) In the case of consignments which are to be delivered at places other than stations, the goods are placed at the disposal of the consignee.

#### Article 28. DELIVERY

§ 1. The railway shall hand over the consignment note and deliver the goods to the consignee at the destination station against a receipt and payment of the amounts chargeable to the consignee by the railway.

Acceptance of the consignment note obliges the consignee to pay to the railway the amounts chargeable to him.

§ 2. It shall be equivalent to delivery to the consignee if, in accordance with the provisions in force at the destination station:

- (a) The goods have been handed over to Customs or *Octroi* authorities at their premises or warehouses, when these are not subject to railway supervision;
- (b) The goods have been deposited for storage with the railway, with a forwarding agent or in a public warehouse.

§ 3. The provisions in force at the destination station or the terms of any agreements with the consignee shall determine whether the railway is entitled or obliged to hand over the goods to the consignee elsewhere than at the destination station, whether in a private siding, at his domicile or in a railway depot. If the railway hands over the goods, or arranges for them to be handed over in a private siding, at his domicile or in a depot, delivery shall be deemed to have been effected at the time when they are so handed over. Save where the railway and the user of a private siding have agreed otherwise, operations carried out by the railway on behalf of and under the instructions of that user shall not be covered by the contract of carriage.

§ 4. After the arrival of the goods at the destination station, the consignee may require the railway to hand over the consignment note and deliver the goods to him.

If the loss of the goods is established or if the goods have not arrived on the expiry of the period provided for in Article 39, § 1, the consignee may assert, in his own name, any rights against the railway which he may have acquired by reason of the contract of carriage.

§ 5. The person entitled may refuse to accept the goods, even when he has received the consignment note and paid the charges, so long as an examination for which he has asked in order to establish alleged loss or damage has not been made.

§ 6. In all other respects, delivery of goods shall be carried out in accordance with the provisions in force at the destination station.

*Article 29. CORRECTION OF CHARGES*

§ 1. In case of incorrect application of a tariff or of error in the calculation or collection of charges, overcharges shall be repaid by the railway and undercharges paid to the railway only if they exceed four units of account per consignment note. The repayment shall be made as a matter of course.

§ 2. If the consignee has not taken possession of the consignment note the consignor shall be obliged to pay to the railway any amounts undercharged. When the consignment note has been accepted by the consignee or the contract of carriage modified in accordance with Article 31, the consignor shall be obliged to pay any undercharge only to the extent that it relates to the costs which he has undertaken to pay by an entry in the consignment note. Any balance of the undercharge shall be paid by the consignee.

§ 3. Sums due under this Article shall bear interest at five per cent per annum from the day of receipt of the demand for payment or from the day of the claim referred to in Article 53 or, if there has been no such demand or claim, from the day on which legal proceedings are instituted.

If, within a reasonable period allotted to him, the person entitled does not submit to the railway the supporting documents required for the amount of the claim to be finally settled, no interest shall accrue between the expiry of the period laid down and the actual submission of such documents.

## TITLE III. MODIFICATION OF THE CONTRACT OF CARRIAGE

*Article 30. MODIFICATION BY THE CONSIGNOR*

§ I. The consignor may modify the contract of carriage by giving subsequent orders:

- (a) For the goods to be withdrawn at the forwarding station;
- (b) For the goods to be stopped in transit;
- (c) For delivery of the goods to be delayed;
- (d) For the goods to be delivered to a person other than the consignee shown in the consignment note;
- (e) For the goods to be delivered at a station other than the destination station shown in the consignment note;
- (f) For the goods to be returned to the forwarding station;
- (g) For the consignment to be made subject to a cash on delivery payment;
- (h) For a cash on delivery payment to be increased, reduced or cancelled;
- (i) For charges relating to a consignment which has not been prepaid to be debited to him, or for charges which he has undertaken to pay in accordance with Article 15, § 2 to be increased.

The tariffs of the forwarding railway may provide that orders specified in (g) to (i) are not acceptable.

The supplementary provisions or the international tariffs in force between the railways participating in the carriage may provide for the acceptance of orders other than those listed above.

Orders must not in any event have the effect of splitting the consignment.

§ 2. Such orders shall be given to the forwarding station by means of a written declaration in the form laid down and published by the railway.

The declaration shall be reproduced and signed by the consignor in the duplicate of the consignment note which shall be presented to the railway at the same time. The forwarding

station shall certify that the order has been received by affixing its date stamp on the duplicate note below the declaration made by the consignor and the duplicate shall then be returned to him.

If the consignor asks for a cash on delivery payment to be increased, reduced or cancelled, he shall produce the document which was delivered to him. Where the cash on delivery payment is to be increased or reduced, such document shall be returned to the consignor after correction; in the event of cancellation it shall not be returned.

Any order given in a form other than that prescribed shall be null and void.

§ 3. If the railway complies with the consignor's orders without requiring the production of the duplicate, where this has been sent to the consignee, the railway shall be liable to the consignee for any loss or damage caused thereby. Nevertheless, any compensation shall not exceed that payable in the event of loss of the goods.

§ 4. The consignor's right to modify the contract of carriage shall, notwithstanding that he is in possession of the duplicate of the consignment note, be extinguished in cases where the consignee:

- (a) Has taken possession of the consignment note;
- (b) Has accepted the goods;
- (c) Has asserted his rights in accordance with Article 28, § 4;
- (d) Is entitled, in accordance with Article 31, to give orders as soon as the consignment has entered the Customs territory of the country of destination.

From that time onwards, the railway shall comply with the orders and instructions of the consignee.

#### *Article 31. MODIFICATION BY THE CONSIGNEE*

§ 1. When the consignor has not undertaken to pay the charges relating to carriage in the country of destination, and has not inserted in the consignment note the words "Consignee not authorised to give subsequent orders", the consignee may modify the contract of carriage by giving subsequent orders:

- (a) For the goods to be stopped in transit;
- (b) For delivery of the goods to be delayed;
- (c) For the goods to be delivered in the country of destination to a person other than the consignee shown in the consignment note;
- (d) For the goods to be delivered in the country of destination at a station other than the destination station shown in the consignment note, subject to contrary provisions in international tariffs;
- (e) For formalities required by Customs or other administrative authorities to be carried out in accordance with Article 26, § 3.

The supplementary provisions or the international tariffs in force between the railways participating in the carriage may provide for the acceptance of orders other than those listed above.

Orders must not in any case have the effect of splitting the consignment.

The consignee's orders shall only be effective after the consignment has entered the Customs territory of the country of destination.

§ 2. Such orders shall be given either to the destination station or to the station of entry into the country of destination, by means of a written declaration in the form laid down and published by the railway.

Any order given in a form other than that prescribed shall be null and void.

§ 3. The consignee's right to modify the contract of carriage shall be extinguished in cases where he has:

- (a) Taken possession of the consignment note;
- (b) Accepted the goods;
- (c) Asserted his rights in accordance with Article 28, § 4;
- (d) Designated a person in accordance with § 1 (c) and that person has taken possession of the consignment note or asserted his rights in accordance with Article 28, § 4.

§ 4. If the consignee has given instructions for delivery of the goods to another person, that person shall not be entitled to modify the contract of carriage.

#### *Article 32. EXECUTION OF SUBSEQUENT ORDERS*

§ 1. The railway may not refuse to execute orders given under Articles 30 or 31 or delay doing so save where:

- (a) It is no longer possible to execute the orders by the time they reach the station responsible for doing so;
- (b) Compliance with the orders would interfere with normal railway operations;
- (c) A change of destination station would contravene the laws and regulations of a State, and in particular the requirements of the Customs or of other administrative authorities;
- (d) In the case of a change of destination station, the value of the goods will not, in the railway's view, cover all the charges which would be payable on the goods on arrival at the new destination, unless the amount of such charges is paid or guaranteed immediately.

The person who has given the orders shall be informed as soon as possible of any circumstances which prevent their execution.

If the railway is not in a position to foresee such circumstances, the person who has given the orders shall be liable for all the consequences of starting to execute them.

§ 2. The charges arising from the execution of an order, except those arising from any fault by the railway, shall be paid in accordance with Article 15.

§ 3. Subject to § 1, the railway shall, in the case of any fault on its part, be liable for the consequences of failure to execute an order or failure to execute it properly. Nevertheless, any compensation shall not exceed that payable in the event of loss of the goods.

#### *Article 33. CIRCUMSTANCES PREVENTING CARRIAGE*

§ 1. When circumstances prevent the carriage of goods, the railway shall decide whether it is preferable to carry the goods as a matter of course by modifying the route or whether it is advisable in the consignor's interest to ask him for instructions and at the same time give him any relevant information available to the railway.

Save fault on its part, the railway may recover the carriage charges applicable to the route followed and shall be allowed the transit periods applicable to such route.

§ 2. If it is impossible to continue carrying the goods, the railway shall ask the consignor for instructions. It shall not be obliged to do so in the event of carriage being temporarily prevented as a result of measures taken in accordance with Article 3, § 4.

§ 3. The consignor may enter in the consignment note instructions to cover the event of circumstances preventing carriage.

If the railway considers that such instructions cannot be executed, it shall ask for fresh instructions.

§ 4. The consignor, on being notified of circumstances preventing carriage, may give his instructions either to the forwarding station or to the station where the goods are being held. If those instructions change the consignee or the destination station or are given to the station where the goods are being held, the consignor must enter them in the duplicate of the consignment note and present this to the railway.

§ 5. If the railway complies with the consignor's instructions without requiring the production of the duplicate, when this has been sent to the consignee, the railway shall be liable to the consignee for any loss or damage caused thereby. Nevertheless, any compensation shall not exceed that payable in the event of loss of the goods.

§ 6. If the consignor, on being notified of a circumstance preventing carriage, fails to give within a reasonable time instructions which can be executed, the railway shall take action in accordance with the provisions relating to circumstances preventing delivery, in force at the place where the goods have been held up.

If the goods have been sold, the proceeds of sale, less any amounts chargeable against the goods, shall be held at the disposal of the consignor. If the proceeds are less than those costs, the consignor shall pay the difference.

§ 7. When the circumstances preventing carriage cease to obtain before the arrival of instructions from the consignor, the goods shall be forwarded to their destination without waiting for such instructions; the consignor shall be notified to that effect as soon as possible.

§ 8. When the circumstances preventing carriage arise after the consignee has modified the contract of carriage in accordance with Article 31, the railway shall notify the consignee. §§ 1, 2, 6, 7 and 9 shall apply analogously.

§ 9. Save fault on its part, the railway may raise demurrage or standage charges if circumstances prevent carriage.

§ 10. Article 32 shall apply to carriage undertaken in accordance with Article 33.

#### *Article 34. CIRCUMSTANCES PREVENTING DELIVERY*

§ 1. When circumstances prevent delivery of the goods, the destination station shall without delay notify the consignor through the forwarding station, and ask for his instructions. The consignor shall be notified direct, either in writing, by telegram or by teleprinter, if he has so requested in the consignment note; the costs of such notification shall be charged against the goods.

§ 2. If the circumstances preventing delivery cease to obtain before the arrival at the destination station of instructions from the consignor the goods shall be delivered to the consignee. The consignor shall be notified without delay by registered letter; the costs of such notification shall be charged against the goods.

§ 3. If the consignee refuses the goods, the consignor shall be entitled to give instructions even if he is unable to produce the duplicate of the consignment note.

§ 4. The consignor may also request, by an entry in the consignment note, that the goods be returned to him as a matter of course in the event of circumstances preventing delivery. Unless such request is made, his express consent is required.

§ 5. Unless the tariffs otherwise provide, the consignor's instructions shall be given through the forwarding station.

§ 6. Except as otherwise provided for above, the railway responsible for delivery shall proceed in accordance with the provisions in force at the place of delivery.

If the goods have been sold, the proceeds of sale, less any costs chargeable against the goods, shall be held at the disposal of the consignor. If such proceeds are less than those costs, the consignor shall pay the difference.

§ 7. When the circumstances preventing delivery arise after the consignee has modified the contract of carriage in accordance with Article 31, the railway shall notify the consignee. §§ 1, 2 and 6 shall apply analogously.

§ 8. Article 32 shall apply to carriage undertaken in accordance with Article 34.

#### TITLE IV. LIABILITY

##### *Article 35. COLLECTIVE RESPONSIBILITY OF RAILWAYS*

§ 1. The railway which has accepted goods for carriage with the consignment note shall be responsible for the carriage over the entire route up to delivery.

§ 2. Each succeeding railway, by the very act of taking over the goods with the consignment note, shall become a party to the contract of carriage in accordance with the terms of that document and shall assume the obligations arising therefrom, without prejudice to the provisions of Article 55, § 3, relating to the railway of destination.

##### *Article 36. EXTENT OF LIABILITY*

§ 1. The railway shall be liable for loss or damage resulting from the total or partial loss of, or damage to, the goods between the time of acceptance for carriage and the time of delivery and for the loss or damage resulting from the transit period being exceeded.

§ 2. The railway shall be relieved of such liability if the loss or damage or the exceeding of the transit period was caused by a fault on the part of the person entitled, by an order given by the person entitled other than as a result of a fault on the part of the railway, by inherent vice of the goods (decay, wastage, etc.) or by circumstances which the railway could not avoid and the consequences of which it was unable to prevent.

§ 3. The railway shall be relieved of such liability when the loss or damage arises from the special risks inherent in one or more of the following circumstances:

- (a) Carriage in open wagons under the conditions applicable thereto or under an agreement made between the consignor and the railway and referred to in the consignment note;
- (b) Absence or inadequacy of packing in the case of goods which by their nature are liable to loss or damage when not packed or when not properly packed;
- (c) Loading operations carried out by the consignor or unloading operations carried out by the consignee under the provisions applicable thereto or under an agreement made between the consignor and the railway and referred to in the consignment note, or under an agreement between the consignee and the railway;
- (d) Defective loading, when loading has been carried out by the consignor under the provisions applicable thereto or under an agreement made between the consignor and the railway and referred to in the consignment note;
- (e) Completion by the consignor, the consignee or an agent of either, of the formalities required by Customs or other administrative authorities;
- (f) The nature of certain goods which renders them inherently liable to total or partial loss or damage, especially through breakage, rust, interior and spontaneous decay, desiccation or wastage;
- (g) Irregular, incorrect or incomplete description of articles not acceptable for carriage or acceptable subject to conditions, or failure on the part of the consignor to observe the prescribed precautions in respect of articles acceptable subject to conditions;
- (h) Carriage of live animals;
- (i) Carriage which, under the provisions applicable or under an agreement made between the consignor and the railway and referred to in the consignment note, must be accompanied by an attendant, if the loss or damage results from any risk which the attendant was intended to avert.

*Article 37. BURDEN OF PROOF*

§ 1. The burden of proving that the loss, the damage or the exceeding of the transit period was due to one of the causes specified in Article 36, § 2 shall rest upon the railway.

§ 2. When the railway establishes that, having regard to the circumstances of a particular case, the loss or damage could have arisen from one or more of the special risks referred to in Article 36, § 3, it shall be presumed that it did so arise. The person entitled shall, however, have the right to prove that the loss or damage was not attributable either wholly or partly to one of those risks.

This presumption shall not apply in the case referred to in Article 36, § 3 (a) if an abnormally large quantity has been lost or if a package has been lost.

*Article 38. PRESUMPTION IN CASE OF RECONSIGNMENT*

§ 1. When a consignment despatched in accordance with the Uniform Rules has been reconsigned subject to the same Rules and partial loss or damage has been ascertained after the reconsignment, it shall be presumed that it occurred during the latest contract of carriage if the consignment remained in the care of the railway and was reconsigned in the same condition as it arrived at the station from which it was reconsigned.

§ 2. This presumption shall also apply when the contract of carriage prior to the reconsignment was not subject to the Uniform Rules, if the Rules would have applied in the case of a through consignment from the original forwarding station to the final destination station.

*Article 39. PRESUMPTION OF LOSS OF GOODS*

§ 1. The person entitled may, without being required to furnish further proof, consider the goods lost when they have not been delivered to the consignee or are not being held at his disposal within thirty days after the expiry of the transit periods.

§ 2. The person entitled may, on receipt of compensation for the lost goods, make a written request to be notified without delay should the goods be recovered within one year after the payment of compensation. The railway shall give a written acknowledgement of such request.

§ 3. Within thirty days after receipt of such notification, the person entitled may require the goods to be delivered to him at any station on the route. In that case he shall pay the charges in respect of carriage from the forwarding station to the station where delivery is effected and shall refund the compensation received, less any costs which may have been included therein. Nevertheless he shall retain his rights to claim compensation for exceeding the transit period provided for in Articles 43 and 46.

§ 4. In the absence of the request mentioned in § 2 or of any instructions given within the period specified in § 3, or if the goods are recovered more than one year after the payment of compensation, the railway shall dispose of them in accordance with the laws and regulations of the State having jurisdiction over the railway.

*Article 40. COMPENSATION FOR LOSS*

§ 1. In the event of total or partial loss of the goods the railway must pay, to the exclusion of all other damages, compensation calculated according to the commodity exchange quotation or, if there is no such quotation, according to the current market price, or if there is neither such quotation nor such price, according to the normal value of goods of the same kind and quality at the time and place at which the goods were accepted for carriage.

§ 2. Compensation shall not exceed 17 units of account per kilogramme of gross mass short, subject to the limit provided for in Article 45.

§ 3. The railway shall in addition refund carriage charges, Customs duties and other amounts incurred in connection with carriage of the lost goods.



§ 4. When the calculation of compensation requires the conversion of amounts expressed in foreign currencies, conversion shall be at the rate of exchange applicable at the time and place of payment of compensation.

*Article 41. LIABILITY FOR WASTAGE IN TRANSIT*

§ 1. In respect of goods which, by reason of their nature, are generally subject to wastage in transit by the sole fact of carriage, the railway shall only be liable to the extent that the wastage exceeds the following allowances, whatever the length of the route:

(a) Two per cent of the mass for liquid goods or goods consigned in a moist condition, and also for the following goods:

Bark	Leather
Bones, whole or ground	Liquorice root
Coal and coke	Mushrooms, fresh
Dye-woods, grated or ground	Peat and turf
Fats	Putty or mastic, fresh
Fish, dried	Roots
Fruit, fresh, dried or cooked	Salt
Furs	Sinews, animal
Hide cuttings	Soap and solidified oils
Hides	Tobacco, cut
Hog bristles	Tobacco leaves, fresh
Hops	Vegetables, fresh
Horns and hooves	Wool;
Horsehair	

(b) One per cent of the weight for all other dry goods.

§ 2. The limitation of liability provided for in § 1 may not be invoked if, having regard to the circumstances of a particular case, it is proved that the loss was not due to causes which would justify an allowance.

§ 3. Where several packages are carried under a single consignment note, the wastage in transit shall be calculated separately for each package if its mass on despatch is shown separately in the consignment note or can otherwise be ascertained.

§ 4. In the event of total loss of the goods, no deduction for wastage in transit shall be made in calculating the compensation payable.

§ 5. This Article shall not derogate from Articles 36 and 37.

*Article 42. COMPENSATION FOR DAMAGE*

§ 1. In case of damage to goods, the railway must pay compensation equivalent to the loss in value of the goods, to the exclusion of all other damages. The amount shall be calculated by applying to the value of the goods as defined in Article 40 the percentage of loss in value noted at the place of destination.

§ 2. The compensation may not exceed:

(a) If the whole consignment has lost value through damage, the amount which would have been payable in case of total loss;

(b) If only part of the consignment has lost value through damage, the amount which would have been payable had that part been lost.

§ 3. The railway shall in addition refund the amounts provided for in Article 40, § 3, in the proportion set out in § 1.

*Article 43. COMPENSATION FOR EXCEEDING THE TRANSIT PERIOD*

§ 1. If loss or damage has resulted from the transit period being exceeded, the railway shall pay compensation not exceeding three times the carriage charges.

§ 2. In case of total loss of the goods, the compensation provided for in § 1 shall not be payable in addition to that provided for in Article 40.

§ 3. In case of partial loss of the goods, the compensation provided for in § 1 shall not exceed three times the carriage charges in respect of that part of the consignment which has not been lost.

§ 4. In case of damage to the goods, not resulting from the transit period being exceeded, the compensation provided for in § 1 shall, where appropriate, be payable in addition to that provided for in Article 42.

§ 5. In no case shall the total of compensation payable under § 1 together with that payable under Articles 40 and 42 exceed the compensation which would be payable in the event of total loss of the goods.

§ 6. The railway may provide, in international tariffs or in special agreements, for other forms of compensation than those provided for in § 1 when, in accordance with Article 27, § 1, the transit period has been established on the basis of transport plans.

If, in this case, the transit periods provided for in Article 27, § 2 are exceeded, the person entitled may demand either the compensation provided for in § 1 above or that determined by the international tariff or the special agreement applied.

*Article 44. COMPENSATION IN CASE OF WILFUL MISCONDUCT OR GROSS NEGLIGENCE*

When the loss, damage or exceeding of the transit period, or the failure to perform or failure to perform properly the railway's additional services provided for in the Uniform Rules, has been caused by wilful misconduct or gross negligence on the part of the railway, full compensation for the loss or damage proved shall be paid to the person entitled by the railway.

In case of gross negligence, liability shall however be limited to twice the maxima specified in Articles 25, 26, 30, 32, 33, 40, 42, 43, 45 and 46.

*Article 45. LIMITATION OF COMPENSATION UNDER CERTAIN TARIFFS*

When the railway agrees to special conditions of carriage through special or exceptional tariffs, involving a reduction in the carriage charge calculated on the basis of the general tariffs, it may limit the amount of compensation payable to the person entitled in the event of loss, damage or exceeding of the transit period, provided that such limit is indicated in the tariff.

When the special conditions of carriage apply only to part of the route, the limit may only be invoked if the event giving rise to the compensation occurred on that part of the route.

*Article 46. COMPENSATION IN CASE OF INTEREST IN DELIVERY*

In case of a declaration of interest in delivery, further compensation for loss or damage proved may be claimed, in addition to the compensation provided for in Articles 40, 42, 43 and 45, up to the amount declared.

*Article 47. INTEREST ON COMPENSATION*

§ 1. The person entitled may claim interest on compensation payable, calculated at five per cent per annum, from the date of the claim referred to in Article 53 or, if no such claim has been made, from the day on which legal proceedings are instituted.

§ 2. Interest shall only be payable if the compensation exceeds four units of account per consignment note.

§ 3. If, within a reasonable period allotted to him, the person entitled does not submit to the railway the supporting documents required for the amount of the claim to be finally settled, no interest shall accrue between the expiry of the period laid down and the actual submission of such documents.

*Article 48. LIABILITY IN RESPECT OF RAIL-SEA TRAFFIC*

§ 1. In rail-sea transport by the services referred to in Article 2, § 2 of the Convention each State may, by requesting that a suitable note be included in the list of lines or services to which the Uniform Rules apply, indicate that the following grounds for exemption from liability will apply in their entirety in addition to those provided for in Article 36.

The carrier may only avail himself of these grounds for exemption if he proves that the loss, damage or exceeding of the transit period occurred in the course of the sea journey between the time when the goods were loaded on board the ship and the time when they were discharged from the ship.

The grounds for exemption are as follows:

- (a) Act, neglect or default on the part of the master, a mariner, pilot or the carrier's servants in the navigation or management of the ship;
- (b) Unseaworthiness of the ship, if the carrier proves that the unseaworthiness is not attributable to lack of due diligence on his part to make the ship seaworthy, to ensure that it is properly manned, equipped and supplied or to make all parts of the ship in which the goods are loaded fit and safe for their reception, carriage and protection;
- (c) Fire, if the carrier proves that it was not caused by his act or fault, or that of the master, a mariner, pilot or the carrier's servants;
- (d) Peril, dangers and accidents of the sea or other navigable waters;
- (e) Saving or attempting to save life or property at sea;
- (f) The loading of goods on the deck of the ship, if they are so loaded with the consent of the consignor given in the consignment note and are not in wagons.

The above grounds for exemption in no way affect the general obligations of the carrier and, in particular, his obligation to exercise due diligence to make the ship seaworthy, to ensure that it is properly manned, equipped and supplied and to make all parts of the ship in which the goods are loaded fit and safe for their reception, carriage and protection.

Even when the carrier can rely on the foregoing grounds for exemption, he shall nevertheless remain liable if the person entitled proves that the loss, damage or exceeding of the transit period is due to a fault of the carrier, the master, a mariner, pilot or the carrier's servants, fault other than provided for under (a).

§ 2. Where one and the same sea route is served by several undertakings included in the list referred to in Articles 3 and 10 of the Convention, the regime of liability applicable to that route shall be the same for all those undertakings.

In addition, where such undertakings have been included in the list at the request of several States, the adoption of this regime shall be the subject of prior agreement between those States.

§ 3. The measures taken under this Article shall be notified to the Central Office. They shall come into force at the earliest at the expiry of a period of thirty days from the date of the letter by which the Central Office notifies them to the other States.

Consignments already in transit shall not be affected by such measures.

*Article 49. LIABILITY IN CASE OF NUCLEAR INCIDENTS*

The railway shall be relieved of liability under the Uniform Rules for loss or damage caused by a nuclear incident when the operator of a nuclear installation or another person who is substituted for him is liable for the loss or damage pursuant to a State's laws and regulations governing liability in the field of nuclear energy.

*Article 50.* LIABILITY OF THE RAILWAY FOR ITS SERVANTS

The railway shall be liable for its servants and for any other persons whom it employs to perform the carriage.

If however such servants and other persons, at the request of an interested party, make out consignment notes, make translations or render other services which the railway itself is under no obligation to render, they shall be deemed to be acting on behalf of the person to whom the services are rendered.

*Article 51.* OTHER ACTIONS

In all cases to which the Uniform Rules apply, any action in respect of liability on any grounds whatsoever may be brought against the railway only subject to the conditions and limitations laid down in the Rules.

The same shall apply to any action brought against those servants and other persons for whom the railway is liable under Article 50.

TITLE V. ASSERTION OF RIGHTS

*Article 52.* ASCERTAINMENT OF PARTIAL LOSS OR DAMAGE

§ 1. When partial loss of, or damage to, goods is discovered or presumed by the railway or alleged by the person entitled, the railway must without delay, and if possible in the presence of the person entitled, draw up a report stating, according to the nature of the loss or damage, the condition of the goods, their mass and, as far as possible, the extent of the loss or damage, its cause and the time of its occurrence.

A copy of the report must be supplied free of charge to the person entitled.

§ 2. Should the person entitled not accept the findings in the report, he may request that the condition and mass of the goods and the cause and amount of the loss or damage be ascertained by an expert appointed either by the parties or by a court. The procedure to be followed shall be governed by the laws and regulations of the State in which such ascertainment takes place.

*Article 53.* CLAIMS

§ 1. Claims relating to the contract of carriage shall be made in writing to the railway specified in Article 55.

§ 2. A claim may be made by persons who have the right to bring an action against the railway under Article 54.

§ 3. To make the claim, the consignor must produce the duplicate of the consignment note. Failing this, he must produce an authorisation from the consignee or furnish proof that the consignee has refused to accept the consignment.

To make the claim, the consignee must produce the consignment note if it has been handed over to him.

§ 4. The consignment note, the duplicate and any other documents which the person entitled thinks fit to submit with the claim shall be produced either in the original or as copies, the copies to be duly authenticated if the railway so requires.

On settlement of the claim, the railway may require the production, in the original form, of the consignment note, the duplicate or the cash on delivery voucher so that they may be endorsed to the effect that settlement has been made.

*Article 54.* PERSONS WHO MAY BRING AN ACTION AGAINST THE RAILWAY

§ 1. An action for the recovery of a sum paid under the contract of carriage may only be brought by the person who made the payment.

§ 2. An action in respect of the cash on delivery payments provided for in Article 17 may only be brought by the consignor.

§ 3. Other actions arising from the contract of carriage may be brought:

- (a) By the consignor, until such time as the consignee has:
- (i) Taken possession of the consignment note,
  - (ii) Accepted the goods, or
  - (iii) Asserted his rights under Article 28, § 4 or Article 31;
- (b) By the consignee, from the time when he has:
- (i) Taken possession of the consignment note,
  - (ii) Accepted the goods,
  - (iii) Asserted his rights under Article 28, § 4, or
  - (iv) Asserted his rights under Article 31 provided that the right of action shall be extinguished from the time when the person designated by the consignee in accordance with Article 31, § 1 (c) has taken possession of the consignment note, accepted the goods, or asserted his rights under Article 28, § 4.

§ 4. In order to bring an action, the consignor must produce the duplicate of the consignment note. Failing this, in order to bring an action under § 3 (a) he must produce an authorisation from the consignee or furnish proof that the consignee has refused to accept the consignment.

In order to bring an action, the consignee shall produce the consignment note if it has been handed over to him.

#### *Article 55. RAILWAYS AGAINST WHICH AN ACTION MAY BE BROUGHT*

§ 1. An action for the recovery of a sum paid under the contract of carriage may be brought against the railway which has collected that sum or against the railway on whose behalf it was collected.

§ 2. An action in respect of the cash on delivery payments provided for in Article 17 may only be brought against the forwarding railway.

§ 3. Other actions arising from the contract of carriage may be brought against the forwarding railway, the railway of destination or the railway on which the event giving rise to the proceedings occurred.

Such actions may be brought against the railway of destination even if it has received neither the goods nor the consignment note.

§ 4. If the plaintiff can choose between several railways, his right to choose shall be extinguished as soon as he brings an action against any one of them.

§ 5. An action may be brought against a railway other than those specified in §§ 1, 2 and 3 when instituted by way of counterclaim or by way of exception to the principal claim based on the same contract of carriage.

#### *Article 56. COMPETENCE*

Actions brought under the Uniform Rules may only be instituted in the competent court of the State having jurisdiction over the defendant railway, unless otherwise provided in agreements between States or in acts of concession.

When a railway operates independent railway systems in different States, each system shall be regarded as a separate railway for the purposes of this Article.

*Article 57. EXTINCTION OF RIGHT OF ACTION AGAINST THE RAILWAY*

§ 1. Acceptance of the goods by the person entitled shall extinguish all rights of action against the railway arising from the contract of carriage in case of partial loss, damage or exceeding of the transit period.

§ 2. Nevertheless, the right of action shall not be extinguished:

- (a) In the case of partial loss or of damage, if:
  - (i) The loss or damage was ascertained before the acceptance of the goods in accordance with Article 52 by the person entitled;
  - (ii) The ascertainment which should have been carried out under Article 52 was omitted solely through the fault of the railway;
- (b) In the case of loss or damage which is not apparent and is not ascertained until after acceptance of the goods by the person entitled, provided that he:
  - (i) Asks for ascertainment in accordance with Article 52 immediately after discovery of the loss or damage and not later than seven days after the acceptance of the goods;
  - (ii) And, in addition, proves that the loss or damage occurred between the time of acceptance for carriage and the time of delivery;
- (c) In cases where the transit period has been exceeded, if the person entitled has, within sixty days, asserted his rights against one of the railways referred to in Article 55, § 3;
- (d) If the person entitled furnishes proof that the loss or damage was caused by wilful misconduct or gross negligence on the part of the railway.

§ 3. If the goods have been reconsigned in accordance with Article 38, § 1 rights of action in case of partial loss or of damage, arising from one of the previous contracts of carriage, shall be extinguished as if there had been only one contract of carriage.

*Article 58. LIMITATION OF ACTIONS*

§ 1. The period of limitation for an action arising from the contract of carriage shall be one year.

Nevertheless, the period of limitation shall be two years in the case of an action:

- (a) To recover a cash on delivery payment collected by the railway from the consignee;
- (b) To recover the proceeds of a sale effected by the railway;
- (c) For loss or damage caused by wilful misconduct;
- (d) For fraud;
- (e) Arising from one of the contracts of carriage prior to the reconsignment in the case provided for in Article 38, § 1.

§ 2. The period of limitation shall run:

- (a) In actions for compensation for total loss, from the thirtieth day after the expiry of the transit period;
- (b) In actions for compensation for partial loss, for damage or for exceeding the transit period, from the day when delivery took place;
- (c) In actions for payment or refund of carriage charges, supplementary charges, other charges or surcharges, or for correction of charges in case of a tariff being wrongly applied or of an error in calculation or collection:
  - (i) If payment has been made, from the day of payment;
  - (ii) If payment has not been made, from the day when the goods were accepted for carriage if payment is due from the consignor, or from the day when the consignee took possession of the consignment note if payment is due from him;

- (iii) In the case of sums to be paid under a charges note, from the day on which the railway submits to the consignor the account of charges provided for in Article 15, § 7; if no such account has been submitted, the period in respect of sums due to the railway shall run from the thirtieth day following the expiry of the transit period;
- (d) In an action by the railway for recovery of a sum which has been paid by the consignee instead of by the consignor or vice versa and which the railway is required to refund to the person entitled, from the day of the claim for a refund;
- (e) In actions relating to cash on delivery as provided for in Article 17, from the thirtieth day following the expiry of the transit period;
- (f) In actions to recover the proceeds of a sale, from the day of the sale;
- (g) In actions to recover additional duty demanded by Customs or other administrative authorities, from the day of the demand made by such authorities;
- (h) In all other cases, from the day when the right of action arises.

The day indicated for the commencement of the period of limitation shall not be included in the period.

§ 3. When a claim is presented to a railway in accordance with Article 53 together with the necessary supporting documents, the period of limitation shall be suspended until the day that the railway rejects the claim by notification in writing and returns the documents. If part of the claim is admitted, the period of limitation shall recommence in respect of that part of the claim still in dispute. The burden of proof of receipt of the claim or of the reply and of the return of the documents shall rest on the party who relies on those facts.

The period of limitation shall not be suspended by further claims having the same object.

§ 4. A right of action which has become time-barred may not be exercised by way of counter claim or relied upon by way of exception.

§ 5. Subject to the foregoing provisions, the suspension and interruption of periods of limitation shall be governed by national law.

## TITLE VI. RELATIONS BETWEEN RAILWAYS

### *Article 59.* SETTLEMENT OF ACCOUNTS BETWEEN RAILWAYS

§ 1. Any railway which has collected, either at the time of forwarding or on arrival, charges or other sums due under the contract of carriage must pay to the railways concerned their respective shares.

The methods of payment shall be settled by agreements between railways.

§ 2. Subject to its rights of recovery against the consignor, the forwarding railway shall be liable for carriage and other charges which it has failed to collect when the consignor has undertaken to pay them in accordance with Article 15.

§ 3. Should the railway of destination deliver the goods without collecting charges or other sums due under the contract of carriage, it shall be liable for them to the railways which have taken part in the carriage and to the other parties concerned.

§ 4. Should one railway default in payment and such default be confirmed by the Central Office at the request of one of the creditor railways, the consequences thereof shall be borne by all the other railways which have taken part in the carriage in proportion to their shares of the carriage charges.

The right of recovery against the defaulting railway shall not be affected.

*Article 60. RECOURSE IN CASE OF LOSS OR DAMAGE*

§ 1. A railway which has paid compensation in accordance with the Uniform Rules, for total or partial loss or for damage, has a right of recourse against the other railways which have taken part in the carriage in accordance with the following provisions:

- (a) The railway which has caused the loss or damage shall be solely liable for it;
- (b) When the loss or damage has been caused by more than one railway, each shall be liable for the loss or damage it has caused; if such distinction cannot be made, the compensation shall be apportioned between those railways in accordance with (c);
- (c) If it cannot be proved that the loss or damage has been caused by one or more railways in particular, the compensation shall be apportioned between all the railways which have taken part in the carriage, except those which can prove that the loss or damage was not caused on their lines; such apportionment shall be in proportion to the kilometric distances contained in the tariffs.

§ 2. In the case of the insolvency of any one of the railways, the unpaid share due from it shall be apportioned among all the other railways which have taken part in the carriage, in proportion to the kilometric distances contained in the tariffs.

*Article 61. RECOURSE IN CASE OF EXCEEDING THE TRANSIT PERIOD*

§ 1. Article 60 shall apply where compensation is paid for exceeding the transit period. If this has been caused by more than one railway, the compensation shall be apportioned between such railways in proportion to the length of the delay occurring on their respective lines.

§ 2. The transit periods specified in Article 27 shall be apportioned in the following manner:

- (a) Where two railways have taken part in the carriage:
  - (i) The period for despatch shall be divided equally;
  - (ii) The period for transport shall be divided in proportion to the kilometric distances contained in the tariffs;
- (b) Where three or more railways have taken part in the carriage:
  - (i) The period for despatch shall be divided equally between the forwarding railway and the railway of destination;
  - (ii) The period for transport shall be divided between all the railways:

— One-third in equal shares

— The remaining two-thirds in proportion to the kilometric distances contained in the tariffs.

§ 3. Any additional periods to which a railway may be entitled shall be allocated to that railway.

§ 4. The interval between the time when the goods are handed over to the railway and commencement of the period for despatch shall be allocated exclusively to the forwarding railway.

§ 5. Such apportionment shall only apply if the total transit period has been exceeded.

*Article 62. PROCEDURE FOR RECOURSE*

§ 1. The validity of the payment made by the railway exercising one of the rights of recourse under Articles 60 and 61 may not be disputed by the railway against which the right of recourse is exercised, when compensation has been determined by a court and when the latter railway duly served with notice, has been afforded an opportunity to



intervene in the proceedings. The court seized of the main proceedings shall determine what time shall be allowed for such notification and for intervention in the proceedings.

§ 2. A railway exercising its right of recourse must take proceedings by one and the same action against all the railways concerned with which it has not reached a settlement, failing which it shall lose its right of recourse in the case of those against which it has not taken proceedings.

§ 3. The court shall give its decision in one and the same judgment on all recourse claims brought before it.

§ 4. The railways against which such action has been brought shall have no further right of recourse.

§ 5. Recourse proceedings may not be joined with proceedings for compensation taken by the person entitled on the basis of the contract of carriage.

#### *Article 63.* COMPETENCE FOR RECOURSE

§ 1. The courts of the country in which the railway against which the recourse claim has been made, has its headquarters shall have exclusive competence for all recourse claims.

§ 2. When the action is to be brought against several railways, the plaintiff railway shall be entitled to choose the court in which it will bring the proceedings from among those having competence under § 1.

#### *Article 64.* AGREEMENTS CONCERNING RECOURSE

By agreement, railways may derogate from the provisions concerning reciprocal rights of recourse set out in Title VI, apart from that contained in Article 62, § 5.

### TITLE VII. EXCEPTIONAL PROVISIONS

#### *Article 65.* TEMPORARY DEROGATIONS

§ 1. If the economic and financial position of any State is such as to cause serious difficulty in applying Title VI, each State may derogate from Articles 15, 17 and 30 by determining in the case of certain types of traffic that:

- (a) Consignments from the territory of that State shall be forwarded charges paid:
  - (i) As far as its frontiers, or
  - (ii) At least as far as its frontiers;
- (b) Consignments to destinations in that State shall be forwarded charges paid:
  - (i) At least as far as its frontiers, in so far as the State of departure does not impose the restriction provided for at (a) (i), or
  - (ii) At most as far as its frontiers;
- (c) Consignments from or to the territory of that State may not be made subject to any cash on delivery payment and that no disbursements shall be allowed, or that cash on delivery payments and disbursements shall be allowed only within certain limits;
- (d) The consignor may not modify the contract of carriage in matters affecting the country of destination, prepayment of charges and cash on delivery payments.

§ 2. Under the same conditions States may authorise the railways to derogate from Articles 15, 17, 30 and 31 by determining, in the case of traffic exchanged between them that:

- (a) The rules for the payment of charges shall be specially fixed by agreement between the railways concerned; however, such rules may not prescribe methods of payment other than those provided for in Article 15;

(b) Certain subsequent orders shall not be allowed.

§ 3. Measures taken in accordance with §§ 1 and 2 shall be notified to the Central Office.

The measures set out in § 1 shall come into force at the earliest on the expiry of a period of eight days from the date of the letter by which the Central Office shall have notified such measures to the other States.

The measures set out in § 2 shall come into force at the earliest on the expiry of a period of two days from the date of their publication in the States concerned.

§ 4. Consignments already in transit shall not be affected by such measures.

#### *Article 66. DEROGATIONS*

The provisions of the Uniform Rules shall not prevail over those provisions which certain States are obliged to adopt, in traffic among themselves, in pursuance of certain Treaties such as the Treaties relating to the European Coal and Steel Community and the European Economic Community.

#### ANNEX I<sup>1</sup> (Articles 4 and 5)

#### *Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)*

The text of this Annex shall be that drawn up by the Committee of Experts, in accordance with Article 69, § 4 of the International Convention concerning the Carriage of Goods by Rail (CIM) of 7 February 1970, for the International Regulations concerning the Carriage of Dangerous Goods by Rail (RID), Annex I to the CIM. The Committee of Experts shall also edit the text to bring it into line with the Convention concerning the International Carriage of Goods by Rail of 9 May 1980.

#### ANNEX II<sup>2</sup> (Article 8, § 1)

#### *Regulations concerning the International Haulage of Private Owners' Wagons by Rail (RIP)*

The text of this Annex shall be that drawn up by the Committee of Experts, in accordance with Article 69, § 4 of the International Convention concerning the Carriage of Goods by Rail (CIM) of 7 February 1970, for the International Regulations concerning the Haulage of Private Owners' Wagons (RIP), Annex IV to the CIM. The Committee of Experts shall also edit the text to bring it into line with the Convention concerning the International Carriage of Goods by Rail of 9 May 1980.

#### ANNEX III<sup>3</sup> (Article 8, § 2)

#### *Regulations concerning the International Carriage of Containers by Rail (RiCo)*

The text of this Annex shall be that drawn up by the Committee of Experts, in accordance with Article 69, § 4 of the International Convention concerning the Carriage of Goods by Rail (CIM) of 7 February 1970, for the International Regulations concerning the

<sup>1</sup> See p. 171 of this volume for the text of annex I.

<sup>2</sup> See p. 623 of this volume for the text of annex II.

<sup>3</sup> See p. 627 of this volume for the text of annex III.

Carriage of Containers (RICO), Annex V to the CIM. The Committee of Experts shall also edit the text to bring it into line with the Convention concerning the International Carriage of Goods by Rail of 9 May 1980.

ANNEX IV  
(Article 8, § 3)

*Regulations concerning the International Carriage of Express Parcels  
by Rail (RIEx)*

§ 1. Only such goods as are carried in a specially rapid manner subject to the conditions of an international tariff shall be deemed to be express parcels.

The only goods acceptable as express parcels shall be those which can ordinarily be loaded into the luggage vans of passenger trains. The international tariffs may derogate from this rule.

§ 2. The articles referred to in Article 4 of the Uniform Rules shall not be accepted for carriage as express parcels. The substances and articles enumerated in the RID or those covered by agreements and tariff clauses drawn up in pursuance of Article 5, § 2 of the Uniform Rules shall not be accepted for carriage as express parcels unless that form of carriage is expressly provided for in the RID or such agreements or tariff clauses. The international tariffs shall determine whether other goods may also be treated as unacceptable for carriage or accepted subject to conditions.

§ 3. Express parcels may be handed over for carriage under cover of a document other than that prescribed in accordance with Article 12, § 2 of the Uniform Rules. The form to be used, and the particulars which must or may be inserted therein, shall be determined by the international tariffs. The document must contain the following information:

- (a) The names of the forwarding and destination stations;
- (b) The names and addresses of the consignor and of the consignee;
- (c) The description of the goods;
- (d) The number of parcels and a description of the packing;
- (e) A detailed list of the documents required by Customs or other administrative authorities and attached to the consignment note.

§ 4. Express parcels shall be carried by rapid means within the periods prescribed in the international tariffs. The transit periods shall in all cases be less than the periods applicable to “*grande vitesse*” traffic.

§ 5. The international tariffs may also provide for derogations from the Uniform Rules other than those specified above. There shall however be no derogation from Articles 35-38, 40-42, 44 and 47-58 of the Uniform Rules.

§ 6. Unless the above provisions and those of the international tariffs require otherwise, the Uniform Rules shall be applicable to the carriage of express parcels.

## [TRANSLATION — TRADUCTION]

FINAL ACT OF THE EIGHTH CONFERENCE FOR REVIEWING THE INTERNATIONAL CONVENTIONS CONCERNING THE CARRIAGE OF GOODS (CIM) AND OF PASSENGERS AND LUGGAGE BY RAIL (CIV)<sup>1</sup>

In accordance with the provisions of article 69 of the International Convention concerning the Carriage of Goods by Rail (CIM),<sup>2</sup> of article 64 of the International Convention concerning the Carriage of Passengers and Luggage by Rail (CIV),<sup>3</sup> both of 7 February 1970, and of article 27 of the Additional Convention relating to the liability of the railway for death of, and personal injury to, passengers, of 26 February 1966,<sup>4</sup> the Swiss Government has convened a Conference for the purpose of reviewing these Conventions.

The Conference was held at Berne from 30 April to 9 May 1980.

The participants were as follows:

## I. DELEGATES OF THE STATES PARTIES TO THE CONVENTIONS OF 7 FEBRUARY 1970

*Germany, Federal Republic of:*

Mr. G. Beck, Ministerial Director, Federal Ministry of Transport;  
Mr. J. Thiers, Ministerial Counsellor, Federal Ministry of Transport;  
Mr. B. Klingsporn, Ministerial Counsellor, Federal Ministry of Justice;  
Mr. M. Burgmann, Governmental Director, Federal Ministry of Transport.

*Austria:*

Mr. H. Wild, Director-General, Federal Ministry of Transport;  
Mr. O. Peschorn, Ministerial Counsellor, Federal Ministry of Transport;  
Mr. W. Schütz, Senior Counsellor, Federal Ministry of Justice;  
Mr. H. Winkler, Legation Counsellor, Federal Ministry of Foreign Affairs;  
Mr. G. Kafka, Commissioner, Federal Ministry of Transport.

*Belgium:*

H. E. Mr. Erik Bal, Ambassador Extraordinary and Plenipotentiary of Belgium in Switzerland;  
Mr. P. De Roover, Chief Inspector, Transport Administration, Ministry of Communications;  
Mr. J. Compère, Legal Counsel to SNCB;  
Mr. B. De Vidts, Legal Expert, Ministry of Foreign Affairs.

<sup>1</sup> Published for information by the Secretariat of the United Nations.

<sup>2</sup> United Nations, *Treaty Series*, vol. 1101, p. 164.

<sup>3</sup> *Ibid.*, p. 340.

<sup>4</sup> *Ibid.*, p. 82.

*Bulgaria:*

- Mr. V. Valkov, Vice-Minister of Transport;
- Mr. A. Petkov, Deputy Director-General of BDZ;
- Mr. S. Koltchev, Chief Expert, Ministry of Transport.

*Denmark :*

- Mr. S. A. Jenstrup, Director, General Directorate, Danish State Railways;
- Mr. S. Larsen, Legal Officer, General Directorate, Danish State Railways.

*Spain:*

- Mr. J. A. de Yturriaga, Assistant Director-General for Land, Sea and Air Co-operation, Ministry of Foreign Affairs;
- Mr. L. González, Assistant Director-General for International Co-operation, Ministry of Transport and Communications;
- Mr. J. M. López-Aguilar, Secretary, Spanish Embassy, Berne;
- Mrs. M. A. Guzmán, Chief, Bilateral Affairs Section, Ministry of Transport and Communications;
- Mr. A. L. Morua, Expert, Institute of Transport and Communications Studies, Ministry of Transport and Communications;
- Mr. P. de Otaola, Director-General for Land Transport, Ministry of Transport and Communications;
- Mrs. A. Huicio, Expert, Higher Institute of Transport and Communications, Ministry of Transport and Communications;
- Mr. B. Rodríguez, Assistant Director, Spanish National Railways Department, Trade Directorate.

*Finland:*

- Mr. P. Roto, Acting Director, Finnish State Railways;
- Mr. S. Laukkasuo, First Secretary, Finnish Embassy at Berne.

*France:*

- H. E. Mr. Gilles Curien, Ambassador Extraordinary and Plenipotentiary of France in Switzerland;
- Mr. A. Valadas, First Counsellor, French Embassy at Berne, Deputy Head of the French Delegation;
- Mr. M. Surbiguet, Legal Counsel, Ministry of Foreign Affairs; Directorate of Legal Affairs;
- Mrs. A. Roy, Administrative Officer, Ministry of Foreign Affairs;
- Mr. J.-P. Béraudo, Judicial Officer, International Law Office, Ministry of Justice;
- Mr. P. Barbé, Tax Inspector, Ministry of the Budget;
- Mr. Gauthier, Administrative Officer, Ministry of Transport;

Mr. M. Allégret, Chief Inspector, Office of Legal Affairs, French National Railways (SNCF);

Mr. H. Schibler, Inspector, Goods Division, French National Railways (SNCF);

Mr. A. Duperrier, Deputy Chief Engineer, Passengers Division, French National Railways (SNCF).

*Greece:*

H. E. Mr. Alexandre Demetropoulos, Ambassador Extraordinary and Plenipotentiary of the Hellenic Republic in Switzerland;

Mr. T. Papadakis, Commercial Attaché, Embassy of the Hellenic Republic at Berne;

Mr. E. Kosteas, Head of Division, Greek Railways.

*Hungary:*

Mr. Z. Szücs, Director, Railways Department, Ministry of Communications and Postal Services, Director-General of MÁV;

Mr. K. Zelenay, Senior Adviser, Chief of Section, Ministry of Communications and Postal Services; Railways Department;

Mr. J. Pál, Legal Counsel, Ministry of Communications and Postal Services; Railways Department.

*Iraq:*

Mr. T. Al-Shakrchi, President, Iraqi Republic Railways (IRR);

Mr. Y. Tawfeek, Director-General for Transport and Development, IRR;

Mr. W. Ahmed, Interpreter, IRR.

*Iran:*

Mr. S. Y. Alizadeh, Under-Secretary of State, Railways and Transport, and President of RAI;

Mr. M. Achari, Head of Operations, RAI;

Mr. A. Kazarian, RAI Expert.

*Ireland:*

Miss I. Howard, Assistant Principal, Department of Transport;

Mr. J. Deady, Secretary, Irish Embassy, Berne;

Mr. T. A. O'Connor, Director, International Department (Coras Iompair Eireann).

*Italy:*

Mr. M. Ferretti, Head Official, Italian State Railways;

Mr. G. Sessa, Senior Official, Commercial and Traffic Service, Italian State Railways.

*Lebanon:*

Mr. A. G. Itani, Counsellor, Lebanese Embassy, Berne.

*Liechtenstein:*

Mr. B. Beck, Director, Office of Industry and Crafts of the Government of the Principality.

*Luxembourg:*

Mr. C. Kasel, Government Commissioner, National Railways of Luxembourg;

Mr. R. Logelin, Honorary First Governmental Counsellor, Ministry of Transport.

*Morocco:*

H. E. Mr. Mohamed Bennani-Smires, Ambassador Extraordinary and Plenipotentiary of the Kingdom of Morocco in Switzerland;

Mr. M. Temri, Chief Engineer, National Office, Moroccan Railways;

Mr. A. Bennis, First Secretary, Moroccan Embassy, Berne.

*Norway:*

H. E. Mr. Erik Colban, Ambassador Extraordinary and Plenipotentiary of the Kingdom of Norway in Switzerland;

Mr. K. Fålnun, Director, Norwegian State Railways;

Mr. T. Hagen, Lawyer to the Norwegian State Railways.

*Netherlands:*

H. E. Mr. Herman Cornelis Jorissen, Ambassador Extraordinary and Plenipotentiary of the Kingdom of the Netherlands in Switzerland;

Mr. S. Glazenburg, Deputy Director for International Transport Policy, Ministry of Transport and Public Works;

Mr. H. Hamaeckers, Inspector, Ministry of Finance;

Mrs. R. C. Hosman, Expert, Ministry of Transport and Public Works;

Mrs. M. S. Kappeyne van de Coppello, Legal Expert, Ministry of Foreign Affairs;

Mr. E. van der Bruggen, Chief, Legal Division, Netherlands Railways.

*Poland:*

Mr. W. August, Departmental Director, Ministry of Communications;

Mr. Z. Stepniewski, Senior Specialist, Ministry of Communications.

*German Democratic Republic:*

Mr. H. Gerber, Acting Minister of Transport;

Mr. V. Kolloch, Director, Fares Department, Ministry of Transport;

Mr. L. Krink, Section Chief, Ministry of Transport;

Mr. F. Bork, Head of Division, Fares Department, Ministry of Transport.

*Romania:*

H. E. Mr. Dan Enachescu, Ambassador Extraordinary and Plenipotentiary of the Socialist Republic of Romania in Switzerland;

Mr. D. Prapa, Chief, Law and Arbitration Office, Ministry of Transport and Telecommunications;

Mr. E. Culicov, Chief Engineer, Ministry of Transport and Telecommunications;

Mr. G. Dascalescu, Counsellor, Ministry of Transport and Telecommunications;

Mr. G. David, Economist, Ministry of Transport and Telecommunications;

Mr. V. C. Ionescu, Economist, Ministry of Transport and Telecommunications.

*United Kingdom:*

Mr. B. A. Payne, Head, International Transport Division, Department of Transport;

Mr. R. Bellis, Legal Counsel, Department of the Environment;

Mr. E. Harding, Chief Legal Counsel, British Railways;

Mr. M. Baker, Legal Counsel, British Railways;

Mr. F. Hammond, Deputy Traffic Director, Sealink UK Ltd.;

Mr. M. Worley, Officer, International Traffic Division, British Railways.

*Sweden:*

Mr. C. Nordström, Director, Legal Department, Swedish State Railways;

Mr. A. Weidstam, Counsellor, Court of Appeal;

Mr. A. G. Iacobæus, Assessor, Ministry of Justice.

*Switzerland:*

Mr. P. Trachsel, Director, Federal Office of Transport;

Mr. F.-C. Vaney, Chief, Fares and Traffic Service, Federal Office of Transport;

Mrs. M. von Grünigen, Chief, Diplomatic Section, Federal Department of Foreign Affairs;

Mr. M. Monney, Deputy Chief, Fares and Traffic Service, Federal Office of Transport;

Mr. A. Ritz, Diplomatic Assistant, Federal Department of Foreign Affairs;

Mr. H. R. Spitzli, Director, DANZAS S.A., Basle;

Mr. G. Rindlisbacher, Assistant, Legal Division, Directorate of Swiss Railways.



*Syria:*

- Mr. F. El Hassan, Director-General, Syrian Railways;
- Mr. W. Mardirossian, Deputy Director-General, Syrian Railways.

*Czechoslovakia:*

- Mr. L. Blažek, Vice-Minister of Transport;
- Mr. J. Šír, Director, International Department, Federal Ministry of Transport;
- Mr. Z. Slezák, Director, Finance Department, Federal Ministry of Transport;
- Mr. J. Čapek, Senior Counsellor, Federal Ministry of Transport;
- Mr. J. Chroust, Senior Counsellor, Federal Ministry of Transport;
- Mr. B. Roučka, Third Secretary, Ministry of Foreign Affairs;
- Mr. L. Hejl, Official, Federal Ministry of Finance;
- Mr. V. Coufal, Expert, Federal Ministry of External Trade.

*Tunisia:*

- H. E. Mr. Taoufik Smida, Ambassador Extraordinary and Plenipotentiary of Tunisia in Switzerland;
- Mr. F. Tounsi, First Secretary, Tunisian Embassy, Berne;
- Mr. S. Zlitni, Chief of Railways Service, Ministry of Transport and Communications;
- Mr. M. Cheour, Technical Director-General of Tunisian National Railways.

*Yugoslavia:*

- H. E. Mr. Milić Bugarčić, Ambassador Extraordinary and Plenipotentiary of the Socialist Federal Republic of Yugoslavia in Switzerland;
- Mrs. S. Petrović, Legal Expert on International Transport for Yugoslav Railways;
- Mr. B. Cvetković, Senior Counsellor, Federal Transport and Communications Committee;
- Mr. T. Obućina, Counsellor, Embassy of the Socialist Federal Republic of Yugoslavia, Berne.

## II. OBSERVERS

### DELEGATES OF INTERNATIONAL ORGANIZATIONS

#### (a) *Governmental international organizations*

*Commission of the European Communities (CEC):*

- M. J. Blanc, Principal Administrator, Directorate-General for Transport.

*Committee of the Organization of Railways Co-operation (ORC):*

Mr. S. Batkowski, Chairman of the Committee.

*(b) Non-Governmental international organizations**International Chamber of Commerce (ICC):*

Mr. R. Chapuis, Attaché, Transport Services of Nestlé World Trade Corporation, Vevey (Switzerland);

Mr. Ph. Guéret, Attaché, Directorate of Transport, Trade Union Chamber of the French Iron and Steel Industry, Paris.

*International Union of Railways:*

Represented by the International Rail Transport Committee (IRTC).

*International Rail Transport Committee:*

Mr. E. Bertherin, Head of the Legal Division of CFF, Secretary of IRTC;

Mr. P. Norelius, Director, SJ;

Mr. W. Dusak, Counsellor, Directorate-General of Austrian Federal Railways.

*International Federation of Freight Forwarders Associations:*

Mr. P. Joss, Vice-Director, DANZAS S.A. Basle.

*International Association of Tariff-Specialists:*

Mr. K. Spera, President;

Mr. L. L'Eplattenier, Vice-President;

Mr. W. Schumann, Vice-President.

**III. CENTRAL OFFICE FOR INTERNATIONAL RAILWAY TRANSPORT (OCTI)**

Mr. H. Amberg, Director-General;

Mr. P. Baudry, Vice-Director-General.

*Secretariat of the Conference:*

Mr. Z. Matyassy, Counsellor;

Mr. K. Yéretzian, Counsellor;

Mr. M. Ingold, Counsellor;

Mr. G. Mutz, Assistant Counsellor;

Mrs. M. Lehmann, Second Secretary;

Mr. J.-J. Héritier, Chief, Administrative Services.

*Interpreters:*

Mrs. M.-L. Sialm;

Mrs. V. Vaucher.

## IV. STATES PARTIES TO THE 1970 CIM AND CIV CONVENTIONS NOT PRESENT

Algeria, Portugal, Turkey.

V. STATES NOT PARTIES TO THE 1970 CIM AND CIV CONVENTIONS  
INVITED TO THE CONFERENCE

Albania, Saudi Arabia, India, Jordan, Pakistan, Union of Soviet Socialist Republics.

The Conference elected the following officers:

(a) *Chairman:*

Mr. P. Trachsel, Head of the Swiss delegation;

(b) *Vice-Chairmen:*

Mr. V. Valkov, Head of the Bulgarian delegation;

Mr. M. Ferretti, Head of the Italian delegation;

H. E. Mr. Mohamed Bennani-Smires, Head of the Moroccan delegation;

Mr. C. Nordström, Head of the Swedish delegation.

The Conference established seven Committees with the following officers:

*Committee I. Credentials*

Chairman: H. E. Mr. E. Colban (Norway);

Vice-Chairman: H. E. Mr. A. Demetropoulos (Greece); M. J. Čapek (Czechoslovakia).

*Committee II. Institutional Questions*

Chairman: Mr. M. Burgmann (Federal Republic of Germany);

Vice-Chairmen: Mr. J. A. de Yturriaga (Spain); Mr. W. August (Poland).

*Committee III. Standard Rules CIV*

Chairman: Mr. F. C. Vaney (Switzerland);

Vice-Chairmen: Mr. M. K. Zelenay (Hungary); Mr. B. A. Payne (United Kingdom).

*Committee IV. Standard Rules CIM*

Chairman: Mrs. S. Petrovič (Yugoslavia);

Vice-Chairmen: Mr. O. Peschorn (Austria); Mr. J. Compère (Belgium).

*Committee V. Common CIV and CIM Questions*

Chairman: Mr. S. Glazenburg (Netherlands);

Vice-Chairmen: Mr. P. Roto (Finland); Mr. D. Prapa (Romania).

*Committee VI. General Affairs*

Chairman: Mr. F. Bork (German Democratic Republic);

Vice-Chairpersons: Miss I. Howard (Ireland); Mr. F. El Hassan (Syria).

*Committee VII. French Drafting Committee*

Chairman: Mr. A. Gauthier (France);

Vice-Chairman: Mr. C. Kasel (Luxembourg).

The Conference took as the basis for its discussions:

## (a) The agenda adopted by the Conference;

- (b) The draft Convention concerning International Carriage by Rail (COTIF) including the Protocol on the Privileges and Immunities of the Intergovernmental Organization for International Carriage by Rail (OTIF) and the Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV) (Appendix A) and the Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM) (Appendix B);
- (c) The general report of the Central Office for International Railway Transport on the preliminary work for the Eighth Conference for Reviewing the International Conventions of 7 February 1970 concerning the Carriage of Goods by Rail (CIM) and the Carriage of Passengers and Luggage by Rail (CIV) and the Additional Convention to CIV of 26 February 1966;
- (d) The report of the Administrative Committee on its activities as a whole during the period 1976-1980;
- (e) The proposal for establishing the membership of the Administrative Committee of the Central Office for the five-year period 1981-1985;
- (f) The report of the Administrative Committee on the fixing of maximum rates per kilometre for the five-year period 1981-1985.

Bearing in mind the proceedings of the Conference as reported in the records of the Committees and in the records of the plenary meetings, the Conference decided to submit to the respective representatives of States for their signature:

The "Convention concerning International Carriage by Rail (COTIF)" including the "Protocol on the Privileges and Immunities of the Intergovernmental Organization for International Carriage by Rail (OTIF)", the "Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV)" (Appendix A) and the "Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM)" (Appendix B).

The Drafting Committees for finalizing the official translations into German, English, Arabic, Italian and Dutch of the documents issued by the Eighth Conference shall be convened by the Central Office after the closure of the Conference.

The Conference further decided:

1. To adopt the report of the Administrative Committee on its activities as a whole during the period 1976-1980;
2. To designate the following States to constitute the Committee for the five-year period 1981-1985 :

*Chairman:* Switzerland (permanent member);

*Members whose term is renewed:* Federal Republic of Germany, Spain, German Democratic Republic;

*New Members:* Finland, Greece, Hungary, Iraq, Italy, Belgium, Morocco;

3. To fix the following maximum rates per kilometre for the contributions of Contracting States to the budget of the Central Office for the five-year period 1981-1985:

8 Swiss francs for CIM and 7.50 Swiss francs for CIV;

4. To instruct the Central Office to study the problem of supplementary provisions and questions pertaining thereto with a view to suggesting to the competent authorities, where appropriate, amendments to the Convention;
5. To instruct the Central Office to study the problem of liability in respect of non-compliance with the timetable, liability for hand-carried parcels and, where applicable, for other matters as well as questions pertaining thereto in order to suggest to the competent authorities, where appropriate, amendments to the Convention;
6. To instruct the Central Office to study the problem created by the possible introduction of additional working languages, in particular Arabic and English, with a view to submitting a report to the competent authorities.

IN WITNESS WHEREOF, the undersigned have signed this Final Act.

DONE at Berne, on 9 May 1980, in one original which shall be deposited in the archives of the Swiss Confederation, and an authentic copy of which shall be sent to each of the States represented at this Conference.

For Germany, Federal Republic of:

[U. LEBSANFT]<sup>1</sup>  
[G. BECK]

For Austria:

[H. WILD]

For Belgium:

[ERIK BAL]

For Bulgaria:

[V. VALKOV]

For Denmark:

[S. A. JENSTRUP]

For Spain:

[J. A. DE YTURRIAGA]

For Finland:

[PENTTI ROTO]

<sup>1</sup> The names of signatories appearing between brackets were not legible and have been supplied by the Government of Switzerland — Les noms des signataires donnés entre crochets étaient illisibles et ont été fournis par le Gouvernement suisse.

For France:

[GILLES CURIEN]

For Greece:

[A. DEMETROPOULOS]  
13.V.80

For Hungary:

[Z. SZÜCS]

For Iraq:

[AL-SHAKRCHI]

For Iran:

[S. Y. ALIZADEH]

For Ireland:

[ISOLDA HOWARD]

For Italy:

[MAURO FERRETTI]

For Lebanon:

[A. G. ITANI]

For Liechtenstein:

[BECK]  
22.5.1980

For Luxembourg:

[C. KASEL]

For Morocco:

[BENNANI-SMIREN]

For Norway:

[ERIK COLBAN]

For the Netherlands:

[H. C. JORISSEN]

For Poland:

[AUGUST]

For the German Democratic Republic:

[H. GERBER]

For Romania:

[D. ENACHESCU]

For the United Kingdom:

[B. A. PAYNE]

For Sweden:

[CLAS NORDSTRÖM]

For Switzerland:

[P. TRACHSEL]

For Syria:

[MARDIROSSIAN]

For Czechoslovakia:

[L. BLAŽEK]

For Tunisia:

[TAOUFIK SMIDA]

For Yugoslavia:

[MILIĆ BUGARČIĆ]

FINAL ACT OF THE DIPLOMATIC CONFERENCE CONVENED TO  
DETERMINE THE ENTRY INTO FORCE OF THE CONVENTION  
CONCERNING INTERNATIONAL CARRIAGE BY RAIL (COTIF)  
SIGNED ON 9 MAY 1980<sup>1</sup>

Pursuant to article 24 of the Convention concerning International Carriage by Rail (COTIF), signed on 9 May 1980, the Swiss Government convened a Conference in order to determine, with the Governments concerned, the entry into force of that Convention.

The Conference was held at Berne from 15 to 17 February 1984.

The participants were as follows:

I. REPRESENTATIVES OF THE STATES PARTIES TO THE CONVENTION  
OF 9 MAY 1980

*Algeria:*

H. E. Mr. Abdelmalek Benhabyles, Ambassador Extraordinary and Plenipotentiary of the People's Democratic Republic of Algeria in Switzerland;

Mr. A. Kechoud, Deputy Director of Railways, Ministry of Transport;

Mr. M. Tiar, Chief Engineer, Adviser to the Director-General of Algerian National Railways.

*Germany, Federal Republic of:*

H. E. Mr. GERHÄRD FISCHER, Ambassador Extraordinary and Plenipotentiary of the Federal Republic of Germany in Switzerland;

Mr. J. Thiers, Ministerial Counsellor, Federal Ministry of Transport;

Mr. B. Klingsporn, Ministerial Counsellor, Federal Ministry of Justice.

*Austria:*

Mr. O. Peschorn, Ministerial Counsellor, Federal Ministry of Transport;

Mr. H. P. Manz, Second Secretary, Austrian Embassy at Berne;

Mr. G. Kafka, Senior Commissioner, Federal Ministry of Transport.

*Belgium:*

H. E. Mr. A. Coesens, Ambassador Extraordinary and Plenipotentiary of Belgium in Switzerland;

Mr. L. Peersman, Administrative Officer, Transport Administration, Ministry of Communications;

Mr. J. Compère, Principal Legal Counsel, Belgian National Railways.

Mrs. J. Capiet, Head Clerk, Belgium National Railways.

<sup>1</sup> Published for information by the Secretariat of the United Nations.



*Bulgaria:*

- Mr. V. Valkov, Vice-Minister of Transport;
- Mr. S. Koltchev, Chief Expert, Ministry of Transport;
- Mr. C. Jivkov, Second Secretary, Bulgarian Embassy at Berne.

*Denmark:*

- Mr. S. A. Jenstrup, Director, General Directorate, Danish State Railways;
- Mr. H. Rasmussen, Deputy Director, General Directorate, Danish State Railways.

*Spain:*

- Mr. L. González Alonso, Deputy Director-General for International Co-operation, Ministry of Transport and Communications;
- Mr. B. Rodríguez Fernández, Assistant Departmental Director, Passengers Division, Spanish National Railways.

*Finland:*

- H. E. Mr. Richard Tötterman, Ambassador Extraordinary and Plenipotentiary of Finland in Switzerland.

*France:*

- H. E. Mr. Georges Egal, Ambassador Extraordinary and Plenipotentiary of France in Switzerland;
- Mr. G. Franc, Administrative Officer, Ministry of Foreign Affairs;
- Mr. J. Forlot, First Secretary, Embassy of France at Berne;
- Miss A. Roý, Administrative Officer, Ministry of Transport;
- Mr. J.-P. Béraudo, Judicial Officer, Office of Civil Affairs, Ministry of Justice;
- Mr. M. Allégret, Honorary Chief Inspector, Legal Office, French National Railways (SNCF);
- Mr. A. Poupardin, Honorary Chief Engineer, Head of General Affairs Department, Goods Directorate of SNCF;
- Mr. H. Schibler, Divisional Inspector, Goods Directorate of SNCF.

*Greece:*

- H. E. Dimitri Velissaropoulos, Ambassador Extraordinary and Plenipotentiary of the Hellenic Republic in Switzerland;
- Mr. N. Papageorgiou, Commercial Attaché, Embassy of the Hellenic Republic at Berne;
- Mr. E. Kosteas, Chief, Division of International Regulations, Greek Railways.

*Hungary:*

- Mr. R. Bajusz, Director-General, Hungarian State Railways;

Mr. P. Bakos, Principal Officer, Ministry of Communications;  
Mr. E. Maizl, Commercial Director, Hungarian State Railways;  
Mr. L. Varkonyi, Head, International Division, Hungarian State Railways.

*Iraq:*

Mr. T. T. Abdul-Razzak, President, Iraqi Republic Railways;  
Mr. W. A. Ahmed, Interpreter, International Affairs Service, Iraqi Republic Railways.

*Italy:*

Mr. M. Ferretti, Head Official, Director, Commercial and Traffic Service, Autonomous Italian State Railways;  
Mr. S. Amato, Senior Official, Commercial and Traffic Service, Autonomous Italian State Railways.

*Lebanon:*

Mr. A. Comaty, First Secretary, Embassy of Lebanon at Berne.

*Liechtenstein:*

Count Mario von Ledebur-Wicheln, Counsellor, Embassy of the Principality of Liechtenstein at Berne.

*Luxembourg:*

H. E. Mr. Jean Rettel, Ambassador Extraordinary and Plenipotentiary of the Grand Duchy of Luxembourg in Switzerland;  
Mr. C. Kasel, Government Commissioner, National Railways of Luxembourg.

*Morocco:*

H. E. Mr. Abderrahmane Benomar, Ambassador Extraordinary and Plenipotentiary of the Kingdom of Morocco in Switzerland;  
Mr. A. Khalis, Secretary, Embassy of the Kingdom of Morocco at Berne.

*Norway:*

H. E. Mr. Torbjørn K. Christiansen, Ambassador Extraordinary and Plenipotentiary of the Kingdom of Norway in Switzerland;  
Mr. K. Fålnun, Director, Commercial Service, Norwegian State Railways.

*Netherlands:*

H. E. Mrs. Janine C. Ferringa, Ambassador Extraordinary and Plenipotentiary of the Kingdom of the Netherlands in Switzerland;  
Mr. S. Glazenburg, Director for International Transport Policy, Ministry of Transport and Public Works.

*Poland:*

- Mr. S. Michalski, Deputy Director, Department of External Economic Co-operation, Ministry of Transport;  
Mr. A. Kakolecki, Counsellor, Ministry of Foreign Affairs.

*Portugal:*

- H. E. Mr. Francisco Paulo Mendes da Luz, Ambassador Extraordinary and Plenipotentiary of Portugal in Switzerland.

*German Democratic Republic:*

- Mr. H. Gerber, Acting Minister of Transport;  
Mr. V. Kolloch, Chief, Fares Section, Ministry of Transport;  
Mr. L. Krink, Section Chief, Ministry of Transport.

*Romania:*

- Mr. I. Tudosie, Vice-Minister for Transport and Communications;  
Mr. S. Achimescu, Deputy Director, Ministry of Transport and Communications;  
Mr. G. Rogoz, Second Secretary, Consul, Embassy of Romania at Berne.

*United Kingdom:*

- Mr. I. R. Jordan, Head, International Transport Division, Department of Transport;  
Mr. R. G. Bellis, Legal Counsel, Department of Transport;  
Mr. M. G. Worley, Head, International Goods Traffic, British Rail;  
Mr. D. A. Burton, Head, International Goods Traffic Division, British Rail.

*Sweden:*

- Mr. A. Weidstam, Counsellor to the Supreme Court.

*Switzerland:*

- Mr. F. Anliker, Chairman of the Administrative Committee of the Central Office (OCTI);  
Mr. F.-C. Vaney, Chief, Fares and Traffic Service, Federal Office of Transport;  
Mr. M. Monney, Acting Chief, Fares and Traffic Service, Federal Office of Transport;  
Mr. R. Mayor, Chief, United Nations and International Organizations Section, Department of Foreign Affairs;  
Miss R. Eichelberger Associate Officer, United Nations and International Organizations Section, Department of Foreign Affairs;  
Mr. E. Bertherin, Head of the Judicial Division, Department of Swiss Federal Railways.

*Czechoslovakia:*

Mr. L. Blažek, Vice-Minister of Transport;  
Mr. M. Nosek, Senior Legal Counsel, Federal Ministry of Transport;  
Mr. M. Haim, Senior Legal Counsel, Federal Ministry of Transport;  
Mrs. K. Hušnerová, Interpreter, Federal Ministry of Transport.

*Tunisia:*

H. E. Mr. Abdelmajid Chaker, Ambassador Extraordinary and Plenipotentiary of Tunisia in Switzerland;  
Mr. M. Mizouni, Counsellor, Tunisian Embassy at Berne.

*Turkey:*

Mr. G. Aktan, Counsellor, Turkish Embassy at Berne.

*Yugoslavia:*

H. E. Mr. Sulejman Redžepagić, Ambassador [Extraordinary] and Plenipotentiary of the Socialist Federal Republic of Yugoslavia in Switzerland;  
Mrs. S. Petrović, Counsellor, Legal Expert on International Transport, Community of Yugoslav Railways.

**II. CENTRAL OFFICE FOR INTERNATIONAL RAILWAY TRANSPORT (OCTI)**

Mr. P. Trachsel, Director.

*Secretariat of the Conference:*

Mr. K. Yéretzian, Counsellor;  
Mr. M. Ingold, Counsellor;  
Mr. G. Mutz, Counsellor;  
Mr. K. Maurer, Assistant Counsellor;  
Mrs. M. Lehmann, Second Secretary;  
Mr. J.-J. Héritier, Second Secretary, Executive Officer;  
Mr. Ph. Mary, Third Secretary;  
Mr. A. Leroux, Third Secretary.

*Interpreters :*

Mrs. M.-L. Sialm;  
Mrs. V. Vaucher.

The Head of the Swiss delegation was elected Chairman of the Conference.

The delegates of Austria, Czechoslovakia, Spain and the United Kingdom were jointly elected Vice-Chairmen.

The Conference established two Committees:

*Committee I. Credentials*

Chairman: Poland

Vice-Chairmen: Morocco, Netherlands

Members: Germany (Federal Republic of), Bulgaria, German Democratic Republic, Sweden, Switzerland, Turkey.

*Committee II. French Drafting Committee*

Chairman: France

Vice-Chairmen: Belgium, Tunisia

Members: Italy, Switzerland.

The Conference took as the basis of its discussions:

- (a) The agenda adopted by the Conference;
- (b) The Report of OCTI on the date of entry into force of COTIF, signed on 9 May 1980, together with the relevant draft Protocol;
- (c) The information notes on the work done in implementation of the mandates assigned to OCTI by the Eighth Revision Conference, on the following three questions:
  - Additional provisions,
  - Liability in respect of non-compliance with the timetable, liability for hand-carried parcels and, where required, for other matters,
  - Possible introduction of additional working languages.

Bearing in mind the proceedings and reports of the Committees, the Conference decided to submit the protocol on the entry into force of the Convention concerning International Carriage by Rail (COTIF), signed on 9 May 1980, for the signature of the respective representatives of States.

The Conference also decided to take note of the information notes on the work done in implementation of the mandates assigned to OCTI by the Eighth Revision Conference, concerning the aforesaid three questions, and on the views expressed at the plenary meetings.

IN WITNESS WHEREOF, the undersigned have signed this Final Act.

DONE at Berne, on 17 February 1984, in one original which shall be deposited in the archives of the Swiss Confederation, and an authentic copy of which shall be sent to each of the States represented at the Conference.

For Algeria:

[A. BENHABYLES]<sup>1</sup>

19 March 1984

For Germany, Federal Republic of:

[GERHARD FISCHER]

[JOHANNES THIERS]

<sup>1</sup> The names of signatories appearing between brackets were not legible and have been supplied by the Government of Switzerland — Les noms des signataires donnés entre crochets étaient illisibles et ont été fournis par le Gouvernement suisse.

- For Austria:  
[OTHMAR PESCHORN]
- For Belgium:  
[A. COESENS]
- For Bulgaria:  
[VALKO VALKOV]
- For Denmark:  
[S. A. JENSTRUP]
- For Spain:  
[LORENZO GONZÁLEZ]
- For Finland:  
[RICHARD TÖTTERMAN]
- For France:  
[FRANC]
- For Greece:  
[D. VELISSAROPOULOS]
- For Hungary:  
[REZSŐ BAJUSZ]
- For Iraq:  
[T. T. ABDUL RAZZAK]
- For Italy:  
[MAURO FERRETTI]
- For Lebanon:  
[A. COMATY]

For Liechtenstein:

[M. LEDEBUR]

For Luxembourg:

[RETTEL]

For Morocco:

[A. BEN OMAR]

For Norway:

[TORBJØRN CHRISTIANSEN]

For the Netherlands:

[J. C. FERRINGA]

For Poland:

[MICHALSKI]

For Portugal:

[F. MENDES DA LUZ]

For the German Democratic Republic:

[H. GERBER]

For Romania:

[I. TUDOSIE]

For the United Kingdom:

[I. R. JORDAN]  
[R. G. BELLIS]

For Sweden:

[AKE WEIDSTAM]

For Switzerland:

[ANLIKER]

For Czechoslovakia:

[L. BLAŽEK]

For Tunisia:

[A. CHAKER]

For Turkey:

[G. AKTAN]

For Yugoslavia:

[SULEJMAN REDZEPAGIC]

**PROTOCOL ESTABLISHED BY THE DIPLOMATIC CONFERENCE CONVENED FOR THE ENTRY INTO FORCE OF THE CONVENTION CONCERNING INTERNATIONAL CARRIAGE BY RAIL (COTIF) SIGNED ON 9 MAY 1980**

Pursuant to articles 22 and 24 of the Convention concerning International Carriage by Rail (COTIF), signed at Berne on 9 May 1980 and concluded by:

Algeria, Germany, Federal Republic of, Austria, Belgium, Bulgaria, Denmark, Spain, Finland, France, Greece, Hungary, Iraq, Iran, Ireland, Italy, Lebanon, Liechtenstein, Luxembourg, Morocco, Norway, Netherlands, Poland, Portugal, German Democratic Republic, Romania, United Kingdom, Sweden, Switzerland, Syria, Czechoslovakia, Tunisia, Turkey and Yugoslavia,

and, on the invitation of the Swiss Federal Council to the Contracting Parties, the undersigned Plenipotentiaries convened at Berne from 15 to 17 February 1984.

Having presented their credentials, found in good and due form, they took note of the statement of the Swiss Government, pursuant to which the following States deposited, with the said Government and on the dates indicated below, the instruments of ratification, acceptance or approval of the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980 :

- Denmark (ratification), 18 June 1981
- German Democratic Republic (ratification), 5 November 1981
- Hungary (ratification), 14 January 1982
- Spain (ratification), 15 January 1982
- Netherlands (approval), 15 January 1982



- Bulgaria (ratification), 15 July 1982
- Yugoslavia (ratification), 2 August 1982
- France (approval), 3 September 1982
- Czechoslovakia (ratification), 28 January 1983
- Austria (ratification), 8 March 1983
- United Kingdom (ratification), 10 May 1983
- Belgium (ratification), 2 June 1983
- Romania (ratification), 14 June 1983
- Luxembourg (ratification), 27 July 1983
- Switzerland (ratification), 8 November 1983
- Lebanon (ratification), 1 December 1983.

The Conference, having confirmed that sixteen States had deposited their instruments of ratification, acceptance or approval with the Swiss Government, adopted the following provisions:

1. The Convention concerning International Carriage by Rail (COTIF) of 9 May 1980, including its Protocol, Appendices and Annexes, shall enter into force on 1 May 1985. The CIM and CIV Conventions of 7 February 1970 and the Additional Convention to CIV of 26 February 1966 and their Annexes and Protocols shall be abrogated on the same date, even in respect of the Contracting States which did not ratify, accept or approve the COTIF of 9 May 1980.

2. The following annexes to the CIM of 7 February 1970:

- Regulations concerning the International Carriage of Dangerous Goods by Rail (RID),
- Regulations concerning the International Haulage of Private Owners' Wagons by Rail (RIP),
- Regulations concerning the International Carriage of Containers by Rail (RiCo),

which are subject to a special revision procedure and were therefore not attached to the instruments signed on 9 May 1980, shall apply, with effect from 1 May 1985 as:

- Annex I. Regulations concerning the International Carriage of Dangerous Goods by Rail (RID),
- Annex II. Regulations concerning the International Haulage of Private Owners' Wagons by Rail (RIP),
- Annex III. Regulations concerning the International Carriage of Containers by Rail (RiCo),

to the CIM Uniform Rules (Appendix B to COTIF), in the version established by the Committees of Experts which revised them and concurred them with COTIF, in accordance with the procedure specified in article 69, paragraph 4, of the CIM of 7 February 1970.

This Protocol shall remain open for signature until 30 June 1984.

For States depositing their instruments of ratification, acceptance or approval after 1 March 1985, the Convention concerning the International Carriage by Rail (COTIF) of 9 May 1980 shall apply as from the first day of the second month following the month in which the Swiss Government has notified the Governments of the Contracting States of such deposit.

IN WITNESS WHEREOF, the following Plenipotentiaries have drawn up and signed this Protocol.

DONE at Berne, on 17 February 1984, in one original which shall be deposited in the archives of the Swiss Confederation, and a certified true copy of which shall be sent to each of the Member States.

For Algeria:

[A. BENHABYLES]<sup>1</sup>  
19 March 1984

For Germany, Federal Republic of:

Subject to ratification  
[GERHARD FISCHER]  
[JOHANNES THIERS]

For Austria:

Subject to ratification  
[OTHMAR PESCHORN]

For Belgium:

[A. COESENS]

For Bulgaria:

[VALKO VALKOV]

For Denmark:

[S. A. JENSTRUP]

For Spain:

[LORENZO GONZÁLEZ]

For Finland:

[RICHARD TÖTTERMAN]

<sup>1</sup> The names of signatories appearing between brackets were not legible and have been supplied by the Government of Switzerland — Les noms des signataires donnés entre crochets étaient illisibles et ont été fournis par le Gouvernement suisse.

For France :

[FRANC]

For Greece:

[D. VELISSAROPOULOS]  
Subject to ratification

For Hungary:

(Subject to approval)  
[REZSŐ BAJUSZ]

For Iraq:

[T. T. ABDUL RAZZAK]

For Italy:

[MAURO FERRETTI]

For Lebanon:

[RACHID KARAMÉ]  
21 June 1984

For Liechtenstein:

[M. LEDEBUR]

For Luxembourg:

[RETTEL]

For Morocco:

[A. BEN OMAR]

For Norway:

[TORBJØRN CHRISTIANSEN]

For the Netherlands:

[J. C. FERRINGA]

For Poland:

[MICHALSKI]

For Portugal:

[F. MENDES DA LUZ]  
Subject to ratification

For the German Democratic Republic:

[H. GERBER]

For Romania:

[I. TUDOSIE]

For the United Kingdom:

[I. R. JORDAN]  
[R. G. BELLIS]

For Sweden:

[AKE WEIDSTAM]

For Switzerland:

[ANLIKER]

For Czechoslovakia:

[L. BLAŽEK]

For Tunisia:

[*Signed — Signé*]  
[A. CHAKER]

For Turkey:

[G. AKTAN]

For Yugoslavia:

[SULEJMAN REDZEPAGIC]  
Subject to approval

[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]A N N E X I<sup>3</sup>REGULATIONS CONCERNING THE INTERNATIONAL CARRIAGE  
OF DANGEROUS GOODS BY RAIL (RID)

With effect from 1 January 1990

## CONTENTS

	<i>Page</i>
<i>Part I. General Requirements</i>	
General requirements.....	172
<i>Part II. Special Requirements for the various Classes</i>	
Class 1. Explosive substances and articles.....	183
Class 2. Gases: compressed, liquefied or dissolved under pressure.....	223
Class 3. Inflammable liquids.....	251
Class 4.1. Inflammable solids.....	265
Class 4.2. Substances liable to spontaneous combustion.....	275
Class 4.3. Substances which give off inflammable gases on contact with water.....	283
Class 5.1. Oxidizing substances.....	290
Class 5.2. Organic peroxides.....	301
Class 6.1. Toxic substances.....	308
Class 6.2. Infectious and repugnant substances.....	333
Class 7. Radioactive material.....	337
Class 8. Corrosive substances.....	384
Class 9. Miscellaneous dangerous substances and articles.....	400
<i>Part III. Appendices</i>	
<i>Appendix I.</i> A. Stability and safety conditions relating to explosive substances and articles, inflammable solids and organic peroxides.....	406
B. Glossary of names in marg. 101.....	409
<i>Appendix II.</i> A. Requirements relating to the nature of aluminium alloy receptacles for certain gases of Class 2.....	420
B. Requirements concerning the materials and construction of receptacles in accordance with marg. 207 intended for the carriage of deeply-refrigerated liquefied gases of Class 2.....	423

<sup>1</sup> Translation by the Government of the United Kingdom of Great Britain and Northern Ireland (Department of Transport, Her Majesty's Stationery Office, 1990 edition).

<sup>2</sup> Traduction du Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord (Département des transports, Her Majesty's Stationery Office, édition de 1990).

<sup>3</sup> The text of Annex I published herein comprises the requirements applicable from 1 May 1985, as well as modifications No. 1, No. 2 and No. 3 dated respectively 1 May 1986, 1 January 1988 and 1 January 1990. These modifications are drafted as a result of the discussions of the Committee of Experts on the Carriage of Dangerous Goods, as provided for in paragraph 4 of article 19 of the COTIF Convention (information supplied by the Government of Switzerland).

	C. Requirements concerning the materials and construction of shells of tank wagons and shells of tank containers for which a test pressure of at least 1 MPa (10 bar) is prescribed, as well as shells of tank wagons and shells of tank containers intended for the carriage of deeply-refrigerated liquefied gases of Class 2 .....	427
	D. Requirements relating to tests on aerosol dispensers and non-refillable containers of gas under pressure of items 10 and 11 of Class 2 .....	431
<i>Appendix III.</i>	A. Tests relating to inflammable liquids of Classes 3, 6.1 and 8 .....	432
	B. Test to determine the fluidity of inflammable liquids of Class 3 .....	433
<i>Appendix IV.</i>	Conditions governing the use of wagons fitted with electrical equipment ..	434
<i>Appendix V.</i>	General packing conditions, types of packagings, requirements applicable to packagings, test requirements for packagings .....	435
<i>Appendix VI.</i>	Requirements relating to intermediate bulk containers (IBCs) .....	468
<i>Appendix VII.</i>	Requirements relating to radioactive material of Class 7 .....	484
<i>Appendix VIII.</i>	Requirements relating to the marking of tank wagons and tank containers .....	513
<i>Appendix IX.</i>	1. Requirements relating to danger labels .....	555
	2. Explanation of illustrations .....	556
	Danger labels .....	559
<i>Appendix X.</i>	Requirements relating to the use of tank containers, their construction and the tests which they must undergo .....	561
<i>Appendix XI.</i>	Requirements relating to the use of tank wagons, their construction and the tests which they must undergo .....	591

#### PART I. GENERAL REQUIREMENTS

1 (1) Annex I constitutes the rules for the carrying out of Article 4 (*d*) and Article 5 para. 1 (*a*) of the Uniform Rules concerning the Contract for Carriage of Goods by Rail (CIM).<sup>1</sup> It is entitled "RID", which is the abbreviation for "Règlement concernant le transport international ferroviaire des marchandises dangereuses" [Regulations concerning the International Carriage of Dangerous Goods by Rail].

(2) The substances and articles of RID are arranged in the following classes:

- Class 1. Explosive substances and articles.
- Class 2. Gases: compressed, liquefied or dissolved under pressure.
- Class 3. Inflammable liquids.
- Class 4.1. Inflammable solids.
- Class 4.2. Substances liable to spontaneous combustion.
- Class 4.3. Substances which give off inflammable gases on contact with water.
- Class 5.1. Oxidizing substances.
- Class 5.2. Organic peroxides.
- Class 6.1. Toxic substances.
- Class 6.2. Infectious and repugnant substances.
- Class 7. Radioactive material.

<sup>1</sup> See p. 112 of this volume.

Class 8. Corrosive substances.

Class 9. Miscellaneous dangerous substances and articles.

(3) Substances and articles covered by the titles of Classes 1, 2, 4.2, 4.3, 5.2, 6.2 and 7 (restrictive classes) are not to be accepted for carriage, subject to the following exceptions. Substances and articles listed under marginal numbers (marg.) 101, 201, 431, 471, 551, 651 and 701 are to be accepted for carriage provided that they comply with the conditions laid down in the various classes.

(4) Substances and articles of Classes 3, 4.1, 5.1, 6.1, 8 and 9 (non-restrictive classes), which are mentioned in marginals 301, 401, 501, 601, 801 and 901 or are covered by one of the collective headings in these marginals, are only to be accepted for carriage under the conditions laid down in the various classes. Other substances and articles covered by the titles of these classes are to be accepted for carriage without special conditions.

(5) Substances and articles which are expressly excluded from carriage under the terms of the notes set out in the various classes cannot be accepted for carriage.

(6) Normal conditions of carriage are applicable to substances and articles of RID, unless otherwise provided by RID.

NOTE. Article 5, para. 2 of the CIM Uniform Rules reads as follows:

“§ 2. Two or more States, by agreement, or two or more railways, by tariff clauses, may jointly determine the conditions with which certain substances or articles not acceptable for carriage under the RID must comply if they are nevertheless to be accepted.

States or railways may, in the same manner, make the conditions for acceptance laid down in the RID less rigorous.

Such agreements and tariff clauses must be published and notified to the Central Office which will bring them to the notice of the States.”

2

(1) The conditions of carriage applicable to each class, with the exception of Class 7, are subdivided into the following sections:

A. Packages:

1. General conditions of packing;
2. Specific conditions of packing for substances and articles;
3. Mixed packing;
4. Marking and danger labels on packages.

B. Method of despatch and restrictions on forwarding.

C. Particulars in the consignment note.

D. Transport equipment:

1. Conditions relating to wagons and loading;
2. Marking and danger labels on wagons, tank wagons, tank-containers and small containers.

E. Prohibitions on mixed loading.

F. Empty packagings.

G. Other requirements.

The conditions of carriage applicable to Class 7 are contained in schedules comprising the following headings:

1. Materials.

2. Packaging/Package.
3. Package maximum radiation level.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks.
5. Decontamination and use of wagons, equipment or parts thereof.
6. Mixed packing.
7. Mixed loading.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks.
9. Marking and danger labels on wagons other than tank wagons.
10. Transport documents.
11. Storage and despatch.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks.
13. Other provisions.

The appendices contain:

Appendix I: Stability and safety conditions relating to explosive substances and articles, inflammable solids and organic peroxides, together with the glossary of names in marg. 101;

Appendix II: Requirements relating to the nature of aluminium alloy receptacles for certain gases of Class 2; requirements concerning the materials and construction of receptacles in accordance with marg. 207 intended for the carriage of deeply refrigerated liquefied gases of Class 2; requirements concerning the materials and construction of shells of tank wagons and shells of tank-containers for which a test pressure of at least 1 MPa (10 bar) is prescribed, as well as shells of tank wagons and shells of tank-containers intended for the carriage of deeply refrigerated liquefied gases of Class 2; requirements relating to tests on aerosol dispensers and non-refillable containers of gas under pressure of items 10 and 11 of Class 2;

Appendix III: Tests relating to inflammable liquids of Classes 3, 6.1 and 8; test to determine the fluidity of inflammable liquids of Class 3;

Appendix IV: Conditions governing the use of wagons fitted with electrical equipment;

Appendix V: General packing conditions, types of packaging, requirements applicable to packagings, test requirements for packagings;

Appendix VI: Requirements relating to intermediate bulk containers (IBCs);

Appendix VII: Requirements relating to radioactive material of Class 7;

Appendix VIII: Requirements relating to the marking of tank wagons and tank-containers;

Appendix IX: Requirements relating to danger labels and explanation of the symbols;

Appendix X: Requirements relating to the use of tank-containers, their construction and the tests which they must undergo;

Appendix XI: Requirements relating to the use of tank wagons, their construction and the tests which they must undergo.



(2) The regulations for the completion of formalities required by the Customs or other administrative authorities should also be observed (see Art. 25, para. 1 of the CIM Uniform Rules).

In addition to the particulars and attestations required by RID, it is particularly necessary that the attestations called for by the administrative authorities should also be entered in the consignment note, to which any accompanying documents required by these authorities should be attached.

(3) In conformity with para. 2 of RIEx (Annex IV to the CIM Uniform Rules), substances and articles of RID, with the exception of those of Class 7, are only to be accepted for carriage as express parcels (*colis express*) in so far as this means of carriage is specifically laid down under Section B of the various classes. For the carriage of substances of Class 7 as express parcels, see marg. 701 (4).

(4) In conformity with Article 18 (e) of the Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV), substances and articles of RID are excluded from carriage as luggage unless the tariffs provide for exceptions.

(5) For traffic in terms of Article 3, para. 3 of the Convention concerning International Carriage by Rail (COTIF), besides the provisions of RID any special national or international rules for the carriage of dangerous goods by road or waterway are equally applicable in so far as they do not conflict with the requirements of RID.

3 (1) A non-radioactive substance [see the definition of radioactive material in marg. 700 (I)] falling under a collective heading of any class is not to be accepted for carriage if in addition it is covered by the title of a restrictive class where it is not listed.

(2) A non-radioactive substance [see the definition of radioactive material in marg. 700 (1)] not specifically listed in a class, but falling under two or more collective headings of various classes, is subject to the conditions of carriage laid down:

- (a) In the restrictive class, if one of the relevant classes is restrictive;
- (b) In the class corresponding to the principal danger which the substance is likely to manifest during carriage, if none of the relevant classes is restrictive.

(3) The following provisions shall apply to solutions and mixtures (such as preparations and wastes) not mentioned in the lists of substances of the various Classes.

NOTE. 1. Solutions and mixtures comprise two or more components. These components may be either substances of RID or substances which are not subject to the requirements of RID.

2. Solutions and mixtures containing one or more components of a restrictive Class are not to be accepted for carriage unless those components are listed by name in the list of substances of the restrictive Class.

3. The provisions of this paragraph are not applicable to substances of Class 4.1, item 1 (a). Solid wastes consisting of substances of Class 4.1, item 1 (a) impregnated with inflammable liquids of Class 3, shall be classified under Class 4.1, item 1 (b).

4. Solutions and mixtures having a specified activity exceeding 700 kBq/kg (2 nCi/g) are substances of Class 7 [see marg. 700 (1)].

(a) Solutions and mixtures containing only one component subject to RID shall be regarded as substances of RID if the concentration of the component is such that the solution or mixture continues to present a danger inherent in the component itself. Classification shall be made according to the criteria of the various Classes.

- (b) Solutions and mixtures containing two or more components subject to RID shall be placed under an item and letter of the appropriate Class in accordance with their danger characteristics. Such classification according to the danger characteristics shall be carried out as follows:
1. Determination of the physical and chemical characteristics and physiological properties by measurement or calculation and classification according to the criteria of the various Classes.
  2. If this determination is not possible without disproportionate cost or effort (as for some kinds of wastes), such solutions or mixtures shall be placed in the Class of the component presenting the predominant danger. The following order shall be taken into account:
    - 2.1 If one or more components fall within a restrictive Class and the solution or mixture presents a danger inherent in such component(s), the solution or mixture shall be placed in that Class;
    - 2.2 If there are components falling within two or more restrictive Classes and the solution or mixture presents a danger inherent in at least one such component, the mixture or solution shall be placed in the Class of the component presenting the predominant danger; if there is no predominant danger, classification shall be based on the following order of precedence: Classes 1, 5.2, 2, 4.2, 4.3, 6.2;
    - 2.3 If there are components falling within two or more non-restrictive Classes, or when in the cases referred to in 2.1 or 2.2 the solution or mixture does not present a danger inherent in a restrictive Class, this mixture or solution shall be placed in the Class of the component presenting the predominant danger. If there is no predominant danger, the solution or mixture shall be classified in the following manner:
      - 2.3.1 Classification in terms of the various components and the order of predominance of dangers indicated in the table below. For Classes 3, 6.1, 8 and 9, account shall be taken of the degree of danger presented by the components as designated by the letters (a), (b) or (c) [see marg. 300 (3), 600 (1), 800 (1) and 900].
      - 2.3.2 Classification under an item of a specified Class in accordance with 2.3.1 taking into account the danger characteristics of the various components of the solution or mixture. The use of items containing a non-specific collective heading (Class 3, items 20 and 26, Class 6.1, items 24, 68 and 90, and Class 8, items 27, 39, 46, 55, 65 and 66) in the various Classes is permissible only where classification under an item containing a specific collective heading is not possible.

NOTE. Examples for the classification of mixtures and solutions in Classes and items:

A solution of phenol of Class 6.1, item 13 (b), in benzene of Class 3, item 3 (b), is placed in Class 3, letter (b); because of the toxicity of the phenol, the solution is to be placed in Class 3 under item 17 (b).

A mixture of sodium arsenate of Class 6.1, item 51 (b), and sodium hydroxide of Class 8, item 41 (b), is to be placed in Class 6.1 under item 51 (b).

A solution of naphthalene of Class 4.1, item 11 (b), in petrol of Class 3, item 3 (b), is to be placed in Class 3 under item 3 (b).

A mixture of hydrocarbons of Class 3, item 31 (c) or 32 (c) and polychlorinated biphenyls (PCB) of Class 9, item 2 (b) is to be placed in Class 9 under item 2 (b).

A mixture of ethyleneimine of Class 3, item 12 and polychlorinated biphenyls (PCB) of Class 9, item 2 (b) is to be placed in Class 3 under item 12.

Class and, where applicable, letter	4.1	5.1 <sup>(1)</sup>	6.1(a) <sup>(3)</sup>	6.1(b)(3)	6.1(c)(3)	8(a) <sup>(4)</sup>	8(b) <sup>(4)</sup>	8(c) <sup>(4)</sup>	9
3(a) <sup>(2)</sup>	Sol. Liq. 4.1 3(a)	3(a)	3(a)	3(a)	3(a)	3(a)	3(a)	3(a)	3(a)
3(b) <sup>(2)</sup>	Sol. Liq. 4.1 3(b)	3(b)	3(a)	3(b)	3(b)	3(a)	3(b)	3(b)	3(b)
3(c) <sup>(2)</sup>	Sol. Liq. 4.1 3(c)	3(c)	6.1(a)	6.1(b)	3(c) <sup>(5)</sup>	8(a)	8(b)	3(c)	3(c) <sup>(6)</sup>
4.1		Sol. Liq. 4.1 5.1	6.1(a)	6.1(b)	Sol. Liq. 4.1 6.1(c)	8(a)	8(b)	Sol. Liq. 4.1 8(c)	4.1 <sup>(6)</sup>
5.1 <sup>(1)</sup>			6.1(a)	6.1(b)	5.1	8(a)	8(b)	5.1	5.1 <sup>(6)</sup>
6.1(a) <sup>(3)</sup>						6.1(a)	6.1(a)	6.1(a)	6.1(a)
6.1(b) <sup>(3)</sup>						8(a)	Sol. Liq. 6.1(b) 8(b)	6.1(b)	6.1(b)
6.1(c) <sup>(3)</sup>						8(a)	8(b)	8(c)	6.1(c) <sup>(6)</sup>
8(a) <sup>(4)</sup>									8(a)
8(b) <sup>(4)</sup>	Sol. = solid mixtures								8(b)
8(c) <sup>(4)</sup>	Liq. = liquid mixtures and solutions								8(c) <sup>(6)</sup>

<sup>(1)</sup> These mixtures and solutions may have explosive properties, in which case they are not to be accepted for carriage unless they meet the requirements of Class 1.

<sup>(2)</sup> Solutions or mixtures containing substances of Class 3, marg. 301, items 12 or 13 shall be placed in that Class under those items.

<sup>(3)</sup> Solutions or mixtures containing substances of Class 6.1, marg. 601, items 1 to 3 shall be placed in that Class under those items.

<sup>(4)</sup> Solutions or mixtures containing substances of Class 8, marg. 801, items 24 or 25 shall be placed in that Class under those items.

<sup>(5)</sup> Solutions or mixtures containing substances or preparations used as pesticides of Class 6.1, marg. 601, items 71 to 88, shall be placed in that Class, under those items, if the determining percentage of the active substance of the pesticide for classification under (c) is present.

<sup>(6)</sup> Solutions or mixtures containing polychlorinated biphenyls (PCB) of Class 9, marg. 901, item 2 (b), should be classified in this Class under this item in so far as they do not also contain substances mentioned in footnotes (1) to (4) above. If they do contain these, they should be classified accordingly.

NOTE. Example to explain the use of the table:

Mixture consisting of an inflammable liquid classified under Class 3, letter (c), a toxic substance classified under Class 6.1, letter (b), and a corrosive substance classified under Class 8, letter (a).

Procedure:

The intersection of line 3 (c) with column 6.1 (b) gives 6.1 (b). The intersection of line 6.1 (b) with column 8 (a) gives 8 (a). This mixture is therefore to be classified under Class 8, letter (a).

(4) Wastes are substances, solutions, mixtures or articles for which no direct use is envisaged but which are transported for reprocessing, dumping, elimination by incineration or other methods of disposal.

(5) Radioactive material whose specific activity exceeds 70 kBq/kg (2 nCi/g) and which

- (a) Meets the criteria for carriage under Schedule 1 of Class 7 and  
 (b) Has dangerous properties covered by the title of any other class or classes, shall be excluded from carriage if it is covered by the title of a restrictive class in which it is not listed.

(6) Radioactive material whose specific activity exceeds 70 kBq/kg (2 nCi/g) and which

- (a) Meets the criteria for carriage under Schedule 1 of Class 7 and  
 (b) Has dangerous properties covered by the title of any other class or classes shall, in addition to meeting the requirements of Schedule 1 of Class 7, be subject to the conditions of carriage laid down:

— In the restrictive class, if one of the classes concerned is a restrictive class and the substance is listed in it, or

— In the class corresponding to the predominant danger exhibited by the substance during carriage, if none of the classes concerned is a restrictive class.

4 (1) The following units of measurement<sup>(7)</sup> are applicable in RID:

Measurement of:	SI Unit <sup>(8)</sup>	Acceptable alternative unit	Relationship between units
Length	m (metre)	—	—
Area	m <sup>2</sup> (square metre)	—	—
Volume	m <sup>3</sup> (cubic metre)	l <sup>(9)</sup> (litre)	1 l = 10 <sup>-3</sup> m <sup>3</sup>
Time	s (second)	min (minute)	1 min = 60 s
		h (hour)	1 h = 3600 s
		d (day)	1 d = 86 400 s
		—	—
Mass	kg (kilogramme)	g (gramme)	1 g = 10 <sup>-3</sup> kg
		t (tonne)	1 t = 10 <sup>3</sup> kg
		—	—
Specific gravity	kg/m <sup>3</sup>	kg/l	1 kg/l = 10 <sup>3</sup> kg/m <sup>3</sup>
Temperature	K (kelvin)	°C (degree Celsius)	0 °C = 273 · 15 K
Difference of temperature	K (kelvin)	°C (degree Celsius)	1 °C = 1 K
Force	N (newton)	—	1 N = 1 kg · m/s <sup>2</sup>
Pressure	Pa (pascal)	bar (bar)	1 bar = 10 <sup>5</sup> Pa
		—	1 Pa = 1 N/m <sup>2</sup>
Stress	N/m <sup>2</sup>	N/mm <sup>2</sup>	1 N/mm <sup>2</sup> = 1 MPa
Work	—	kWh (kilowatt hour)	1 kWh = 3.6 MJ
Energy	J (joule)	—	1 J = 1 N · m = 1 W · s
Quality of Heat	—	eV (electron-volt)	1 eV = 0.1602 · 10 <sup>-18</sup> J
Power	W (watt)	—	1 W = 1 J/s = 1 N · m/s
Kinematic viscosity	m <sup>2</sup> /s	mm <sup>2</sup> /s	1 mm <sup>2</sup> /s = 10 <sup>-6</sup> m <sup>2</sup> /s
Dynamic viscosity	Pa · s	mPa · s	1 mPa · s = 10 <sup>-3</sup> Pa · s
Activity <sup>(10)</sup>	Bq (becquerel)	—	—
Dose equivalent <sup>(11)</sup>	Sv (sievert)	—	—

<sup>(7)</sup> The following round figures are applicable for the conversion of the units hitherto used into SI units:

<i>Force</i>	
1 kg	= 9.807 N
1 N	= 0.102 kg
<i>Stress</i>	
1 kg/mm <sup>2</sup>	= 9.807 N/mm <sup>2</sup>
1 N/mm <sup>2</sup>	= 0.102 kg/mm <sup>2</sup>

*Pressure*

1 Pa	= 1 N/m <sup>2</sup> = 10 <sup>-5</sup> bar	= 1.02 · 10 <sup>-5</sup> kg/cm <sup>2</sup>	= 0.75 · 10 <sup>-2</sup> torr
1 bar	= 10 <sup>5</sup> Pa	= 1.02 kg/cm <sup>2</sup>	= 750 torr
1 kg/cm <sup>2</sup>	= 9 807 · 10 <sup>1</sup> Pa	= 0.9807 bar	= 736 torr
1 torr	= 1.33 · 10 <sup>2</sup> Pa	= 1.33 · 10 <sup>-3</sup> bar	= 1.36 · 10 <sup>-3</sup> kg/cm <sup>2</sup>

*Energy, work, quantity of heat*

1 J	= 1 Nm	= 0.278 · 10 <sup>-6</sup> kWh	= 0.102 kgm	= 0.239 · 10 <sup>-3</sup> kcal
1 kWh	= 3.6 · 10 <sup>6</sup> J	= 367 · 10 <sup>3</sup> kgm	= 860 kcal	
1 kgm	= 9.807 J	= 2.72 · 10 <sup>-6</sup> kWh	= 2.34 · 10 <sup>-3</sup> kcal	
1 kcal	= 4.19 · 10 <sup>3</sup> J	= 1.16 · 10 <sup>-3</sup> kWh	= 427 kgm	

*Power*

1 W	= 0.102 kgm/s	= 0.86 kcal/h
1 kgm/s	= 9.807 W	= 8.43 kcal/h
1 kcal/h	= 1.16 W	= 0.119 kgm/s

*Kinematic viscosity*

1 m <sup>2</sup> /s	= 10 <sup>4</sup> St (Stokes)
1 St	= 10 <sup>-4</sup> m <sup>2</sup> /s

*Dynamic viscosity*

1 Pa · s	= 1 Ns/m <sup>2</sup>	= 10 P (Poise)	= 0.102 kgs/m <sup>2</sup>
1 P	= 0.1 Pa · s	= 0.1 Ns/m <sup>2</sup>	= 1.02 · 10 <sup>2</sup> kgs/m <sup>2</sup>
1 kgs/m <sup>2</sup>	= 9.807 Pa · s	= 9.807 Ns/m <sup>2</sup>	= 98.07 P

<sup>(8)</sup> The International System of Units (SI) is the result of decisions taken at the General Conference of Weights and Measures (Address: Pavillon de Breteuil, Parc de St-Cloud, F-92 310 Sèvres).

<sup>(9)</sup> The abbreviation "L" for litre is also authorised, in place of the abbreviation "l", when a typewriter is used.

<sup>(10)</sup> For the sake of clarity, activity may also be indicated, in parentheses, in Ci (curie) (relationship between the units: 1 Ci = 3.7 · 10<sup>10</sup> Bq). By derogation from the conversion formula, rounded values may be given.

<sup>(11)</sup> For the sake of clarity, the dose equivalent may also be indicated, in parentheses, in rem (relationship between the units: 1 rem = 0.01 Sv).

The decimal multiples and sub-multiples of a unit may be formed by prefixes, having the following meanings, placed before the name of the units.

Factor		Prefix	Symbol
1 000 000 000 000 000 000 = 10 <sup>18</sup>	trillion*	exa	E
1 000 000 000 000 000 = 10 <sup>15</sup>	thousand billion*	peta	P
1 000 000 000 000 = 10 <sup>12</sup>	billion*	tera	T
1 000 000 000 = 10 <sup>9</sup>	thousand million	giga	G
1 000 000 = 10 <sup>6</sup>	million	mega	M
1 000 = 10 <sup>3</sup>	thousand	kilo	k
100 = 10 <sup>2</sup>	hundred	hecto	h
10 = 10 <sup>1</sup>	ten	deca	da
0.1 = 10 <sup>-1</sup>	tenth	deci	d
0.01 = 10 <sup>-2</sup>	hundredth	centi	c
0.001 = 10 <sup>-3</sup>	thousandth	milli	m
0.000 001 = 10 <sup>-6</sup>	millionth	micro	μ
0.000 000 001 = 10 <sup>-9</sup>	thousand millionth	nano	n
0.000 000 000 001 = 10 <sup>-12</sup>	billionth	pico	p
0.000 000 000 000 001 = 10 <sup>-15</sup>	thousand billionth	femto	f
0.000 000 000 000 000 001 = 10 <sup>-18</sup>	trillionth	atto	a

\* Editorial note: For the terms billion and trillion, British Standard BS 350: Part 1: 1974 (paragraph 1.2) should be noted.

(2) When the mass of packages is mentioned in RID, the gross mass is meant unless otherwise stated.

(3) Unless expressly stated otherwise, the sign “%” in RID represents:

- (a) In the case of mixtures of solids or of liquids, and also in the case of solutions and of solids wetted by a liquid: a percentage mass based on the total mass of the mixture, solution or wetted solid;
- (b) In the case of mixtures of compressed gases: the proportion of the volume indicated as a percentage of the total volume of the gaseous mixture; in the case of mixtures of liquefied gases and gases dissolved under pressure: the proportion of the mass indicated as a percentage of the total mass of the mixture.

(4) Pressures of all kinds relating to receptacles (such as test pressure, internal pressure, safety-valve opening pressure) are always indicated as gauge pressure (pressure in excess of atmospheric pressure); on the other hand, vapour pressure is always expressed as absolute pressure.

(5) Where RID specifies a degree of filling for receptacles, this is always related to a reference temperature of the substances of 15°C, unless some other temperature is indicated.

(6) The term “fragile packages” means packages containing receptacles made of glass, porcelain, stoneware or similar materials which are not enclosed in a packaging with complete sides protecting them effectively against shock.

(7) Fragile receptacles secured, either singly or in groups, by cushioning materials in a strong receptacle are not regarded as fragile receptacles if the strong receptacle is leakproof and so designed that in the event of breakage or leakage of the fragile receptacles their contents cannot escape from the strong receptacle and the mechanical strength of the latter is not impaired by corrosion during carriage.

5 If receptacles made of plastics material are accepted as packaging, the railway of the country of despatch can demand proof that the plastics material is suitable for its intended use.

6 A substance of RID may only be carried in bulk, in tank wagons, in tank-containers or in small containers if these means of carriage are expressly authorized for that substance in the appropriate class.

7 (1) Containers which satisfy the requirements of these Regulations, as well as the requirements of RICO (Annex III to the CIM Uniform Rules) if they have a capacity of 1 m<sup>3</sup> or more, are to be regarded as containers for the purpose of RID.

NOTE. Intermediate bulk containers (IBCs) (see Appendix VI) are not to be regarded as containers for the purpose of RID.

(2) All requirements of RID relating to carriage in wagons apply similarly to carriage in large containers, apart from tank-containers.

(3) The requirements of Appendix X shall apply to the carriage of liquid, gaseous, powdery and granular substances in tank-containers with a capacity of more than 0.45 m<sup>3</sup>.

(4) The requirements relating to receptacles sent as packages shall apply to small containers — excluding the tank-containers referred to in (3) — intended for the carriage of goods in bulk, unless the special requirements of the various classes state otherwise.

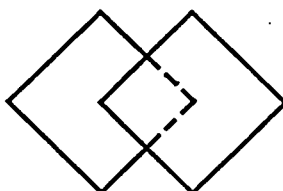
8 (1) If mixed packing of several substances with each other or with other goods is authorized by virtue of the provisions of Section A.3 of the various classes, or those of Class 7, inner packagings containing different substances and articles must be carefully and effectively separated from each other within the

outer packagings if dangerous reactions, such as production of dangerous heat, combustion, formation of mixtures sensitive to friction or shock, emission of inflammable or toxic gases, are likely to occur as a result of damage to or destruction of the inner packagings. It is particularly important that the risk of dangerous mixtures be avoided if fragile receptacles are used, especially if these receptacles contain liquids, and it is necessary for that purpose to take all expedient measures such as: use of suitable filling materials in sufficient quantity, securing of receptacles in a second strong packaging, subdivision of the outer packaging into several compartments. For mixed packing of substances of Class 7, see marg. 1711 (1) of Appendix VII.

(2) In the case of mixed packing, the requirements of RID relating to the particulars in the consignment note apply for each of the dangerous goods of different denominations contained in the outer package and this outer package must bear all the markings and all the danger labels required by RID for the dangerous goods which it contains.

9 Additional outer packagings may be used as well as those prescribed by RID, provided that they do not contravene the spirit of the requirements of RID for outer packagings. If such additional packagings are used, the prescribed markings and labels must be affixed to these packagings.

10 Observance of the mixed loading prohibitions prescribed under Section E of each class, with the exception of Class 7 where they are prescribed in marg. 703, heading 7, is based on the danger labels of Appendix IX. These labels must be affixed to the packages in conformity with the requirements under Section A.4 of the various classes with the exception of Class 7. For the labelling of packages containing material of Class 7, see marg. 706. When a package must bear two labels of the same model, these shall be affixed in the manner shown below:



11 (1) Unless requirements to the contrary appear in the various classes, packages may be loaded:

- (a) In covered wagons, or
- (b) In sheeted open wagons, or
- (c) In open wagons (unsheeted).

(2) Packages whose packagings are made of materials sensitive to moisture shall be loaded in covered or sheeted open wagons.

(3) The requirements in force at the dispatching station shall be complied with for the loading of goods, unless any special requirements are prescribed in the individual classes.

12 Substances and articles of RID, except those which are handed over for carriage as *colis express*, may only be forwarded in goods trains.

13 When a dangerous commodity covered by marg. 1801 of Appendix VIII is carried in a tank wagon, or in a tank-container with a capacity of more than 3 m<sup>3</sup>,

the tank wagon or tank-container shall bear a marking in conformity with the provisions of that appendix.

- 14 Packages with a capacity of not more than 450 l or 400 kg which do not entirely meet the requirements of RID for packing, labelling and mixed packing but are in conformity with the requirements for the carriage of dangerous goods by sea or air<sup>(12)</sup> shall be accepted for carriage preceding or following a journey by sea or air, under the following conditions:
- (a) If their labelling does not comply with RID, the packages must be labelled in accordance with the requirements for sea or air transport;<sup>(12)</sup>
  - (b) For mixed packing in a package; the requirements for sea or air transport<sup>(12)</sup> are applicable;
  - (c) Packages containing goods of Classes 1, 5.1 and 5.2 which are not labelled in accordance with the requirements of RID shall only be carried as a full wagon load and shall not be loaded together with other goods of RID;
  - (d) In addition to the particulars prescribed in RID, the consignment note must include the statement "*Carriage in accordance with marg. 14 RID*".
- 15 (1) Dangerous goods may also be carried by piggyback transport in accordance with the following provisions.
- NOTE. For the purposes of RID, "piggyback transport" means the carriage on rail wagons of road vehicles and swap bodies.
- (2) Road vehicles and swap bodies handed over for carriage by piggyback transport, as well as their contents, must comply with the provisions of the European Agreement concerning the international carriage of dangerous goods by road (ADR).<sup>(13)</sup>
- However, the substances of Class 5.2, Group E, of ADR are not to be accepted.
- (3) The carrying wagons used in piggyback transport shall bear on both sides the danger labels prescribed by RID for the goods carried.
- The danger labelling of wagons is not necessary where use is made of the "rolling road" system (loading of lorries with or without trailer and of semi-trailers with tractor on wagons used for this system of transport) unless the railways concerned on a particular route decide to the contrary.
- (4) The written instructions prescribed in marginal 10 385 of ADR must be attached to the consignment note.
- (5) Besides the particulars prescribed in the various classes of RID for the goods carried, the consignor must include in the box on the consignment note reserved for the description of the goods the entry: "*Carriage in accordance with marg. 15 RID*".

16-99

<sup>(12)</sup> These requirements are published for sea transport in the IMDG Code and for air transport in the ICAO technical instructions.

<sup>(13)</sup> This agreement also includes the special agreements which have been signed by all the countries involved in the transport operation.



PART II. *SPECIAL REQUIREMENTS RELATING  
TO THE VARIOUS CLASSES*

CLASS 1. EXPLOSIVE SUBSTANCES AND ARTICLES

1. *List of substances and articles*

100 (1) Among the substances and articles covered by the heading of Class 1, only those listed in marg. 101 are to be accepted for carriage, and then only subject to the provisions laid down in marg. 100 (2) to 142 and Appendix I. These substances and articles to be accepted for carriage under certain conditions are to be considered as substances and articles of RID.

(2) Substances and articles of Class 1 are as follows:

(a) Explosive substances: solid or liquid substances (or mixtures of substances) capable by chemical reaction of producing gases at such a temperature and pressure and at such a speed as to cause damage to the surroundings.

Pyrotechnic substances: substances or mixtures of substances designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonating self-sustaining exothermic chemical reactions.

NOTE. 1. Explosive substances which are unduly sensitive or are liable to spontaneous reaction are not to be accepted for carriage.

2. Substances which are not themselves explosive but which may form an explosive mixture of gas, vapour or dust are not substances of Class 1.

3. Also excluded from Class 1 are: water- or alcohol-wetted explosives of which the water or alcohol content exceeds the limits indicated in marg. 101 — these explosives are assigned to Class 4.1 (marg. 401, items 7 (a), 20 and 21) — and those explosives which, on the basis of their predominant hazard, are assigned to Class 5.2.

(b) Explosive articles: articles containing one or more explosive substances and/or pyrotechnic substances.

NOTE. Devices containing explosive and/or pyrotechnic substances in such small quantity or of such a character that their inadvertent or accidental ignition or initiation during carriage would not cause any manifestation external to the device by projection, fire, smoke, heat or loud noise are not subject to the requirements of Class 1.

(c) Substances and articles not mentioned under (a) or (b) above which are manufactured with a view to producing a practical effect by explosion or a pyrotechnic effect.

(3) Explosive substances and articles shall have been assigned to a name in marg. 101 in accordance with the test methods for the determination of explosive properties and the classification procedures set out in Appendix I and they shall meet the conditions appropriate to that name.

(4) Substances and articles of Class 1, other than empty packagings, uncleaned, of item 51, shall have been assigned to a division in accordance with paragraph (6) and to a compatibility group in accordance with paragraph (7).

The division shall be based on the results of the tests described in Appendix I, applying the definitions in paragraph (6).

The compatibility group shall be determined in accordance with the definitions in paragraph (7).

The classification code shall consist of the division number and the compatibility group letter.

(5) Substances and articles of Class 1 are assigned to packing group II (see Appendix V).

(6) Definition of divisions:

- 1.1 Substances and articles which have a mass explosive hazard. (A mass explosion is an explosion which affects almost the entire load virtually instantaneously.)
- 1.2 Substances and articles which have a projection hazard but not a mass explosion hazard.
- 1.3 Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard,
  - (a) Combustion of which gives rise to considerable radiant heat; or
  - (b) Which burn one after another, producing minor blast or projection effects or both.
- 1.4 Substances and articles which present only a slight risk of explosion in the event of ignition or initiation during carriage. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package.
- 1.5 Very insensitive substances having a mass explosion hazard which are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of carriage. As a minimum requirement they must not explode in the external fire test.

(7) Definition of compatibility groups of substances and articles:

- A Primary explosive substance
- B Article containing a primary explosive substance and not having two or more effective protective features
- C Propellant explosive substance or other secondary deflagrating explosive substance or article containing such explosive substance
- D Secondary detonating explosive substance or black powder or article containing a secondary detonating explosive substance, in each case without means of initiation and without a propelling charge, or article containing a primary explosive substance and having two or more effective protective features
- E Article containing a secondary detonating explosive substance, without means of initiation, with a propelling charge (other than one containing an inflammable liquid or gel or hypergolic liquids)
- F Article containing a secondary detonating explosive substance with its own means of initiation, with a propelling charge (other than one containing an inflammable liquid or gel or hypergolic liquids) or without a propelling charge
- G Pyrotechnic substance, or article containing a pyrotechnic substance, or article containing both an explosive substance and an illuminating, incendiary, tear- or smoke-producing substance (other than a water-activated

article or one which contains white phosphorus, phosphides, a pyrophoric substance, an inflammable liquid or gel or hypergolic liquids)

- H Article containing both an explosive substance and white phosphorus
- J Article containing both an explosive substance and an inflammable liquid or gel
- K Article containing both an explosive substance and a toxic chemical agent
- L Explosive substance or article containing an explosive substance and presenting a special risk (e.g. due to water activation or the presence of hypergolic liquids, phosphides or a pyrophoric substance) necessitating isolation of each type
- S Substance or article so packed or designated that any hazardous effects arising from accidental functioning are confined within the package unless the package has been degraded by fire, in which case all blast or projection effects are limited to the extent that they do not significantly hinder or prohibit fire-fighting or other emergency response efforts in the immediate vicinity of the package.

NOTE. 1. Each substance or article, packed in a specified packaging, may be assigned to one compatibility group only. Since the criterion of compatibility group S is empirical, assignment to this group is necessarily linked to the tests for assignment of a classification code.

2. Articles of compatibility groups D or E may be fitted or packed together with their own means of initiation provided that such means have at least two effective protective features designed to prevent an explosion in the event of accidental functioning of the means of initiation. Such packages shall be assigned to compatibility groups D or E.

3. Articles of compatibility groups D or E may be packed together with their own means of initiation, which do not have two effective protective features (i.e. means of initiation assigned to compatibility group B), provided that they comply with the requirements of marg. 104 (6). Such packages shall be assigned to compatibility groups D or E.

4. Articles may be packed or fitted together with their own means of ignition provided that the means of ignition cannot function during normal conditions of carriage.

5. Articles of compatibility groups C, D and E may be packed together. Such packages shall be assigned to compatibility group E.

(8) Substances of compatibility group A, articles of compatibility group K and substances or articles of compatibility group L in accordance with paragraph (7) are not to be accepted for carriage.

(9) For the purposes of the requirements of this Class and by derogation from marg. 1510 (3), the term "package" shall also include an unpackaged article in so far as that article is accepted for carriage unpackaged.

101 The substances and articles of Class I to be accepted for carriage are listed in table I below:

Explosive substances and articles can be assigned to the various names in marg. 101 only if their properties, composition, construction and anticipated use correspond to one of the descriptions contained in Appendix I.

Table 1 [Listing of substances and articles]

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
1.	Articles classified as 1.1 B			
	0029 Detonators, non-electric, for blasting	1.1 B	E 105	19, 20, 21, 22, 24, 54
	0030 Detonators, electric, for blasting	1.1 B	E 104	17
	0073 Detonators for ammunition	1.1 B	E 128	23, 36
	0106 Fuzes, detonating	1.1 B	E 137	38
	0225 Boosters with detonator	1.1 B	E 108	23
	0360 Detonator assemblies, non-electric, for blasting,	1.1 B	E 105 A	25, 26
	0377 Primers, cap-type	1.1 B	E 142	39, 40, 41
2.	Substances classified as 1.1 C			
	0160 Powder, smokeless	1.1 C	E 22	8, 9, 10
	0433 Powder cake (powder paste), wetted with not less than 17% alcohol by mass	1.1 C	E 103	—
3.	Articles classified as 1.1 C			
	0271 Charges, propelling, for rocket motors	1.1 C	E 22	8, 9, 10
	0273 Charges, propelling, for rocket motors composite mixtures	1.1 C	E 22	8, 9, 10
	0279 Charges, propelling, for cannon	1.1 C	E 119	—
	0280 Rocket motors	1.1 C	E 146	—
	0326 Cartridges for weapons, blank	1.1 C	E 112	13
4.	Substances classified as 1.1 D			
	0004 Ammonium picrate, dry or wetted with less than 10% water by mass	1.1 D	E 2	1, 2
	0027 Black powder (gunpowder), granular or as a meal	1.1 D	E 4	—
	0028 Black powder (gunpowder), compressed, or black powder (gunpowder), in pellets	1.1 D	E 5	—
	0072 Cyclotrimethylene-trinitramine (cyclonite; hexogen; RDX), wetted with not less than 15% water by mass	1.1 D	E 6 a)	—
	0075 Diethyleneglycol dinitrate, desensitized with not less than 25% non-volatile water-insoluble phlegmatizer by mass	1.1 D	E 103	—

<sup>(1)</sup> The identification numbers are taken from the United Nations Recommendations.<sup>1</sup><sup>1</sup> United Nations, *Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1)*.

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
4. (cont.)	0076 <i>Dinitrophenol</i> , dry or wetted with less than 15% water by mass	1.1 D	E 2	1, 2
	0078 <i>Dinitroresorcinol</i> , dry or wetted with less than 15% water by mass	1.1 D	E 2	1, 2
	0079 <i>Hexanitrodiphenylamine (dipicrylamine; hexyl)</i>	1.1 D	E 11	—
	0081 <i>Explosive, blasting, type A</i> Note: Substances containing more than 40% liquid nitric esters shall satisfy the exudation test specified in Appendix I, marg. 1101 (4)	1.1 D	E 8	—
	0082 <i>Explosive, blasting, type B</i>	1.1 D	E 8	—
	0083 <i>Explosive, blasting, type C</i>	1.1 D	E 10	—
	0084 <i>Explosive, blasting, type D</i>	1.1 D	E 11	—
	0118 <i>Hexolite</i> , dry or wetted with less than 15% water by mass	1.1 D	E 13	—
	0133 <i>Mannitol hexanitrate (nitromannite)</i> , wetted with not less than 40% water by mass, or a mixture of alcohol and water	1.1 D	E 14	—
	0143 <i>Nitroglycerine, desensitized</i> with not less than 40% non-volatile water-insoluble phlegmatizer by mass	1.1 D	E 103	—
	0144 <i>Nitroglycerine solution in alcohol</i> , with more than 1% but not more than 10% nitroglycerine Note: For alcoholic solutions of nitroglycerine with a concentration of not more than 5% by mass under special conditions of packing, see Class 3, (marg. 301, item 8)	1.1 D	E 17	47
	0146 <i>Nitrostarch</i> , dry or wetted with less than 20% water by mass	1.1 D	E 19	7
	0147 <i>Nitro urea</i>	1.1 D	E 2	1
	0150 <i>Pentaerythrite tetranitrate (pentaerythritol tetranitrate, PETN)</i> wetted with not less than 25% water by mass, or desensitized with not less than 15% phlegmatizer by mass	1.1 D	E 6	—

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
4. (cont.)	0151 <i>Pentolite</i> , dry or wetted with less than 15% water by mass	1.1 D	E 13	—
	0153 <i>Trinitroaniline (picramide)</i>	1.1 D	E 2	1
	0154 <i>Trinitrophenol (picric acid)</i> , dry or wetted with less than 30% water by mass	1.1 D	E 2	1, 2
	0155 <i>Trinitrochlorobenzene (picryl chloride)</i>	1.1 D	E 2	1
	0207 <i>Tetranitroaniline</i>	1.1 D	E 2	1
	0208 <i>Trinitrophenylmethylnitramine (tetryl)</i>	1.1 D	E 11	—
	0209 <i>Trinitrotoluene (TNT)</i> , dry or wetted with less than 30% water by mass	1.1 D	E 26	53
	0213 <i>Trinitroanisole</i>	1.1 D	E 2	1
	0214 <i>Trinitrobenzene</i> , dry or wetted with less than 30% water by mass	1.1 D	E 2	1
	0215 <i>Trinitrobenzoic acid</i> , dry or wetted with less than 30% water, by mass	1.1 D	E 11	—
	0216 <i>Trinitro-m-cresol</i>	1.1 D	E 2	1, 2
	0217 <i>Trinitronaphthalene</i>	1.1 D	E 2	1
	0218 <i>Trinitrophenetole</i>	1.1 D	E 2	1
	0219 <i>Trinitroresorcinol (styphnic acid)</i> , dry or wetted with less than 20% water by mass (or mixture of alcohol and water)	1.1 D	E 2	1, 2
	0220 <i>Urea nitrate</i> , dry or wetted with less than 20% water by mass	1.1 D	E 2	1
	0222 <i>Ammonium nitrate</i> containing more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1.1 D	E 1	—
	0223 <i>Ammonium nitrate fertilizer</i> , which is more liable to explode than ammonium nitrate with 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1.1 D	E 1	—

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
4. (cont.)	0226 <i>Cyclotetramethylenetetranitramine (HMX), octogen, wetted with not less than 15% water by mass</i>	1.1 D	E 6 a)	—
	0241 <i>Explosive, blasting, type E</i>	1.1 D	E 8	—
	0266 <i>Octolite (Octol), dry or wetted with less than 15% water by mass</i>	1.1 D	E 13	—
	0282 <i>Nitroguanidine (picrite), dry or wetted with less than 20% water by mass</i>	1.1 D	E 18	—
	0340 <i>Nitrocellulose, dry or wetted with less than 25% water (or alcohol) by mass</i>	1.1 D	E 103	—
	0341 <i>Nitrocellulose, unmodified or plasticized with less than 18% plasticizing substance by mass</i>	1.1 D	E 103	—
	0385 <i>5-Nitrobenzotriazol</i>	1.1 D	E 2	1
	0386 <i>Trinitrobenzenesulphonic acid</i>	1.1 D	E 2	1, 2
	0387 <i>Trinitrofluorenone</i>	1.1 D	E 2	1
	0388 <i>Trinitrotoluene (TNT) and trinitrobenzene mixtures or trinitrotoluene (TNT) and hexanitrostilbene mixtures</i>	1.1 D	E 2	1
	0389 <i>Trinitrotoluene (TNT) mixtures containing trinitrobenzene and hexanitrostilbene</i>	1.1 D	E 2	1
	0390 <i>Tritonal</i>	1.1 D	E 2	1
	0391 <i>Cyclotrimethylenetrinitramine (cyclonite, hexogen, RDX) and cyclotetramethylenetetranitramine (HMX, octogen) mixtures, wetted with not less than 15% water by mass, or cyclotrimethylenetrinitramine (cyclonite, hexogen, RDX) and cyclotetramethylenetetranitramine (HMX, octogen) mixtures desensitized with not less than 10% phlegmatizer by mass</i>	1.1 D	E 6	—
	0392 <i>Hexanitrostilbene</i>	1.1 D	E 11	—
	0393 <i>Hexatonal, cast</i>	1.1 D	E 13	—
	0394 <i>Trinitroresorcinol (styphnic acid), wetted with not less than 20% water by mass (or mixture of water and alcohol)</i>	1.1 D	E 24	2

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
4. (cont.)	0401 <i>Dipicryl sulphide</i> dry or wetted with less than 10% water by mass	1.1 D	E 2	1
	0402 <i>Ammonium perchlorate</i> Note: Classification of this substance shall be in accordance with the results of the tests under Appendix I. Depending on the particle size and the packaging of the substance, see also Class 5.1 (marg. 501, item 5)	1.1 D	E 2	1
	0411 <i>Pentaerythrite tetranitrate (PETN)</i> with not less than 7% wax by mass	1.1 D	E 22 a)	11
	0483 <i>Cyclotrimethylenetrinitramine (cyclonite, hexogen, RDX), desensitized</i>	1.1 D	E 6	—
	0484 <i>Cyclotetramethylenetetranitramine (octogen, HMX) desensitized</i>	1.1 D	E 6	—
5.	Articles classified as 1.1 D			
	0034 <i>Bombs</i> with bursting charge	1.1 D	E 106	49
	0038 <i>Bombs, photoflash</i>	1.1 D	E 106	49
	0042 <i>Boosters</i> , without detonator	1.1 D	E 107	—
	0043 <i>Bursters</i> , explosive	1.1 D	E 109	28
	0048 <i>Charges, demolition</i>	1.1 D	E 117	—
	0056 <i>Charges, depth</i>	1.1 D	E 118	51
	0059 <i>Charges, shaped, commercial, without detonator</i>	1.1 D	E 120	30, 31
	0060 <i>Charges, supplementary, explosive</i>	1.1 D	E 122	—
	0065 <i>Cord, detonating</i> , flexible	1.1 D	E 124	33
	0099 <i>Fracturing devices, explosive, without detonator</i> , for oil wells	1.1 D	E 134	—
	0124 <i>Jet perforating guns, charged</i> , oil well, without detonator	1.1 D	E 140	—
	0137 <i>Mines</i> with bursting charge	1.1 D	E 106	49
	0168 <i>Projectiles</i> with bursting charge	1.1 D	E 106	49
	0221 <i>Warheads, torpedo</i> , with bursting charge	1.1 D	E 106	49



Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
5. (cont.)	0284 Grenades, hand or rifle, with bursting charge	1.1 D	E 138	—
	0286 Warheads, rocket, with bursting charge	1.1 D	E 106	49
	0288 Charges, shaped, flexible, linear	1.1 D	E 121	32
	0290 Cord (fuse), detonating, metal clad	1.1 D	E 125	34
	0374 Sounding devices, explosive	1.1 D	E 153	46
	0408 Fuzes, detonating, with protective features	1.1 D	E 137	38
	0442 Charges, explosive, commercial without detonator	1.1 D	E 156	—
	0451 Torpedoes with bursting charge	1.1 D	E 146	—
	0457 Charges, bursting, plastics bonded	1.1 D	E 157	—
6.	Articles classified as 1.1 E			
	0006 Cartridges for weapons, with bursting charge	1.1 E	E 112	13
	0181 Rockets with bursting charge	1.1 E	E 146	—
	0329 Torpedoes with bursting charge	1.1 E	E 146	—
7.	Articles classified as 1.1 F			
	0005 Cartridges for weapons with bursting charge	1.1 F	E 112	13
	0033 Bombs, with bursting charge	1.1 F	E 106	49
	0037 Bombs, photoflash	1.1 F	E 106	49
	0136 Mines with bursting charge	1.1 F	E 106	49
	0167 Projectiles with bursting charge	1.1 F	E 106	49
	0180 Rockets with bursting charge	1.1 F	E 146	—
	0292 Grenades, hand or rifle, with bursting charge	1.1 F	E 138	—
	0296 Sounding devices, explosive	1.1 F	E 153	46
	0330 Torpedoes with bursting charge	1.1 F	E 146	—
	0369 Warheads, rocket, with bursting charge	1.1 F	E 106	49
8.	Substances classified as 1.1 G			
	0094 Flash powder	1.1 G	E 20	55
9.	Articles classified as 1.1 G			
	0049 Cartridges, flash	1.1 G	E 115	—
	0121 Igniters	1.1 G	E 139	28
	0192 Signals, railway track, explosive	1.1 G	E 151	43, 44, 45

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
9. (cont.)	0194 <i>Signals, distress, ship</i>	1.1 G	E 150	12
	0196 <i>Signals, smoke, with explosive sound unit</i>	1.1 G	E 150	12
	0333 <i>Fireworks</i>	1.1 G	E 129	37
	0418 <i>Flares, surface</i>	1.1 G	E 133	—
	0420 <i>Flares, aerial</i>	1.1 G	E 133	—
	0428 <i>Articles, pyrotechnic for technical purpose</i>	1.1 G	E 109	28
10.	Articles classified as 1.1 J			
	0397 <i>Rockets, liquid fuelled, with bursting charge</i>	1.1 J	E 103	—
	0399 <i>Bombs with inflammable liquid, with bursting charge</i>	1.1 J	E 103	—
	0449 <i>Torpedoes, liquid fuelled, with or without bursting charge</i>	1.1 J	E 146	—
11.	Articles classified as 1.2 B			
	0107 <i>Fuzes, detonating</i>	1.2 B	E 137	38
	0268 <i>Boosters, with detonator</i>	1.2 B	E 108	23
	0364 <i>Detonators, for ammunition</i>	1.2 B	E 128	23, 36
12.	Substances classified as 1.2 C (Reserved)	1.2 C		
13.	Articles classified as 1.2 C			
	0281 <i>Rocket motors</i>	1.2 C	E 146	—
	0328 <i>Cartridges for weapons, inert projectile (cartridges, small arms)</i>	1.2 C	E 112	13
	0381 <i>Cartridges, power device</i>	1.2 C	E 114	—
	0413 <i>Cartridges for weapons, blank</i>	1.2 C	E 112	13
	0414 <i>Charges, propelling, for cannon</i>	1.2 C	E 119	—
	0415 <i>Charges, propelling, for rocket motors</i>	1.2 C	E 22	8, 9, 10
	0416 <i>Charges, propelling, for rocket motors, composite mixture</i>	1.2 C	E 22	8, 9, 10
	0436 <i>Rockets with expelling charge</i>	1.2 C	E 146	—
14.	Substances classified as 1.2 D (Reserved)	1.2 D		
15.	Articles classified as 1.2 D			
	0035 <i>Bombs with bursting charge</i>	1.2 D	E 106	49
	0102 <i>Cord, (fuzes), detonating, metal clad</i>	1.2 D	E 125	34

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
15. (cont.)	0138 Mines with bursting charge	1.2 D	E 106	49
	0169 Projectiles with bursting charge	1.2 D	E 106	49
	0283 Boosters without detonator	1.2 D	E 107	—
	0285 Grenades, hand or rifle, with bursting charge	1.2 D	E 138	—
	0287 Warheads, rocket, with bursting charge	1.2 D	E 106	49
	0346 Projectiles with burster or expelling charge	1.2 D	E 106	49
	0375 Sounding devices, explosive	1.2 D	E 153	46
	0409 Fuzes, detonating, with protective features	1.2 D	E 137	38
	0439 Charges, shaped, commercial without detonator	1.2 D	E 120	30, 31
	0443 Charges, explosive, commercial without detonator	1.2 D	E 156	—
0458 Charges, bursting, plastics bonded	1.2 D	E 157	—	
16.	Articles classified as 1.2 E			
	0182 Rockets with bursting charge	1.2 E	E 146	—
	0321 Cartridges for weapons with bursting charge	1.2 E	E 112	13
17.	Articles classified as 1.2 F			
	0007 Cartridges for weapons, with bursting charge	1.2 F	E 112	13
	0204 Sounding devices, explosive	1.2 F	E 153	46
	0291 Bombs with bursting charge	1.2 F	E 106	49
	0293 Grenades, hand or rifle, with bursting charge	1.2 F	E 138	—
	0294 Mines with bursting charge	1.2 F	E 106	49
	0295 Rockets with bursting charge	1.2 F	E 146	—
	0324 Projectiles with bursting charge	1.2 F	E 106	49
	0426 Projectiles with burster or expelling charge	1.2 F	E 106	49
18.	Substances classified as 1.2 G (Reserved)	1.2 G		
19.	Articles classified as 1.2 G			
	0009 Ammunition, incendiary with or without burster, expelling charge or propelling charge	1.2 G	E 102	13, 48

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
19. (cont.)	0015 <i>Ammunition, smoke with or without burster, expelling charge or propelling charge</i>	1.2 G	E 102	13, 48
	0018 <i>Ammunition, tear-producing with burster, expelling charge or propelling charge</i>	1.2 G	E 102	13, 48
	0039 <i>Bombs, photoflash</i>	1.2 G	E 106	49
	0171 <i>Ammunition, illuminating with or without hurster, expelling charge or propelling charge</i>	1.2 G	E 102	13, 48
	0238 <i>Rockets, line-throwing</i>	1.2 G	E 147	—
	0313 <i>Signals, smoke, with explosive sound unit</i>	1.2 G	E 150	12
	0314 <i>Igniters</i>	1.2 G	E 139	—
	0334 <i>Fireworks</i>	1.2 G	E 130	—
	0372 <i>Grenades, practice, hand or rifle</i>	1.2 G	E 138	—
	0419 <i>Flares, surface</i>	1.2 G	E 133	—
	0421 <i>Flares, aerial</i>	1.2 G	E 133	—
	0429 <i>Articles, pyrotechnic for technical purposes</i>	1.2 G	E 109	28
0434 <i>Projectiles with burster or expelling charge</i>	1.2 G	E 106	—	
20.	Articles classified as 1.2 H			
	0243 <i>Ammunition, incendiary, white phosphorus, with burster, expelling charge or propelling charge</i>	1.2 H	E 102	13, 48
	0245 <i>Ammunition, smoke, white phosphorus with burster, expelling charge or propelling charge</i>	1.2 H	E 102	13, 48
21.	Articles classified as 1.2 J			
	0395 <i>Rocket motors, liquid fuelled</i>	1.2 J	E 103	—
	0398 <i>Rockets, liquid fuelled with bursting charge</i>	1.2 J	E 103	—
	0400 <i>Bombs with inflammable liquid, with bursting charge</i>	1.2 J	E 103	—
22.	Substances classified as 1.3 C			
	0077 <i>Dinitrophenolates of alkali metals, dry or wetted with less than 15% water by mass</i>	1.3 C	E 2	1, 2
	0158 <i>Potassium salts of aromatic nitroderivatives, explosive</i>	1.3 C	E 21	2

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
22. (cont.)	0159 Powder-cake (powder paste), wetted with not less than 35% water by mass	1.3 C	E 19	7
	0161 Powder, smokeless	1.3 C	E 22	8, 9, 10
	0234 Sodium dinitro- <i>o</i> -cresolate, dry or wetted with less than 15% water by mass	1.3 C	E 2	1, 2
	0235 Sodium picramate, dry or wetted with less than 20% water by mass	1.3 C	E 2	1, 2
	0236 Zirconium picramate, dry or wetted with less than 20% water by mass	1.3 C	E 2	1, 2
	0342 Nitrocellulose, wetted with not less than 25% alcohol by mass <b>Note:</b> For nitrocellulose with not less than 25% alcohol by mass and with a nitrogen content of not more than 12.6% by mass of the nitrocellulose, under special packing conditions, see Class 4.1 (marg. 401, item 7).	1.3 C	E 15	—
	0343 Nitrocellulose, plasticized not less than 18% plasticizer by mass <b>Note:</b> For nitrocellulose with not less than 18% plasticizer by mass and with a nitrogen content of not more than 12.6% by mass of the nitrocellulose, under special conditions of packing, see Class 4.1 (marg. 401, item 7).	1.3 C	E 15	—
0406 Dinitrosobenzene	1.3 C	E 25	—	
23.	Articles classified as 1.3 C			
	0183 Rockets, with inert head	1.3 C	E 146	—
	0186 Rocket motors	1.3 C	E 146	—
	0242 Charges, propelling, for cannon	1.3 C	E 119	—
	0272 Charges, propelling, for rocket motors	1.3 C	E 22	8, 9, 10

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
23. (cont.)	0274 <i>Charges, propelling, for rocket motors, composite mixture</i>	1.3 C	E 22	8, 9, 10
	0275 <i>Cartridges, power device</i>	1.3 C	E 114	—
	0277 <i>Cartridges, oil well</i>	1.3 C	E 113	—
	0327 <i>Cartridges for weapons, blank (cartridges, small arms, blank)</i>	1.3 C	E 112	13
	0417 <i>Cartridges for weapons, inert projectile</i>	1.3 C	E 112	13
	0437 <i>Rockets with expelling charge</i>	1.3 C	E 146	—
	0447 <i>Cases, combustible, empty, without primer</i>	1.3 C	E 116	—
24.	Articles classified as 1.3 F (Reserved)	1.3 F		
25.	Substances classified as 1.3 G 0305 <i>Flash powder</i>	1.3 G	E 20	55
26.	Articles classified as 1.3 G			
	0010 <i>Ammunition, incendiary with or without burster, expelling charge or propelling charge</i>	1.3 G	E 102	13, 48
	0016 <i>Ammunition, smoke with or without burster, expelling charge or propelling charge</i>	1.3 G	E 102	13, 48
	0019 <i>Ammunition, tear-producing with burster, expelling charge or propelling charge</i>	1.3 G	E 102	13, 48
	0050 <i>Cartridges, flash</i>	1.3 G	E 115	—
	0054 <i>Cartridges, signal</i>	1.3 G	E 115	—
	0092 <i>Flares, surface</i>	1.3 G	E 133	—
	0093 <i>Flares, aerial</i>	1.3 G	E 133	—
	0101 <i>Fuse, instantaneous, non-detonating (quickmatch)</i>	1.3 G	E 135	—
	0195 <i>Signals, distress, ship</i>	1.3 G	E 150	12
	0212 <i>Tracers for ammunition</i>	1.3 G	E 156	—
	0240 <i>Rockets, line-throwing</i>	1.3 G	E 147	—
	0254 <i>Ammunition, illuminating, with or without burster, expelling charge or propelling charge</i>	1.3 G	E 102	13, 48
	0299 <i>Bombs, photoflash</i>	1.3 G	E 106	49
	0315 <i>Igniters</i>	1.3 G	E 139	—
	0316 <i>Fuzes, igniting</i>	1.3 G	E 137	38
0318 <i>Grenades, practice, hand or rifle</i>	1.3 G	E 138	—	

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
26. (cont.)	0319 <i>Primers, tubular</i>	1.3 G	E 143	—
	0335 <i>Fireworks</i>	1.3 G	E 130	—
	0424 <i>Projectiles, inert with tracer</i>	1.3 G	E 106	49
	0430 <i>Articles, pyrotechnic for technical purposes</i>	1.3 G	E 134	—
27.	Articles classified as 1.3 H			
	0244 <i>Ammunition, incendiary, white phosphorus with burster, expelling charge</i>	1.3 H	E 102	13, 48
	0246 <i>Ammunition, smoke, white phosphorus with burster, expelling charge or propelling charge</i>	1.3 H	E 102	13, 48
28.	Articles classified as 1.3 J			
	0247 <i>Ammunition, incendiary, liquid or gel, with burster, expelling charge or propelling charge</i>	1.3 J	E 102	13, 48
	0396 <i>Rocket motors, liquid fuelled</i>	1.3 J	E 103	—
	0450 <i>Torpedoes, liquid fuelled, with inert head</i>	1.3 J	E 146	—
29.	Articles classified as 1.4 B			
	0255 <i>Detonators, electric, for blasting</i>	1.4 B	E 104	18
	0257 <i>Fuzes, detonating</i>	1.4 B	E 137	38
	0267 <i>Detonators, non-electric, for blasting</i>	1.4 B	E 105	19, 20, 21, 22, 24, 54
	0361 <i>Detonator assemblies, non-electric, for blasting</i>	1.4 B	E 105 A	25, 26
	0365 <i>Detonators for ammunition</i>	1.4 B	E 128	23, 36
	0378 <i>Primers, cap type</i>	1.4 B	E 142	39, 40, 41
30.	Substances classified as 1.4 C			
	0407 <i>Tetrazol-1-acetic acid</i>	1.4 C	E 25	—
	0448 <i>5-Mercapto-tetrazol-1-acetic acid</i>	1.4 C	E 25	—
31.	Articles classified as 1.4 C			
	0276 <i>Cartridges, power device</i>	1.4 C	E 114	—
	0278 <i>Cartridges, oil well</i>	1.4 C	E 113	—
	0338 <i>Cartridges for weapons, blank (cartridges, small arms, blank)</i>	1.4 C	E 112	13
	0339 <i>Cartridges for weapons, inert projectile (cartridges, small arms)</i>	1.4 C	E 112	13

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
31. (cont.)	0379 Cases, cartridge, empty, with primer	1.4 C	E 116	—
	0438 Rockets with expelling charge	1.4 C	E 146	—
	0446 Cases, combustible, empty, without primer	1.4 C	E 116	—
32.	Substances classified as 1.4 D (Reserved)	1.4 D		
33.	Articles classified as 1.4 D			
	0104 Cord (fuse), detonating, mild effect, metal clad	1.4 D	E 125	34
	0237 Charges, shaped, flexible, linear	1.4 D	E 121	32
	0289 Cord, detonating, flexible	1.4 D	E 124	33
	0344 Projectiles with bursting charge	1.4 D	E 106	49
	0347 Projectiles with burster or expelling charge	1.4 D	E 106	49
	0370 Warheads, rocket, with burster or expelling charge	1.4 D	E 106	49
	0410 Fuzes, detonating, with protective features	1.4 D	E 137	38
	0440 Charges, shaped, commercial, without detonator	1.4 D	E 120	30, 31
	0444 Charges, explosive, commercial without detonator	1.4 D	E 156	—
0459 Charges, bursting, plastics bonded	1.4 D	E 157	—	
34.	Articles classified as 1.4 E			
	0412 Cartridges for weapons, with bursting charge	1.4 E	E 112	13
35.	Articles classified as 1.4 F			
	0348 Cartridges for weapons, with bursting charge	1.4 F	E 112	13
	0371 Warheads, rocket, with burster or expelling charge	1.4 F	E 106	49
	0427 Projectiles, with burster or expelling charge	1.4 F	E 106	49
36.	Substances classified as 1.4 G (Reserved)	1.4 G		
	37.	Articles classified as 1.4 G		
	0066 Cord, igniter	1.4 G	E 126	—
	0103 Fuse, igniter, tubular, metal clad	1.4 G	E 135	—
	0191 Signal devices, hand	1.4 G	E 150	12



Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
37. (cont.)	0197 <i>Signals, smoke, without explosive sound unit</i>	1.4 G	E 150	12
	0297 <i>Ammunition, illuminating, with or without burster, expelling charge or propelling charge</i>	1.4 G	E 102	13, 48
	0300 <i>Ammunition, incendiary with or without burster, expelling charge or propelling charge</i>	1.4 G	E 102	13, 48
	0301 <i>Ammunition, tear-producing, with burster, expelling charge or propelling charge</i>	1.4 G	E 102	13, 48
	0303 <i>Ammunition, smoke with or without burster, expelling charge or propelling charge</i>	1.4 G	E 102	13, 48
	0306 <i>Tracers for ammunition</i>	1.4 G	E 156	—
	0312 <i>Cartridges, signal</i>	1.4 G	E 115	—
	0317 <i>Fuzes, igniting</i>	1.4 G	E 137	38
	0320 <i>Primers, tubular</i>	1.4 G	E 143	—
	0325 <i>Igniters</i>	1.4 G	E 141	—
	0336 <i>Fireworks</i>	1.4 G	E 130	—
	0362 <i>Ammunition, practice</i>	1.4 G	E 102	13, 48
	0363 <i>Ammunition, proof</i>	1.4 G	E 102	13, 48
	0403 <i>Flares, aerial</i>	1.4 G	E 133	—
	0425 <i>Projectiles, inert with tracer</i>	1.4 G	E 106	49
	0431 <i>Articles, pyrotechnic for technical purposes</i>	1.4 G	E 134	—
	0435 <i>Projectiles with burster or expelling charge</i>	1.4 G	E 106	—
	0452 <i>Grenades, practice, hand or rifle</i>	1.4 G	E 138	—
	0453 <i>Rockets, line throwing</i>	1.4 G	E 147	—
	38.	Substances classified as 1.4 S (Reserved)	1.4 S	
39.	Articles classified as 1.4 S			
	0012 <i>Cartridges for weapons, inert projectile (cartridges, small arms)</i>	1.4 S	E 112	13
	0014 <i>Cartridges for weapons, blank (cartridges, small arms, blank)</i>	1.4 S	E 112	13
	0044 <i>Primers, cap type</i>	1.4 S	E 142	39, 40, 41
	0055 <i>Cases, cartridge, empty, with primer</i>	1.4 S	E 116	—

Item	Identification number and name of the substance or article <sup>(1)</sup>	Classification code, in accordance with marg. 100 (6) and (7)	Packing	
			Packing methods (see marg. 103 (5))	Special packing requirements (see marg. 103 (6))
1	2	3	4	5
39. (cont.)	0070 Cutters, cable, explosive	1.4 S	E 127	—
	0105 Fuse, safety	1.4 S	E 136	32
	0110 Grenades, practice, hand or rifle	1.4 S	E 138	—
	0131 Lighters, fuse	1.4 S	E 141	—
	0173 Release devices, explosive	1.4 S	E 145	—
	0174 Rivets, explosive	1.4 S	E 145	—
	0193 Signals, railway track, explosive	1.4 S	E 151	43, 44, 45
	0323 Cartridges, power device	1.4 S	E 114	—
	0337 Fireworks	1.4 S	E 103	—
	0345 Projectiles, inert, with tracer	1.4 S	E 106	49
	0366 Detonators for ammunition	1.4 S	E 128	23, 26
	0367 Fuzes, detonating	1.4 S	E 137	38
	0368 Fuzes, igniting	1.4 S	E 137	38
	0373 Signal devices, hand	1.4 S	E 150	12
	0376 Primers, tubular	1.4 S	E 143	—
	0404 Flares, aerial	1.4 S	E 133	—
	0405 Cartridges, signal	1.4 S	E 115	—
	0432 Articles, pyrotechnic, for technical purposes	1.4 S	E 134	—
	0441 Charges, shaped, commercial, without detonator	1.4 S	E 120	30, 31
	0445 Charges, explosive, commercial, without detonator	1.4 S	E 156	—
0454 Igniters	1.4 S	E 141	—	
0455 Detonators, non-electric, for blasting	1.4 S	E 105	19, 20, 21, 22, 24, 54	
0456 Detonators, electric, for blasting	1.4 S	E 104	18	
0460 Charges, bursting, plastics bonded	1.4 S	E 157	—	
40.	Substances classified as 1.5 D			
	0331 Explosive, blasting, type B	1.5 D	E 8/9	—
	0332 Explosive, blasting, type E	1.5 D	E 12	—
41.	Articles classified as 1.5 D (Reserved)	1.5 D		
		—	—	—
51.	Empty packagings, uncleaned	—	—	—

## 2. *Conditions of carriage*

### A. PACKAGES

#### 1. *General conditions of packing*

102 (1) Outer packagings, other than cradles and crates, shall conform to the requirements of Appendix V.

(2) In accordance with the provisions of marg. 100 (5) and 1512, packagings of packing group II or I, marked with the letter "Y" or "X" shall be used for substances and articles of Class 1.

(3) The requirements of marg. 1500 (2) shall apply to the parts of packagings which are in direct contact with the contents.

(4) Nails, staples and other closure devices made of metal having no protective coating shall not penetrate to the inside of the outer packaging unless the inner packaging adequately protects the explosive substances and articles against contact with the metal.

(5) The closure device of receptacles containing liquid explosives shall ensure a double protection against leakage.

(6) Inner packagings, fittings and cushioning materials and the positioning of explosive substances or articles in packages shall be such that no dangerous movement may occur within packages during carriage.

(7) Where significant internal pressure is likely to develop in receptacles, such receptacles shall be so constructed that detonation is not possible by reason of increase in internal pressure from internal or external causes.

(8) Cushioning materials shall be suited to the nature of the contents; in particular, they must be absorbent if the contents are liquid or might exude liquid.

#### 2. *Special conditions of packing for substances and articles*

103 (1) Substances and articles shall be packed as indicated in marg. 101, table 1, columns 4 and 5, and as set out in detail in marg. 103 (5), table 2 and (6), table 3.

(2) If the body of steel drums is double-seamed, steps shall be taken to prevent the ingress of explosive substances into the recesses of the seams. The closure device of steel or aluminium drums shall include a suitable gasket. If the closure device includes a screw thread, the ingress of explosive substances into the screw thread shall not be possible.

(3) If metal-lined boxes are used for packing explosive substances, these boxes shall be made in such a way that the explosive substance carried cannot get between the liner and the sides or bottom of the box.

(4) Only hoops in hardwood shall be authorized for wooden barrels intended for the carriage of explosive substances.

(5) Table 2. *Packing methods*

NOTE. For the packing methods to be used for the various substances and articles, see marg. 101, table 1, column 4.

Method	Inner packagings	Outer packagings
E 1	(a) Not necessary	Bags paper, multiwall, water-resistant (5M2) textile, sift-proof (5L2) textile, water-resistant (5L3) woven plastics, sift-proof (5H2) woven plastics, water-resistant (5H3) plastics film (5H4)
	(b) Bags paper, kraft plastics  Sheets plastics	Barrels, wooden removable head (2C2)  Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums steel, removable head (1A2)
E 2	Receptacles metal paper plastics  Sheets plastics	Barrels, wooden removable head (2C2)  Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1)  Drums fibre (1G)  Note. In addition, for 0219 of item 4 (Trinitroresorcinol) plastics drums, removable head (1H2)
E 4	(a) Receptacles fibreboard metal paper plastics textile, rubberized	Barrels, wooden removable head (2C2)  Boxes fibreboard (4G) natural wood, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
	(b) Optional	Drums aluminium, removable head (1B2) fibre (1G) steel, removable head (1A2), sift-proof
E 5	Bags plastics  Sheets paper, kraft paper, waxed	Boxes fibreboard (4G) natural wood, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F)

Method	Inner packagings	Outer packagings
E 6 (a)	<p><u>Wetted substances</u></p> <p>1. Bags plastics textile, rubberized</p> <p>2. Bags rubber textile textile, rubberized</p> <p><u>Intermediate:</u> for (a) 2 Bags rubber textile, rubberized</p>	<p>Barrels, wooden removable head (2C2)</p> <p>Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)</p> <p>Drums steel, removable head (1A2) fibre (1G)</p> <p>Barrels, wooden removable head (2C2)</p> <p>Drums steel, removable head (1A2) fibre (1G)</p>
(b)	<p><u>Desensitized substances</u> Same as for wetted substances except that any fibreboard boxes may be used as inner packaging and any textile bags as intermediate packaging.</p>	
E 8	<p>Receptacles waterproof material</p> <p>Sheets waterproof</p>	<p>Barrels, wooden removable head (2C2)</p> <p>Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1)</p> <p>Drums fibre (1G)</p>
E 9	<p>Bags oil-resistant</p> <p>Sheets plastics</p> <p>Cans metal</p>	<p>Bags paper, multiwall, water-resistant (5M2) textile, sift-proof (5L2) textile, water-resistant (5L3) woven plastics, without inner lining or coating (5H1) woven plastics, water-resistant (5H3) woven plastics, sift-proof (5H2) plastics film (5H4)</p> <p>Note. If bags in woven plastics (5H2 or 5H3), or bags in plastics film (5H4), are used, no inner packaging is necessary.</p>

Method	Inner packagings	Outer packagings
E 9 (cont.)		Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G) steel, removable head (1A2)
E 10	Bags paper, waxed plastics textile, rubberized  Sheets paper, waxed plastics textile, rubberized	Barrels, wooden removable head (2C2)  Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 11	Bags paper, waxed plastics textile textile, rubberized  Sheets paper, waxed plastics textile textile, rubberized	Barrels, wooden removable head (2C2)  Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 12	Bags oil-resistant  Sheets plastics	Bags paper, multiwall, water-resistant (5M2) woven plastics, sift-proof (5H2) woven plastics, without inner lining or coating (5H1) woven plastics, water-resistant (5H3) plastics film (5H4) textile, sift-proof (5L2) textile, water-resistant (5L3)  Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1)  Drums fibre (1G) steel, removable head (1A2) plastics (1H2)  Note. If bags in woven plastics (5H2 or 5H3), or bags in plastics film (5H4), or plastics drums (1H2), are used, no inner packaging is neces- sary

Method	Inner packagings	Outer packagings
E 13	(a) <u>Wetted substances</u>	Barrels, wooden removable head (2C2)  Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
	(b) <u>Dry substances</u>	
E 14	Bags rubber textile textile, rubberized  <u>Intermediate:</u>  Bags rubber textile, rubberized	Barrels, wooden removable head (2C2)  Drums steel, removable head (1A2)
E 15	(a) Not necessary	Drums aluminium, removable head (1B2) steel, removable head (1A2)  Barrels, wooden removable head (2C2)  Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F) fibreboard (4G)  Drums fibre (1G)
	(b) Bags paper, waterproof plastics textile, rubberized  Sheets plastics textile, rubberized	

Method	Inner packagings	Outer packagings
E 17	Cans metal  Receptacles glass plastics	Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 18	Bags paper plastics  Sheets plastics	Barrels, wooden removable head (2C2)  Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G) plywood (1D) steel, removable head (1A2)
E 19	(a) Not necessary   (b) Bags plastics  Sheets plastics	Drums aluminium, removable head (1B2) steel, removable head (1A2) plastics, removable head (1H2)  Barrels, wooden removable head (2C2)  Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 20	Receptacles metal plastics wooden	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 21	Boxes fibreboard  Cans metal Receptacles paper, waterproof plastics, not liable to generate static electricity by contained substances	Boxes natural wood, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F)



Method	Inner packagings	Outer packagings
E 22	(a) Bags paper, kraft plastics textile textile, rubberized	Barrels, wooden removable head (2C2)  Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1) natural wood, sift-proof walls (4C2)  Drums fibre (1G) plywood (1D)
	(b) Receptacles fibreboard metal plastics	Boxes fibreboard (4G) natural wood, ordinary (4C1) natural wood, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F)
	(c) Not necessary	Drums steel, removable head (1A2) fibre (1G) plywood (1D)  Jerricans steel, non-removable head (3A1) steel, removable head (3A2)
E 24	(a) Bags rubber textile, rubberized plastics	Boxes fibreboard (4G)
	(b) Bags rubber textile, rubberized plastics  <u>Intermediate:</u> for (b) Bags rubber textile, rubberized plastics	Drums steel, removable head (1A2), with coating — other than lead
E 25	Bags plastics	Drums fibre (1G)

Method	Inner packagings	Outer packagings
E 26	Receptacles metal paper plastics  Sheets plastics  Bags plastics	Barrels, wooden removable head (2C2)  Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)  Bags woven plastics, sift-proof (5H2)
E 102	As specified by the competent authority in the country of origin <sup>(2)</sup>	Boxes natural wood, ordinary (4C1) natural wood, ordinary (4C1), with liner steel (4A1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F) fibreboard (4G)  Crates <sup>(3)</sup> (for large articles)  Drums steel, removable head (1A2) fibre (1G)
E 103	As specified by the competent authority in the country of origin <sup>(2)</sup>	
E 104	Receptacles fibreboard metal paper	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 105	Receptacles fibreboard metal plastics  Intermediate: Boxes fibreboard wooden	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)

<sup>(2)</sup> If the country of origin is not a party to COTIF, the specification must be validated by the competent authority of the first COTIF country reached by the consignment.

<sup>(3)</sup> Cradles and crates are not subject to the requirements of Appendix V.

Method	Inner packagings	Outer packagings
E 105 A	Bags paper plastics  Boxes fibreboard  Receptacles fibreboard	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 106	Not necessary	Boxes plywood (4D) reconstituted wood (4F) natural wood, ordinary (4C1) steel, (4A1)  Cradles <sup>(4)</sup>  Crates <sup>(4)</sup>
E 107	(a) Boosters which are finished articles consisting of closed metal, plastics or fibreboard receptacles that contain a detonating explosive, or consisting of a plastics-bonded detonating explosive.  Not necessary	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
	(b) Cast or pressed boosters in tubes or capsules without end closures.  Receptacles fibreboard metal plastics  Sheets plastics paper	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 108	Dividing partitions in the outer packaging  Receptacles metal plastics wooden	Boxes natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 109	Receptacles metal plastics wooden	Boxes natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)

<sup>(4)</sup> See footnote (3) [page 208].

Method	Inner packagings	Outer packagings
E 112	Not necessary	Boxes fibreboard (4G) plywood (4D) reconstituted wood (4F) natural wood, ordinary (4C1) steel (4A1) steel, with liner (4A2)  Drums steel, removable head (1A2)
E 113	Receptacles fibreboard plastics metal	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 114	Receptacles fibreboard plastics wooden metal	Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2)
E 115	Receptacles fibreboard metal plastics wooden  <b>Note.</b> For articles of item 37, No. 0312 and item 39, No. 0405, receptacles, paper, kraft, may also be used	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 116	Dividing partitions in the outer packaging  Boxes fibreboard plastics wooden  <b>Note.</b> For small cases, (cartridge), plastics or textile bags may also be used	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 117	Boxes fibreboard metal plastics wooden  Cans metal	Boxes natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)

Method	Inner packagings	Outer packagings
E 118	Not necessary	Cradles <sup>(5)</sup> Crates <sup>(5)</sup>
E 119	Not necessary	Boxes natural wood, sift-proof walls (4C2) plywood (4D) reconstituted wood (4F) steel (4A1) steel, with liner (4A2)  Drums steel, removable head (1A2) <b>Note.</b> For cased charges, boxes in natural wood, ordinary (4C1), plywood (4D) and reconstituted wood (4F) may also be used.
E 120	Dividing partitions in the outer packaging  Tubes	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 121	Not necessary	Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2)
E 122	Boxes fibreboard metal plastics wooden	Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2)
E 124	Reels	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 125	Bags plastics  Reels  Sheets paper, kraft plastics	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)

<sup>(5)</sup> See footnote (3) [page 208].

Method	Inner packagings	Outer packagings
E 126	Reels  Receptacles fibreboard	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 127	Receptacles fibreboard	Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F) steel, with liner (4A2)
E 128	Boxes fitted with dividing partitions fibreboard plastics wooden  Trays fitted with dividing partitions fibreboard plastics wooden  Cans fitted with dividing partitions metal	Boxes natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 129	Receptacles fibreboard plastics  Sheets paper	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 130	Receptacles fibreboard plastics  Sheets paper	Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1)  Drums fibre (1G)
E 133	Dividing partitions in the outer packaging  Receptacles metal plastics fibreboard  Sheets paper, kraft	Boxes fibreboard (4G) plywood (4D) reconstituted wood (4F) natural wood, ordinary (4C1) steel (4A1) plastics, solid (4H2)  Drums fibre (1G) plastics, removable head (1H2)

Method	Inner packagings	Outer packagings
E 134	Receptacles fibreboard metal plastics wooden	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 135	Bags plastics  Reels  Sheets paper, kraft plastics	Boxes fibreboard (4G) natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F)
E 136	Not necessary	Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2)  Drums fibre (1G)
E 137	Dividing partitions in the outer packaging  Receptacles fibreboard metal plastics wooden  Trays plastics wooden	Boxes natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 138	As specified by the competent authority in the country of origin <sup>(6)</sup>	Boxes natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 139	Receptacles metal plastics wooden	Boxes natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 140	Bags water-resistant	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)

<sup>(6)</sup> See footnote (2) [page 208].

Method	Inner packagings	Outer packagings
E 141	Receptacles fibreboard metal wooden  Sheets paper  Trays plastics	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 142	Boxes fibreboard metal plastics wooden  Cans metal  Trays fibreboard plastics  <u>Intermediate:</u> (Optional with inner boxes but mandatory with trays)  Boxes fibreboard	Boxes natural wood, ordinary (4C1) steel, with liner (4A2) fibreboard (4G) plywood (4D) reconstituted wood (4F)
E 143	Boxes fibreboard metal wooden  Tubes fibreboard  Trays plastics	Boxes natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 145	Receptacles fibreboard plastics wooden  <b>Note.</b> For articles of item 39, No. 0174, metal receptacles may also be used	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 146	Not necessary	As specified by the competent authority in the country of origin <sup>(7)</sup>

<sup>(7)</sup> See footnote (2) [page 208].



Method	Inner packagings	Outer packagings
E 147	Receptacles fibreboard metal	Boxes plywood (4D) reconstituted wood (4F) fibreboard (4G) natural wood, ordinary (4C1)  Drums fibre (1G)
E 150	Boxes fibreboard  Receptacles metal plastics  Sheets paper, kraft	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 151	Receptacles fibreboard metal plastics wooden	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)  Drums fibre (1G)
E 153	Sheets fibreboard corrugated  Tubes fibreboard  <u>Intermediate:</u> Receptacles fibreboard metal plastics	Boxes natural wood, ordinary (4C1) steel (4A1) plywood (4D) reconstituted wood (4F)
E 156	Dividing partitions in the outer packaging  Bags plastics  Boxes fibreboard  Tubes fibreboard plastics metal	Boxes fibreboard (4G) natural wood, ordinary (4C1) steel (4A1) steel, with liner (4A2) plywood (4D) reconstituted wood (4F)
E 157	Not necessary	Boxes natural wood, ordinary (4C1) plywood (4D) reconstituted wood (4F) steel (4A1)

(6) Table 3. *Special packing requirements*

NOTE. For the special packing requirements applicable to the various substances and articles, see marg. 101, table 1, column 5.

No.	Requirement
1.	Water soluble substances must be packed in waterproof receptacles.
2.	Packages must be lead free.
7.	Metal drums must be so constructed that explosion is not possible by reason of increase in internal pressure from internal or external causes.
8.	The inside of steel drums and jerricans must be galvanized, painted or otherwise protected. Bare steel must not come into contact with the substance.
9.	Drums or jerricans of steel must be made without pockets or crevices in which the substance could be trapped or nipped.
10.	Metal receptacles must be so constructed that the risk of explosion, by reason of increase in internal pressure from internal or external causes is reduced.
11.	The inner packagings must be hermetically closed.
12.	Outer boxes of natural wood must be provided with tin-plate liner having a hermetically closed lid.
13.	Open ends of inner packagings must be fitted with padded end caps or the outer packaging must be padded.
17.	Not more than 100 articles may be packed in an inner packaging and not more than 5,000 articles in an outer packaging.
18.	The articles must be packed with wires folded or coiled on spools in such a manner that the detonators are protected by the wires. Not more than 10 articles may be assembled in one bundle or coiled on one spool. Not more than 100 articles may be packed in an inner packaging and not more than 2,000 in an outer packaging.
19.	Not more than 100 articles may be packed in an inner packaging.
20.	Intermediate packagings are required if more than 1,000 articles are packed in an outer packaging.
21.	Not more than 10 inner packagings may be packed in an intermediate packaging.
22.	The inner or intermediate packagings must be separated from the outer packaging by a gap of at least 25 mm using spacers (battens) or cushioning material, e.g. sawdust.
23.	The inner packagings must be separated from the outer packaging by a gap of not less than 25 mm filled with cushioning material, e.g. sawdust or wood wool.
24.	Articles in metal inner packagings must be secured by cushioning material at both ends.
25.	Not more than 500 non-electric detonator assemblies with detonating cord, for blasting, may be packed in an outer packaging.
26.	Not more than 1,000 non-electric detonator assemblies, for blasting, with safety fuse or shock tube may be packed in an outer packaging.
28.	Metal inner packagings must be padded with cushioning material.
30.	The shaped charges must be so packed that contact between them is prevented.
31.	The conical cavities of the shaped charges must face inwards in pairs or groups to minimize the shaped charge (jetting) effect in the event of accidental initiation.
32.	The ends of the articles must be sealed.
33.	The ends of the detonating cord must be sealed and tied fast.

No.	Requirement
34.	The ends of the detonating cord must be sealed. Spaces must be filled with cushioning material.
36.	The articles must be protected by cushioning to prevent any contact between them.
37.	Venturis of rockets (fireworks) must be plugged and means of ignition fully protected.
38.	The detonating fuses must be separated from each other in the inner packaging.
39.	Primers fitted with an anvil, composition not covered with a disc of metal foil or other material (varnished only): (a) The primers must be packed in rows in single layers on trays of fibreboard or plastics. (b) Not more than 500 primers must be packed in an inner packaging.
40.	Primers not fitted with an anvil, composition covered, or primers fitted with an anvil, encapsulated: not more than 5,000 primers may be packed in an inner packaging.
41.	The primers must be packed with shock absorbent layers of felt, paper or plastics to prevent propagation within the outer packaging.
43.	The articles must be separated to prevent contact between them and kept apart from the bottom, walls and lid of the outer packaging, e.g. by cushioning material.
44.	Where the articles are contained in magazines for fitting into automatic units, the magazine may replace the inner packaging provided adequate cushioning material is used.
45.	Tin-plate inner packagings must be sealed.
46.	The articles must be wrapped singly in corrugated fibreboard sheets or inserted in fibreboard tubes.
47.	Absorbent cushioning material must be inserted.
48.	Large articles without propelling charge and without means of ignition or initiation may be carried unpacked.
49.	Large articles without their means of initiation may be carried unpacked.
51.	Large articles may be carried unpacked.
53.	Bags, woven plastics, sift-proof (5H2), may be used only for flake or prilled TNT in the dry state and with a maximum net mass of 30 kg per package.
54.	Plastics inner packagings must not be liable to generate sufficient static electricity that a discharge could cause the packaged articles to function.
55.	Not more than 50 g of substance may be packed in an inner packaging.

### 3. *Mixed packing*

104

(1) Substances and articles listed under the same identification number<sup>(8)</sup> may be packed together. In this case, the most secure outer packaging shall be used.

(2) Except where otherwise specially provided below, substances and articles having different identification numbers may not be packed together.

(3) Substances and articles of Class I may not be packed together with substances of other classes or with goods which are not subject to the provisions of RID.

(4) Articles of compatibility groups C, D and E may be packed together.

<sup>(8)</sup> Identification number of the substance or article according to the United Nations Recommendations (see footnote (1) to marg. 101).

(5) Articles of compatibility groups D or E may be packed together with their own means of initiation provided that such means have at least two effective protective features which prevent explosion of an article in the event of accidental functioning of the means of initiation.

(6) Articles of compatibility groups D or E may be packed together with their own means of initiation which do not have two effective protective features (i.e. means of initiation assigned to compatibility group B), provided that, in the opinion of the competent authority of the country of origin,<sup>(9)</sup> the accidental functioning of the means of initiation does not cause the explosion of an article under normal conditions of carriage.

(7) Articles may be packed together with their own means of ignition provided that the means of ignition will not function under normal conditions of carriage.

(8) Goods with the identification numbers shown in table 4 may be included in the same package under the conditions indicated.

Table 4. *Special conditions of mixed packing*

Item	Item	2	4	9	19	22	23	26	37	39																				
Item	Identification number	0160	0027	0028	0194	0333	0428	0238	0334	0429	0161	0186	0054	0195	0240	0335	0430	0191	0197	0312	0336	0431	0012	0014	0044	0337	0373	0405	0432	
2	0160		B B																											
4	0027	B	B																							B				
	0028	B	B																							B				
9	0194				B B		B	B B B B	B B B B B	B																	B B B			
	0333					A			A																	A				
	0428			B	B	B	B	B B B B	B B B B B	B																	B B B			
19	0238			B	B	B	B	B B B B	B B B B B	B																	B B B			
	0334				A				A																	A				
	0429			B	B	B	B	B B B B	B B B B B	B																	B B B			
22	0161	B B B																							B					
23	0186			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0054			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0195			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0240			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0335				A		A																			A				
26	0430			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0191			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0197			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0312			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0336				A		A		A																	A				
37	0431			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0012																									A				
	0014																								A					
	0044	B B B																												
	0337				A		A																							
	0373			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0405			B	B B B	B	B	B B B B	B B B B B	B																	B B B			
	0432			B	B B B	B	B	B B B B	B B B B B	B																	B B B			

Explanations:

A: Substances and articles with these identification numbers may be included in the same package without any special limitation of mass.

B: Substances and articles with these identification numbers may be included in the same package up to a total mass of 50 kg of explosive substance.

<sup>(9)</sup> See footnote (2) [page 208].

(9) For mixed packing, account shall be taken of a possible amendment of the classification of packages in accordance with marg. 100.

(10) For the description of goods in the consignment note in the case of the mixed packing of substances and articles of Class 1, see marg. 115 (4).

4. *Marking and danger labels on packages* (see Appendix IX)

105

(1) Packages shall carry the identification number and one of the names of the substance or article in italics, in marg. 101, table 1, column 2. For substances of item 4, Nos. 0081, 0082, 0083, 0084 and 0241, and substances of item 40, Nos. 0331 and 0332, the commercial name of the particular explosive shall be specified in addition to the type. For other substances and articles, the commercial or technical name may be added. This marking, which shall be clearly legible and indelible, shall be in an official language of the country of origin and also, in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

(2) Packages containing substances or articles of items 1 to 28 shall bear a label conforming to model No. 1. The classification code according to marg. 101, table 1, column 3, shall be shown on the lower part of the label.

Packages containing substances or articles of items 29 to 39 shall bear a label conforming to model No. 1.4 and packages containing substances of item 40 and articles of item 41 shall bear a label conforming to model No. 1.5. The compatibility group according to marg. 101, table 1, column 3, shall be shown on the lower part of the label.

(3) Packages containing substances and articles of:

Item 4, Nos. 0076 and 0143;

Item [19],<sup>1</sup> No. 0018;

Item 22, No. 0077;

Item 26, No. 0019; and

Item 37, No. 0301

shall in addition bear a label conforming to model No. 6.1.

Packages containing articles of:

Item 19, Nos. 0015 and 0018;

Item 26, Nos. 0016 and 0019; and

Item [37],<sup>2</sup> No. 0301

shall in addition bear a label conforming to model No. 8.

106-  
109

B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

110

Substances and articles of item 37, Nos. 0066, 0336 and 0431, and item 39 may also be forwarded as express parcels. A package shall not weigh more than 450 kg [see also marg. 121 (2)].

111-  
114

C. PARTICULARS IN THE CONSIGNMENT NOTE

115

(1) The description of the goods in the consignment note shall conform to one of the identification numbers and one of the names *in italics* in marg. 101, table 1, column 2. The description of the goods shall be followed by the

<sup>1</sup> The text between brackets reads "129" in the authentic French text — Le texte entre crochets se lit « 129 » dans le texte authentique français.

<sup>2</sup> The text between brackets reads "27" in the authentic French text — Le texte entre crochets se lit « 27 » dans le texte authentique français.

*classification code and item number* (marg. 101, table 1, columns 3 and 1) and *completed by the net mass in kg of the explosive substance and the initials "RID"* e.g.: "0160 Powder, smokeless, 1.1 C, item 2, 4,600 kg, RID. A cross shall be inserted in the appropriate box on the consignment note.

(2) For substances of item 4, Nos. 0081, 0082, 0083, 0084 and 0241 and for substances of item 40, Nos. 0331 and 0332, the commercial name of the explosive shall be specified as well as the type of explosive. For other substances and articles, the commercial name or technical name may be added.

(3) For full wagon loads, the consignment note shall indicate the number of packages, the mass of each package in kg and the total net mass of explosive substance.

(4) For mixed packing of two different goods, the description of the goods in the consignment note shall include the identification numbers and names in italics in marg. 101, table 1, column 2 of both substances or articles. If more than two different goods are contained in the same package in conformity with marg. 104, the consignment note shall indicate under the description of the goods the identification numbers of all the substances and articles contained in the package, in the form, "*Goods of Nos. . .*".

116-  
119

#### D. TRANSPORT EQUIPMENT

##### 1. *Conditions relating to wagons and their loading*

###### a. *For packages*

120

(1) Substances and articles of Class 1 shall be loaded in covered wagons. No metal objects in the interior of the wagon other than those forming part of the construction of the wagon shall be allowed to protrude. Before loading, the floor of the wagon shall be carefully cleaned by the sender. The doors and ventilator shutters of the wagons shall be closed. Only wagons fitted with regulation sheet steel spark-guards shall be used for the carriage of substances and articles of divisions 1.1, 1.2, 1.3 and 1.5, even when these substances and articles are loaded in large containers. For wagons fitted with a floor, the sheet steel spark-guards shall not be fixed directly to the floor of the wagon.

Articles which, because of their dimensions or their mass, cannot be loaded in covered wagons may equally be carried on open wagons. They shall be covered by sheets.

(2) For the use of electrically fitted wagons, see Appendix IV.

(3) Packages bearing labels conforming to model No. 6.1 shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in wagons.

121

(1) Packages containing substances and articles of Class 1 shall be so loaded and stowed in the wagons that they cannot move or shift. They shall be protected against any chafing or bumping.

(2) Express parcels consignments may be loaded in railway vehicles which can simultaneously serve for the carriage of persons, but only up to a limit of 100 kg per vehicle.

###### b. *For small containers*

122

(1) Packages containing substances or articles of Class 1 may be carried in small containers.

(2) The loading requirements set out in marg. 121 (1) shall apply by analogy to small containers.

(3) The mixed loading prohibitions laid down in marg. 130 must be observed inside a small container, as well as in the wagon carrying one or more small containers.

123-  
124

2. *Marking and danger labels on wagons and on small containers* (see Appendix IX)

125

(1) Wagons in which packages bearing labels conforming to models Nos. 1, 1.4 or 1.5 are loaded shall bear this same label on both their sides. Compatibility groups shall not be indicated on the labels if the wagon contains substances or articles belonging to two or more compatibility groups.

(2) Where packages of different divisions are loaded in a wagon, the wagon shall bear only labels conforming to the model of the most dangerous division, in the order 1.1, 1.5, 1.2, 1.3, 1.4. Where substances of item 40 are loaded in a wagon with substances or articles of division 1.2, the wagon shall be labelled as division 1.1.

(3) Wagons loaded with substances and articles of the following items and identification numbers shall in addition bear on both sides labels conforming to model No. 6.1:

Item 4, Nos. 0076 and 0143;  
Item 19, No. 0018;  
Item 22, No. 0077;  
Item 26, No. 0019; and  
Item 37, No. 0301.

(4) Wagons loaded with articles of the following items and identification numbers shall in addition bear on both sides labels conforming to model No. 8:

Item 19, Nos. 0015 and 0018;  
Item 26, Nos. 0016 and 0019; and  
Item 37, No. 0301.

(5) Wagons carrying full loads containing substances and articles of items 1 to 11, 17, 20, 21, 24, 27 and 28 shall in addition bear, in or alongside the label-holder, labels conforming to model No. 13.

Wagons carrying full loads containing substances of the following items and identification numbers shall, however, bear in or alongside the label-holder, labels conforming to model No. 15 instead of No. 13:

Item 2, No. 0160; and  
Item 4, Nos. 0072, 0075, 0083, 0133, 0143, 0146, 0150, 0208, 0219, 0226, 0340, 0341, 0391, 0394 and 0411.

(6) Small containers shall be labelled in accordance with marg. 105 (2) and (3).

126-  
129

E. PROHIBITIONS ON MIXED LOADING

130

(1) Packages bearing a label conforming to models Nos. 1, 1.4 or 1.5 but which are assigned to different compatibility groups shall not be loaded together in

the same wagon, unless mixed loading for the corresponding compatibility groups is authorized in the following table 5:

Table 5

Compatibility groups	B	C	D	E	F	G	H	J	S
B	×								×
C		×	×	×		×			×
D		×	×	×		×			×
E		×	×	×		×			×
F					×				×
G		×	×	×		×			×
H							×		×
J								×	×
S	×	×	×	×	×	×	×	×	×

X = mixed loading authorized.

(2) Packages bearing a label conforming to models Nos. 1, 1.4 or 1.5 shall not be loaded together in the same wagon with packages bearing one or two labels conforming to models Nos. 3, 4.1, 4.2, 4.3, 5, 6.1, 6.1A, 7A, 7B, 7C, 8 or 9.

131 Separate consignment notes shall be made out for consignments which may not be loaded in the same wagon.

132-  
134

#### F. EMPTY PACKAGINGS

135 (1) Empty packagings, uncleaned, of item 51 shall be securely closed and be leakproof to the same degree as if they were full.

(2) Empty packagings, uncleaned, of item 51 shall bear the same danger labels as if they were full.

(3) Empty packagings, uncleaned, bearing labels conforming to model No. 6.1, shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in wagons and in goods depots.

(4) The description in the consignment note shall be: "*Empty packagings, 1, item 51, RID*".

A cross shall be entered in the appropriate box of the consignment note.

136-  
139

#### G. OTHER REQUIREMENTS

140 Packages bearing labels conforming to model No. 6.1 shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in goods depots.

#### H. SPECIAL PROVISIONS

141 Every wagon bearing a label conforming to models Nos. 1 or 1.5, as well as loaded containers bearing these labels, shall be separated, by two 2-axle barrier



wagons, or one barrier wagon with 4 or more axles, from wagons bearing labels conforming to models Nos. 3, 4.1, 4.2, 4.3 or 5. Empty or loaded wagons not bearing a label conforming to models Nos. 1 to 9 are regarded as barrier wagons.

142 Substances and articles of Class 1 belonging to the armed forces of a Contracting Party, that were packaged prior to 1 January 1990 in accordance with the requirements of RID in effect at that time may be carried after 1 January 1990 provided the packagings maintain their integrity and are declared in the consignment note as military goods packaged prior to 1 January 1990. The other provisions applicable as from 1 January 1990 for this Class shall be complied with.

#### I. TRANSITIONAL MEASURES

143 Substances and articles of Class 1 may be transported until 31 December 1990 in accordance with the requirements for Class 1a, 1b, and 1c applicable until 31 December 1989. The consignment note shall, in such cases, bear the inscription: "Carriage in accordance with RID applicable before 1 January 1990".

144-  
199

### CLASS 2. GASES: COMPRESSED, LIQUEFIED OR DISSOLVED UNDER PRESSURE

#### 1. *List of substances*

200 (1) Among the substances and articles covered by the heading of Class 2, only those listed in marg. 201 are to be accepted for carriage, and then only under the conditions laid down in marg. 200 (4) to 233. These substances and articles to be accepted for carriage under certain conditions are to be considered as substances and articles of RID.

(2) Substances having a critical temperature lower than 50°C or, at 50°C, a vapour pressure greater than 300 kPa (3 bar) are deemed to be substances of Class 2.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes) containing one or more components listed in marg. 201, see also marg. 3 (3).

(3) The substances and articles of Class 2 are classified as follows:

- A. Compressed gases having a critical temperature below  $-10^{\circ}\text{C}$ .
- B. Liquefied gases having a critical temperature of  $-10^{\circ}\text{C}$  or higher:
  - (a) Liquefied gases having a critical temperature of  $70^{\circ}\text{C}$  or higher;
  - (b) Liquefied gases having a critical temperature of  $-10^{\circ}\text{C}$  or higher, but below  $70^{\circ}\text{C}$ .
- C. Deeply refrigerated, liquefied gases.
- D. Gases dissolved under pressure.
- E. Aerosol dispensers and non-refillable containers of gas under pressure.
- F. Gases subject to special requirements.
- G. Empty receptacles.

The substances and articles of Class 2 are subdivided according to their chemical properties as follows:

- (a) Non-inflammable;
- (at) Non-inflammable, toxic;

- (b) Inflammable;
- (bt) Inflammable, toxic;
- (c) Chemically unstable;
- (ct) Chemically unstable, toxic.

Unless otherwise specified, chemically unstable substances shall be considered to be inflammable.

Corrosive gases and articles containing such gases are designated by the word "corrosive" in brackets.

(4) Substances of Class 2 which are listed among the chemically unstable gases are to be accepted for carriage only if the necessary steps have been taken to prevent their dangerous decomposition, dismutation or polymerization during carriage.

To this end, care should in particular be taken to ensure that receptacles do not contain any substances liable to promote these reactions.

- 201 A. COMPRESSED GASES [see also marg. 201a under (a). For gases of items 1 (a) and (b) and 2 (a) in aerosol dispensers or in non-refillable containers for gases under pressure, see under items 10 and 11]:

Gases having a critical temperature below  $-10^{\circ}\text{C}$  are considered to be compressed gases for the purposes of RID.

1. Pure gases and technically pure gases

(a) Non-inflammable

*Argon; helium; krypton; neon; nitrogen; oxygen; tetrafluoromethane (R 14).*

(at) Non-inflammable, toxic

*Boron trifluoride; fluorine (corrosive); silicon tetrafluoride (corrosive).*

(b) Inflammable

*Deuterium; hydrogen; methane.*

(bt) Inflammable, toxic

*Carbon monoxide.*

(ct) Chemically unstable, toxic

*Nitric oxide (nitrogen monoxide) NO (Non-inflammable).*

2. Mixtures of gases

(a) Non-inflammable

Mixtures of two or more of the following gases: rare gases (containing not more than 10% xenon by volume), nitrogen, oxygen, carbon dioxide (not more than 30% by volume); non-inflammable mixtures of two or more of the following gases: hydrogen, methane, nitrogen, rare gases (containing not more than 10% xenon by volume), not more than 30% carbon dioxide by volume; nitrogen containing not more than 6% ethylene by volume; *air*.

(b) Inflammable

Mixtures of not less than 90% methane by volume with hydrocarbons of items 3 (b) and 5 (b); inflammable mixtures of two or more of the following gases: hydrogen, methane, nitrogen, rare gases (containing not more than 10% xenon by volume), not more than 30% carbon dioxide by volume; *natural gas*.

*(bt)* Inflammable, toxic

*Town gas*; mixtures of hydrogen with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; *water gas*; *synthesis gas* (e.g. from the Fischer-Tropsch process); mixtures of carbon monoxide with hydrogen or with methane.

*(ct)* Chemically unstable, toxic

Mixtures of hydrogen with not more than 10% diborane by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% diborane by volume.

B. LIQUEFIED GASES [see also marg. 20]a under *(b)* and *(e)*. For gases of items 3 to 6 in aerosol dispensers or in non-refillable containers for gases under pressure, see under items 10 and 11]:

Gases having a critical temperature of  $-10^{\circ}\text{C}$  or higher are considered to be liquefied gases for the purposes of RID.

a. Liquefied gases having a critical temperature of  $70^{\circ}\text{C}$  or higher:

3. Pure gases and technically pure gases

*(a)* Non-inflammable

*Bromochlorodifluoromethane* (R 12B1); *chlorodifluoromethane* (R 22); *chloropentafluoroethane* (R 115); *1-chloro-2,2,2-trifluoroethane* (R 133a); *dichlorodifluoromethane* (R 12); *dichlorofluoromethane* (R 21); *1,2-dichloro-1,1,2,2-tetrafluoroethane* (R 114); *octafluorocyclobutane* (RC318).

*(at)* Non-inflammable, toxic

*Ammonia*; *boron trichloride* (corrosive); *chlorine* (corrosive); *chlorine trifluoride* (corrosive); *hexafluoropropylene* (R 1216); *hydrogen bromide* (corrosive); *methyl bromide*; *nitrosyl chloride* (corrosive); *nitrogen dioxide*  $\text{NO}_2$  (nitrogen peroxide, dinitrogen tetroxide  $\text{N}_2\text{O}_4$ ) (corrosive); *phosgene* (corrosive); *sulphur dioxide*; *sulphuryl fluoride*; *tungsten hexafluoride*.

*(b)* Inflammable

*Butane*; *1-butylene* (1-butene); *1-chloro-1,1-difluoroethane* (R 142b); *cis-2-butylene* (*cis-2-butene*); *cyclopropane*; *1,1-difluoroethane* (R 152a); *dimethyl ether*; *isobutane*; *isobutylene* (isobutene); *methylsilane*; *propane*; *propylene*; *trans-2-butylene* (*trans-2-butene*); *1,1,1-trifluoroethane*.

*(bt)* Inflammable, toxic

*Arsine*; *dichlorosilane*; *dimethylamine*; *dimethylsilane*; *ethylamine*; *ethyl chloride*; *hydrogen selenide*; *hydrogen sulphide*; *methylamine*; *methyl chloride*; *methyl mercaptan*; *trimethylamine*; *trimethylsilane*.

*(c)* Chemically unstable

*1,2-Butadiene*; *1,3-butadiene*; *vinyl chloride*.

*(ct)* Chemically unstable, toxic

*Cyanogen*; *cyanogen chloride* (non-inflammable) (corrosive); *ethylene oxide*; *methyl vinyl ether*; *trifluorochloroethylene* (R 1113); *vinyl bromide*.

NOTE. 1. In the case of halogenated hydrocarbons, the use of names customary in the trade, such as the following, is also permitted: *Algofrene, Arcton, Edifren, Flugene, Forane, Freon, Fresane, Frigen, Isceon, Kaltron*, followed by the substance identification number without the letter R.

2. In receptacles containing 1,2-butadiene, the oxygen concentration in the gaseous phase must not exceed 50ml/m<sup>3</sup>.

#### 4. Mixtures of gases

##### (a) Non-inflammable

Mixtures of substances listed under item 3 (a) with or without hexafluoropropylene of item 3 (at), which as:

*mixture F 1* have a vapour pressure at 70°C not exceeding 1.3 MPa (13 bar) and a specific gravity at 50°C not less than that of dichlorofluoromethane 1.30 kg/l;

*mixture F 2* have a vapour pressure at 70°C not exceeding 1.9 MPa (19 bar) and a specific gravity at 50°C not less than that of dichlorodifluoromethane (1.21 kg/l);

*mixture F 3* have a vapour pressure at 70°C not exceeding 3 MPa (30 bar) and a specific gravity at 50°C not less than that of chlorodifluoromethane (1.09) kg/l);

NOTE. 1. Trichlorofluoromethane (R 11), trichlorotrifluoroethane (R 113) and chlorotrifluoroethane (R 133) are not liquefied gases within the meaning of RID and thus are not subject to the requirements of RID. They may, however, enter into the composition of mixtures F 1 to F 3.

2. See Note under item 3.

The azeotropic *mixture* of dichlorodifluoromethane (R 12) and 1,1-difluoroethane (R 152a), known as *R 500*; the azeotropic *mixture* of chloropentafluoroethane (R 115) and chlorodifluoromethane (R 22), known as *R 502*; the mixture of 19 to 21% by mass dichlorodifluoromethane (R 12) and 79 to 81% by mass bromochlorodifluoromethane (R 12B1).

##### (at) Non-inflammable, toxic

Mixtures of methyl bromide and chloropicrin having a vapour pressure above 300 kPa (3 bar) at 50°C.

##### (b) Inflammable

Mixtures of hydrocarbons listed under item 3 (b) and of ethane and ethylene of item 5 (b), which as:

*mixture A* have a vapour pressure at 70°C not exceeding 1.1 MPa (11 bar) and a specific gravity at 50°C not less than 0.525 kg/l;

*mixture A 0* have a vapour pressure at 70°C not exceeding 1.6 MPa (16 bar) and a specific gravity at 50°C not less than 0.495 kg/l;

*mixture A 1* have a vapour pressure at 70°C not exceeding 2.1 MPa (21 bar) and a specific gravity at 50°C not less than 0.485 kg/l;

*mixture B* have a vapour pressure at 70°C not exceeding 2.6 MPa (26 bar) and a specific gravity at 50°C not less than 0.450 kg/l;

*mixture C* have a vapour pressure at 70°C not exceeding 3.1 MPa (31 bar) and a specific gravity at 50°C not less than 0.440 kg/l.

NOTE. In the case of the foregoing mixtures, the use of the following names customary in the trade is permitted for describing these substances:

Names given under item 4 (b) . . . . .	Names customary in the trade
<i>Mixture A, mixture A 0</i> . . . . .	<i>butane</i>
<i>Mixture C</i> . . . . .	<i>propane</i>

Mixtures of hydrocarbons of items 3 (b) and 5 (b) containing methane.

(bt) Inflammable, toxic

Mixtures of two or more of the following gases:

methylsilane, dimethylsilane; trimethylsilane; methyl chloride and methylene chloride in mixtures having a vapour pressure at 50°C of over 30 kPa (3 bar); mixtures of methyl chloride and chloropicrin and mixtures of methyl bromide and ethylene bromide both having a vapour pressure at 50°C over 300 kPa (3 bar).

(c) Chemically unstable

Mixtures of 1,3-butadiene and hydrocarbons of item 3 (b) having a vapour pressure not exceeding 1.1 MPa (11 bar) at 70°C and a specific gravity not below 0.525 kg/l at 50°C;

Mixtures of methylacetylene and propadiene with the hydrocarbons of item 3 (b), which as:

*mixture P 1*, contain not more than 63% by volume methylacetylene and propadiene and not more than 24% by volume propane and propylene, the percentage of C<sub>4</sub>-saturated hydrocarbons being not less than 14% by volume,

*mixture P 2*, contain not more than 48% by volume methylacetylene and propadiene and not more than 50% by volume propane and propylene, the percentage of C<sub>4</sub>-saturated hydrocarbons being not less than 5% by volume.

(ct) Chemically unstable, toxic

Ethylene oxide containing not more than 10% carbon dioxide by mass; ethylene oxide containing not more than 50% methyl formate by mass, with nitrogen up to a total pressure not exceeding 1 MPa (10 bar) at 50°C; ethylene oxide with nitrogen up to a total pressure not exceeding 1 MPa (10 bar) at 50°C; dichlorodifluoromethane containing 12% ethylene oxide by mass.

b. Liquefied gases having a critical temperature of -10°C or higher but below 70°C:

5. Pure gases and technically pure gases

(a) Non-inflammable

*Bromotrifluoromethane* (R 13B1); *carbon dioxide*; *chlorotrifluoromethane* (R 13); *hexafluoroethane* (R 116); *nitrous oxide* N<sub>2</sub>O; *sulphur hexafluoride*; *trifluoromethane* (R 23); *xenon*.

For carbon dioxide, see also marg. 201a under (c).

NOTE. 1. Nitrous oxide is to be accepted for carriage only if it is not less than 99% pure.

2. See note under item 3.

(at) Non-inflammable, toxic

*Hydrogen chloride* (corrosive).

- (b) Inflammable  
*Ethane; ethylene; silane.*
  - (bt) Inflammable, toxic  
*Germane; phosphine.*
  - (c) Chemically unstable  
*1,1-Difluoroethylene; vinyl fluoride.*
  - (ct) Chemically unstable, toxic  
*Diborane.*
6. Mixture of gases
- (a) Non-inflammable  
Carbon dioxide containing from 1% to 10% nitrogen, oxygen, air or rare gases, by mass; the azeotropic *mixture* of chlorotrifluoromethane (R 13) and trifluoromethane (R 23) known as *R 503*.  
  
NOTE. Carbon dioxide containing less than 1% nitrogen, oxygen, air or rare gases by mass is a substance of item 5 (a).
  - (c) Chemically unstable  
Carbon dioxide containing not more than 35% ethylene oxide by mass.
  - (ct) Chemically unstable, toxic  
Ethylene oxide containing more than 10% but not more than 50% carbon dioxide by mass.
- C. DEEPLY REFRIGERATED, LIQUEFIED GASES
7. Pure gases and technically pure gases
- (a) Non-inflammable  
*Argon; carbon dioxide; helium; krypton; neon; nitrogen; nitrous oxide N<sub>2</sub>O; oxygen; xenon.*
  - (b) Inflammable  
*Ethane; ethylene; hydrogen; methane.*
8. Mixtures of gases
- (a) Non-inflammable  
*Air; mixtures of substances of item 7 (a).*
  - (b) Inflammable  
*Mixtures of substances of item 7 (b); natural gas.*
- D. GASES DISSOLVED UNDER PRESSURE
9. Pure gases and technically pure gases
- (at) Non-inflammable, toxic  
*Ammonia* dissolved in water with more than 35% but not more than 40% ammonia by mass; *ammonia* dissolved in water with more than 40% but not more than 50% ammonia by mass;  
  
NOTE. Ammonia solutions with not less than 10% and not more than 35% ammonia (NH<sub>3</sub>) are substances of Class 8 [see marg. 801, item 43 (c)].
  - (c) Chemically unstable  
*Acetylene* dissolved in a solvent (e.g. acetone) absorbed by porous substances.

E. AEROSOL DISPENSERS AND NON-REFILLABLE CONTAINERS OF GAS UNDER PRESSURE [see also marg. 201a under (d)]

NOTE. 1. Aerosol dispensers are receptacles which can be used only once, are equipped with a release valve or dispersal device, and contain, under pressure, a gas or mixture of gases listed in marg. 208 (2) or contain an active substance (insecticide, cosmetic, etc.) together with such a gas or mixture of gases as a propellant.

2. Non-refillable containers of gas under pressure are receptacles which can be used only once, contain a gas or a mixture of gases listed in marg. 208 (2) and (3) (e.g. butane for camp-cookers, refrigerant gases, etc.), but are not equipped with a release valve.

3. The term "inflammable substances" means:

- (i) Gases (propellant in aerosol dispensers; contents of non-refillable containers of gas under pressure) whose mixtures with air can be ignited and have a lower and upper inflammability limit;
- (ii) Liquids (active substances in aerosol dispensers) of Class 3.

4. The term "chemically unstable" is applied to contents which in the absence of special precautions undergo dangerous decomposition or self-polymerization at a temperature of not more than 70°C.

10. *Aerosol dispensers*

(a) Non-inflammable

With non-inflammable contents.

(at) Non-inflammable, toxic

With non-inflammable toxic contents.

(b) Inflammable

1. With not more than 45% by mass inflammable contents.

2. With more than 45% by mass inflammable contents.

(bt) Inflammable, toxic

1. With toxic contents and not more than 45% by mass inflammable contents.

2. With toxic contents and more than 45% by mass inflammable contents.

(c) Chemically unstable

With chemically unstable contents.

(ct) Chemically unstable, toxic

With chemically unstable toxic contents.

11. *Non-refillable containers of gas under pressure*

(a) Non-inflammable

With non-inflammable contents.

(at) Non-inflammable, toxic

With non-inflammable toxic contents.

(b) Inflammable

With inflammable contents.

(bt) Inflammable, toxic

With inflammable toxic contents.

(c) Chemically unstable

With chemically unstable contents.

(*ct*) Chemically unstable, toxic

With chemically unstable toxic contents.

F. GASES SUBJECT TO SPECIAL REQUIREMENTS

12. Various mixtures of gases

Mixtures containing gases listed under the other item numbers of this class; mixtures of one or more gases listed under the other item numbers of this class with one or more vapours of substances which are not excluded from carriage under RID, on condition that during carriage:

1. The mixture remains entirely gaseous;
2. All possibility of a dangerous reaction is excluded.

13. Test gases

Gases and mixtures of gases not listed under other item numbers of this class and used only in laboratory tests, on condition that during carriage:

1. The gas or mixture of gases remains entirely gaseous;
2. All possibility of a dangerous reaction is excluded.

G. EMPTY RECEPTACLES

14. *Empty receptacles, empty tank wagons and empty tank-containers*, uncleaned, which have contained tetrafluoromethane of item 1 (*a*), substances of items 1 (*at*) to (*ct*), 2 (*b*) to (*ct*), 3 to 6, carbon dioxide and nitrous oxide of item 7 (*a*), substances of items 7 (*b*), 8 (*b*), 9, 12 and 13.

NOTE. 1. Those which, after having been emptied of substances listed in item 14, still contain small residual amounts are regarded as empty receptacles, empty tank wagons and empty tank-containers, uncleaned.

2. Empty receptacles, empty tank wagons and empty tank-containers, uncleaned, which have contained gases of item 1 (*a*) other than tetrafluoromethane, gases of item 2 (*a*), 7 (*a*) other than carbon dioxide and nitrous oxide, and gases of item 8 (*a*) are not subject to the requirements of RID.

201a Gases and articles handed over for carriage in conformity with the following provisions are not subject to the requirements of Section 2, "Conditions of carriage":

- (*a*) Compressed gases which are neither inflammable nor toxic nor corrosive and whose pressure in the receptacle, referred to a temperature of 15°C, does not exceed 200 kPa (2 bar); the same applies to mixtures of gases containing not more than 2% of inflammable components;
- (*b*) Liquefied gases, in quantities not exceeding 60 litres, or in quantities of less than 5 litres with not more than 25 g hydrogen, contained in freezing appliances (refrigerators, ice machines, etc.) and necessary for their operation;
- (*c*) Carbon dioxide of item 5 (*a*) in metal capsules (sodors, sparklets), if the carbon dioxide in the gaseous state does not contain more than 0.5% air and the capsules contain not more than 25 g carbon dioxide and not more than 0.75 g per cm<sup>3</sup> of capacity;
- (*d*) Articles of items 10 and 11 of a capacity not exceeding 50 cm<sup>3</sup>. A package of such articles shall not weigh more than 10 kg;
- (*e*) Liquefied petroleum gases contained in the tanks of motor-driven vehicles which are firmly secured to the vehicles. The fuel tap between the tank and the engine shall be closed; the ignition shall be switched off.



## 2. *Conditions of carriage*

(The requirements relating to empty receptacles are included under F.)

### A. PACKAGES

#### 1. *General conditions of packing*

202 (1) The materials of which the receptacles and their closures are made shall not be liable to attack by the contents or form harmful or dangerous compounds therewith.

NOTE. Care shall be taken not to allow any moisture to enter the receptacles when they are being filled, and to dry receptacles completely after hydraulic pressure tests (see marg. 216) carried out with water or with aqueous solutions.

(2) Packagings, including their closures, shall be sufficiently rigid and strong in all their parts to prevent any loosening during carriage and to meet the normal requirements of carriage. When outer packagings are prescribed, the receptacles shall be firmly secured therein. Unless otherwise specified in the section "Packing of individual substances", inner packagings may be enclosed in outer packagings either singly or in groups.

(3) Metal receptacles intended for the carriage of gases of items 1 to 6 and 9 shall contain only the gas for which they have been tested and whose name is inscribed on the receptacle [see marg. 218 (1) (a)].

Exceptions are allowed:

1. For metal receptacles tested for one of the substances of items 3 (a) or 4 (a) or for bromotrifluoromethane, chlorotrifluoromethane or trifluoromethane of item 5 (a). These receptacles may also be filled with another substance of those items provided that the minimum test pressure prescribed for that substance does not exceed the test pressure of the receptacle and that the name of that substance and the maximum filling mass allowed for it are inscribed on the receptacle;
2. For metal receptacles tested for hydrocarbons of items 3 (b) or 4 (b). These receptacles may also be filled with another hydrocarbon, provided that the minimum test pressure prescribed for that substance does not exceed the test pressure of the receptacle and that the name of that substance and the maximum filling mass allowed for it are inscribed on the receptacle.

NOTE to 1 and 2. For tank wagons, see Appendix XI; for tank-containers, see Appendix X, under 2.7.1.

For 1 and 2, see also marg. 215, 218 (1) (a) and 220 (1) to (3).

(4) A change in the use to which a receptacle is assigned is allowed in principle if it does not conflict with national regulations; it requires, however, the approval of the competent authority and replacement of the former markings by markings relating to the new use.

#### 2. *Packing of individual substances*

##### a. *Nature of receptacles*

203 (1) Receptacles intended for the carriage of gases of items 1 to 6, 9, 12 and 13 shall be so closed and leak-proof as to prevent any escape of the gases.

(2) These receptacles shall be made of carbon steel or of alloy steel (special steels). The following may, however, be used:

(a) Copper receptacles for:

1. Compressed gases of items 1 (a), (b) and (bt) and 2 (a) and (b) whose filling pressure, referred to a temperature of 15°C, does not exceed 2 MPa (20 bar);

2. Liquefied gases of item 3 (*a*); sulphur dioxide of item 3 (*at*); dimethyl ether of item 3 (*b*); ethyl chloride and methyl chloride of item 3 (*bt*); vinyl chloride of item 3 (*c*); vinyl bromide of item 3 (*ct*); mixtures F 1, F 2 and F 3 of item 4 (*a*); ethylene oxide containing not more than 10% carbon dioxide by mass [item 4 (*ct*)];
- (b) Aluminium-alloy receptacles (see Appendix II, under A; for tank wagons, see Appendix XI; for tank-containers, see Appendix X, under 2.2.1) for:
  1. Compressed gases of items 1 (*a*), (*b*) and (*bt*), nitric oxide (nitrogen monoxide) of item 1 (*ct*), and compressed gases of items 2 (*a*), (*b*) and (*bt*);
  2. Liquefied gases of item 3 (*a*); sulphur dioxide of item 3 (*at*); liquefied gases of item 3 (*b*) except methylsilane; hydrogen selenide and methyl mercaptan of item 3 (*bt*); ethylene oxide of item 3 (*ct*); liquefied gases of items 4 (*a*) and (*b*); ethylene oxide containing not more than 10% carbon dioxide by mass of item 4 (*ct*); and liquefied gases of items 5 (*a*) and (*b*) and 6 (*a*) and (*c*). Sulphur dioxide of item 3 (*at*) and substances of items 3 (*a*) and 4 (*a*) shall be dry;
  3. Dissolved acetylene of item 9 (*c*).

All gases which are to be carried in aluminium-alloy receptacles must be free from alkaline impurities.

204

(1) Receptacles for dissolved acetylene [Item 9 (*c*)] shall be entirely filled with a porous material, uniformly distributed, of a type approved by the competent authority, which

- (a) Does not attack the receptacles or form harmful or dangerous compounds either with acetylene or with the solvent;
- (b) Does not shake down, even after prolonged use or through jolting, at temperatures up to 60°C;
- (c) Is capable of preventing the spread of decomposition of the acetylene in the mass.

(2) The solvent shall not attack the receptacles.

205

(1) The following liquefied gases may, in addition, be carried in thick-walled glass tubes on condition that the quantity of substance in each tube and the degree of filling of the tubes do not exceed the figures indicated below:

Names of gases	Quantity of substance	Degree of filling of tube
Carbon dioxide, nitrous oxide N <sub>2</sub> O. [item 5( <i>a</i> )], ethane, ethylene [item 5 ( <i>b</i> )].....	3 g	one-half of capacity
Ammonia, chlorine, methyl bromide [item 3 ( <i>at</i> )], cyclopropane [item 3 ( <i>b</i> )], ethyl chloride [item 3 ( <i>bt</i> )].....	20 g	two-thirds of capacity
Phosgene, sulphur dioxide [item 3 ( <i>at</i> )].....	100 g	three quarters of capacity

(2) The glass tubes shall be flame-sealed and secured separately by diatomaceous earth cushioning in closed sheet-metal capsules which shall be placed in a wooden case or in some other outer packaging of sufficient strength (see also marg. 222).

(3) For sulphur dioxide of item 3 (*at*), stout glass siphons containing not more than 1.5 kg of substance and filled to not more than 88% are also allowed.

The siphons shall be secured by diatomaceous earth, sawdust or powdered carbonate of lime, or by a mixture of the latter two, in strong wooden cases or in some other outer packaging of sufficient strength. A package shall not weigh more than 100 kg. If it weighs more than 30 kg, it shall be fitted with means of handling.

206 (1) Gases of items 3 (a) and 3 (b) other than methylsilane, item 3 (br) other than arsine, dichlorosilane, dimethylsilane, hydrogen selenide and trimethylsilane, 3 (c) and 3 (cr) other than cyanogen chloride, and mixtures of 4 (a) and 4 (b) may also, on condition that the mass of liquid per litre of capacity does not exceed either the maximum mass of contents indicated in marg. 220 or 150 g per tube, be contained in thick-walled glass tubes or in thick-walled metal tubes made of a metal allowed by marg. 203 (2). The tubes shall be free from faults liable to impair their strength; in particular, internal stresses in glass tubes shall have been suitably relieved and the thickness of the tube walls shall not be less than 2 mm. The leakproofness of the closure system shall be ensured by an additional device (cap, crown, seal, binding, etc.) capable of preventing any loosening of the closure system during carriage. The tubes shall be secured by cushioning material in small boxes made of wood or fibreboard, the number of tubes per small box being such that the mass of the liquid contained in a small box does not exceed 600 g. These small boxes shall be placed in wooden cases or in some other outer packaging of sufficient strength; if the liquid contents of a case weigh more than 5 kg, the case shall be lined with soft-soldered sheet metal.

(2) A package shall not weigh more than 75 kg.

207 (1) Gases of item 7 (a) other than carbon dioxide and nitrous oxide, and of item 8 (a) other than mixtures containing carbon dioxide and nitrous oxide, shall be enclosed in closed, double-walled metal receptacles which are so insulated that they cannot become coated with dew or hoar-frost and which are fitted with safety valves.

(2) Gases of item 7 (a) other than carbon dioxide and nitrous oxide, and of item 8 (a) other than mixtures containing carbon dioxide and nitrous oxide, may also be enclosed in receptacles which are not hermetically closed and which are:

- (a) Double-walled vacuum-jacketed glass receptacles surrounded by an absorbent insulating material; these receptacles shall be protected by iron-wire baskets and placed in metal cases; or
- (b) Metal receptacles protected against heat transmission in such a way that they cannot become coated with dew or hoar-frost; the capacity of these receptacles shall not exceed 100 litres.

(3) The metal cases referred to in subparagraph (2) (a) and the receptacles referred to in subparagraph (2) (b) above shall be fitted with means of handling. The openings of the receptacles referred to in subparagraphs (2) (a) and (b) shall be fitted with devices allowing gases to escape, preventing any splashing out of the liquid, and so fixed that they cannot fall out. In the case of oxygen of item 7 (a) and mixtures containing oxygen of item 8 (a), the devices referred to above and the absorbent insulating material surrounding the receptacles referred to in subparagraph (2) (a) shall be made of incombustible materials.

208 (1) Aerosol dispensers (item 10) and non-refillable containers of gas under pressure (item 11) shall satisfy the following requirements:

- (a) Aerosol dispensers containing only a gas or a mixture of gases, and non-refillable containers of gas under pressure, shall be made of metal. This requirement shall not apply to non-refillable plastics containers of gas under pressure with a maximum capacity of 100 ml for butane. Other aerosol dispensers shall be made of metal, a plastics material or glass. Receptacles made of metal and having an outside diameter of not less than 40 mm shall have a concave bottom;

- (b) Receptacles made of materials liable to shatter, such as glass or certain plastics materials, shall be enclosed in a device (close-mesh wire netting, flexible cover made of a plastics material, etc.) affording protection against fragments and their dispersal. Receptacles whose capacity does not exceed 150 cm<sup>3</sup> and whose internal pressure at 20°C is below 150 kPa (1.5 bar) are exempted from this requirement;
- (c) The capacity of receptacles made of metal shall not exceed 1,000 cm<sup>3</sup>; that of receptacles made of a plastics material or of glass shall not exceed 500 cm<sup>3</sup>;
- (d) Each model of receptacle shall, before being put into service, satisfy a hydraulic pressure test carried out in conformity with Appendix II, marg. 1291. The internal pressure to be applied (test pressure) shall be 1.5 times the internal pressure at 50°C, with a minimum pressure of 1 MPa (10 bar);
- (e) The release valves of aerosol dispensers, and their dispersal devices, shall ensure that the dispensers are so closed as to be leak-proof and shall be protected against accidental opening. Valves and dispersal devices which close only by the action of the internal pressure are not to be accepted.

(2) The following gases shall be accepted as propellents, or as constituents of propellents, or as filler gases, for aerosol dispensers:

Gases of items 1 (a) and (b), 2 (a) and (b) and 3 (a) and (b), other than methylsilane; ethyl chloride of item 3 (bt); 1,3-butadiene, of item 3 (c); trifluorochloroethylene of item 3 (ct); gases of items 4 (a) and (b); gases of items 5 (a) and (b) other than silane; gases of items 5 (c), 6 (a) and (c).

(3) All the gases listed under (2) and, in addition, the following gases shall be accepted as filling gases for non-refillable containers of gas under pressure: methyl bromide of item 3 (at); dimethylamine, ethylamine, methylamine, methyl mercaptan and trimethylamine of item 3 (bt); ethylene oxide, methyl vinyl ether and vinyl bromide of item 3 (ct); ethylene oxide containing not more than 10% carbon dioxide by mass of item 4 (ct).

209

(1) The internal pressure at 50°C of aerosol dispensers and of non-refillable containers of gas under pressure shall not exceed two-thirds of the test pressure of the receptacle and shall not be more than 1.2 MPa (12 bar).

(2) Aerosol dispensers and non-refillable containers of gas under pressure shall be so filled that at 50°C the liquid phase does not exceed 95% of their capacity. The capacity of aerosol dispensers is the available volume in a closed dispenser fitted with the valve support, the valve and the dip tube.

(3) All aerosol dispensers and non-refillable containers for gas under pressure shall satisfy a leakproofness test in conformity with Appendix II, marg. 1292.

210

(1) Aerosol dispensers and non-refillable containers of gas under pressure shall be placed in wooden cases or strong fibreboard or metal boxes; aerosol dispensers made of glass or a plastics material liable to shatter shall be separated from one another by interposed sheets of fibreboard or of another suitable material.

(2) A package shall not weigh more than 50 kg if fibreboard boxes are used or more than 75 kg if other packagings are used.

(3) For full wagon loads comprising, in whole or in part, aerosol dispensers made of metal, these may also be packed as follows: the aerosol dispensers shall be grouped together in units on trays with a suitable plastics wrapping by a process of sealing; these units shall be suitably stacked and secured on pallets.

b. *Conditions governing metal receptacles*

[Not applicable either to the metal tubes mentioned in marg. 206, the receptacles mentioned in marg. 207 (2) (b), or the aerosol dispensers or non-refillable metal containers for gas under pressure mentioned in marg. 208; for tank wagons, see Appendix XI; for tank-containers, see Appendix X.]

1. Construction and fittings [see also marg. 233 (2)].

211

(1) At the test pressure, the stress in the metal at the most severely stressed point of the receptacle (marg. 215, 219 and 220) shall not exceed three-quarters of the guaranteed minimum yield stress  $R_e$ . By "yield stress" is meant the stress at which a permanent elongation of 2% (i.e. 0.2%) or, for austenitic steels, 1% of the gauge length on the test piece has been produced.

NOTE. In the case of sheet metal the axis of the tensile test-piece shall be at right angles to the direction of rolling. The permanent elongation at fracture ( $l = 5d$ ) shall be measured on a test-piece of circular cross-section in which the gauge length  $l$  is equal to five times the diameter  $d$ ; if test pieces of rectangular cross-section are used, the gauge length shall be calculated by the formula  $l = 5.65\sqrt{F_0}$ , where  $F_0$  indicates the initial cross-sectional area of the test piece.

(2) (a) Steel receptacles whose test pressure exceeds 6 MPa (60 bar) shall be of seamless construction or welded. For welded receptacles, steels (carbon or alloy) of fully satisfactory weldability shall be used.

(b) Receptacles whose test pressure does not exceed 6 MPa (60 bar) shall either conform to the provisions of subparagraph (a) above or be riveted or hard-soldered (for tank wagons, see Appendix XI; for tank-containers see Appendix X), on condition that the manufacturer guarantees the workmanship of the riveting and hard-soldering and that the competent authority of the country of origin has given its approval.

(3) Aluminium-alloy receptacles shall be seamless or welded.

(4) Welded receptacles are to be accepted only on condition that the manufacturer guarantees the workmanship of the welding and that the competent authority of the country of origin has given its approval.

212

(1) A distinction is made between the following types of receptacles:

(a) Cylinders of a capacity not exceeding 150 litres;

(b) Receptacles of a capacity of not less than 100 litres [with the exception of cylinders in conformity with subparagraph (a)] and not more than 1,000 litres (e.g. cylindrical receptacles equipped with rolling hoops and receptacles on skids);

(c) Tanks of a capacity of more than 1,000 litres;

NOTE. For tank wagons and receptacles of any other kind fixed on their under-frame, see Appendix XI; for tank-containers, see Appendix X.

(d) Assemblies, known as "frames" of cylinders in conformity with subparagraph (I) (a) interconnected by a manifold and held firmly together by a metal fitting;

(e) Batteries of receptacles and batteries of tanks.

NOTE. 1. By "battery of receptacles" or "battery of tanks" is meant an assemblage of several receptacles as defined in (1) (b) or of tanks as defined in (1) (c) of this marginal, interconnected by a manifold and permanently mounted on a frame.

2. For battery wagons, see Appendix XI; for multiple-element tank-containers, see Appendix X.

- (2) (a) If, under the regulations of the country of departure, cylinders of (1) (a) are required to be fitted with a device to prevent rolling, this device shall not be integral with the valve cap [marg. 213 (2)].
- (b) Receptacles in conformity with subparagraph (1) (b) which are capable of being rolled shall be equipped with rolling hoops or some other means of protection against damage due to rolling (for example, by spraying corrosion-resistant metal on to the receptacle's outer surface).
- Receptacles in conformity with subparagraphs (1) (b) and (1) (c) which are not capable of being rolled shall be fitted with devices (skids, rings, straps) which ensure that they can be safely handled by mechanical means and which shall be so arranged as not to impair the strength of and not to cause undue stresses in the wall of the receptacle.
- (c) Frames of cylinders in conformity with subparagraph (1) (d) and batteries of receptacles in conformity with subparagraph (1) (e) shall be fitted with devices ensuring that they can be handled safely. The manifold and the master cock shall be situated within the frame and be so fixed as to be protected against any damage.
- (3) (a) With the exception of gases of items 7 and 8, gases of Class 2 may be carried in cylinders in conformity with subparagraph (1) (a).

NOTE. For possible limitations on the capacity of cylinders for certain gases, see marg. 219.

- (b) With the exception of fluorine and silicon tetrafluoride [item 1 (at)]; nitric oxide (NO) [item 1 (ct)]; mixtures of hydrogen with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume [item 2 (bt)]; mixtures of hydrogen with not more than 10% diborane by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% diborane by volume [item 2 (ct)]; boron trichloride, chlorine trifluoride, nitrosyl chloride, sulphuryl fluoride, and tungsten hexafluoride [item 3 (at)]; methylsilane [item 3 (b)]; arsine, dichlorosilane, dimethylsilane, hydrogen selenide and trimethylsilane [item 3 (bt)]; cyanogen chloride, cyanogen and ethylene oxide [item 3 (ct)]; mixtures of methylsilanes [item 4 (bt)]; ethylene oxide containing not more than 50% methyl formate by mass with nitrogen up to a maximum total pressure of 1 MPa (10 bar) at 50°C [item 4 (ct)]; silane [item 5 (b)]; and substances of items 5 (bt), 5 (ct), 7, 8, 12 and 13, gases of Class 2 may be carried in receptacles in conformity with subparagraph (1) (b).
- (c) For tanks in conformity with subparagraph (1) (c), see Appendices X and XI.
- (d) With the exception of silicon tetrafluoride [item 1 (at)]; nitric oxide (NO) [item 1 (ct)]; mixtures of hydrogen with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume [item 2 (bt)];

mixtures of hydrogen with not more than 10% diborane by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% diborane by volume [item 2 (*ct*)]; boron trichloride, chlorine trifluoride, nitrosyl chloride, sulphuryl fluoride, and tungsten hexafluoride [item 3 (*at*)]; methylsilane [item 3 (*b*)]; arsine, dichlorosilane, dimethylsilane, hydrogen selenide and trimethylsilane [item 3 (*bt*)]; cyanogen chloride, cyanogen and ethylene oxide [item 3 (*ct*)]; mixtures of methylsilanes [item 4 (*bt*)]; substances of items 4 (*c*) and 4 (*ct*) other than dichlorodifluoromethane containing 12% ethylene oxide by mass; nitrous oxide of item 5 (*a*); silane [item 5 (*b*)]; and substances of items 5 (*bt*), 5 (*ct*), 7, 8, 12 and 13, gases of Class 3 may be carried in frames of cylinders in conformity with subparagraph (1) (*d*). The individual cylinders in a frame of cylinders shall contain only one and the same compressed gas, liquefied gas or gas dissolved under pressure. Each cylinder in a frame of cylinders for fluorine [item 1 (*at*)] or dissolved acetylene [item 9 (*c*)] shall however be fitted with a tap. The cylinders in a frame of cylinders for acetylene shall all contain the same porous material (marg. 204).

- 213 (1) Openings for filling and emptying receptacles shall be fitted with flap valves or needle valves. Valves of other types may be allowed, however, if they present equivalent guarantees of safety and have been approved in the country of origin. Nevertheless, whatever the type of valve adopted, its system of attachment shall be strong and such that its satisfactory condition can be verified easily before each filling.

Receptacles in conformity with marg. 212 (1) (*b*) and (*c*) shall not have more than two openings, for filling and emptying respectively, in addition to the manhole (if one is provided), which shall be closed by an efficient closure, and to the necessary orifice for the removal of deposits. Nevertheless, receptacles of a capacity of not less than 100 l intended for the carriage of dissolved acetylene [item 9 (*c*)] may have more than two openings for filling and emptying.

Similarly, receptacles in conformity with marg. 212 (1) (*b*) and (*c*) intended for the carriage of substances of items 3 (*b*) and 4 (*b*) may be provided with other openings intended in particular for verifying the level of the liquid and the gauge pressure.

(2) Valves shall be effectively protected by caps or fixed flanges. Caps shall possess vent-holes of sufficient cross-sectional area to evacuate gases if leakage occurs at the valves. The caps or flanges shall adequately protect the valve if the cylinder falls and during carriage and stacking. Valves placed inside the neck of the receptacles and protected by a screw-threaded stopper, and receptacles carried packed in protective cases, shall not require a cap. Likewise, no protective cap shall be required for the valves of frames of cylinders.

(3) Receptacles containing fluorine [item 1 (*at*)], chlorine trifluoride [item 3 (*at*)] or cyanogen chloride [item 3 (*ct*)] shall, whether or not they are carried packed in protective cases, be fitted with steel caps. These caps shall have no openings and shall, throughout carriage, be fitted with a gasket ensuring gas-tightness and made of a material not liable to attack by the contents of the receptacle.

- 214 (1) In the case of receptacles containing boron trifluoride or fluorine [item 1 (*at*)], chlorine trifluoride or liquefied ammonia [item 3 (*at*)], ammonia dissolved in water [item 9 (*at*)], nitrosyl chloride [item 3 (*at*)], dimethylamine, ethylamine, methylamine or trimethylamine [item 3 (*bt*)], valves made of copper or of any other metal liable to be attacked by these gases are not to be accepted.

(2) The use of substances containing grease or oil for ensuring leakproofness of joints or for maintaining the closure devices of receptacles used for oxygen [item 1 (a)], fluorine [item 1 (at)], mixtures with oxygen [item 2 (a)], nitrogen dioxide, chlorine trifluoride [item 3 (at)], nitrous oxide [item 5 (a)] or mixtures of item 12 containing more than 10% oxygen by volume is prohibited.

(3) The following requirements shall apply to the construction of the receptacles referred to in marg. 207 (1):

- (a) The materials and construction of the receptacles shall be in conformity with the requirements of Appendix II, B, marg. 1250 to 1254. All the mechanical and technological characteristics of the material used shall be established for each receptacle at the first test; in so far as the impact strength and the bending coefficient are concerned, see Appendix II under B, marg. 1255 to 1261.
- (b) Receptacles shall be fitted with a safety valve which shall be capable of opening at the working pressure shown on the receptacle. The valves shall be so constructed as to work perfectly even at their lowest working temperature. Their reliability of functioning at that temperature shall be established and checked by testing each valve or a sample of valves of the same type of construction.
- (c) The vents and safety valves of the receptacles shall be so designed as to prevent the liquid from splashing out.
- (d) The closing devices shall be so arranged that they cannot be opened by unauthorized persons.
- (e) Receptacles whose filling is measured by volume shall be provided with a level indicator.
- (f) The receptacles shall be thermally insulated. The thermal insulation shall be protected against impact by means of continuous metal sheathing. If the space between the receptacle and the metal sheathing is airless (vacuum insulation), the protective sheathing shall be designed to withstand without deformation an external pressure of at least 100 kPa (1 bar). If the sheathing is so closed as to be gas-tight (e.g. in the case of vacuum insulation), a device shall be provided to prevent any dangerous pressure from developing in the insulating layer in the event of inadequate gas-tightness of the receptacle or its fittings. The device shall prevent moisture from entering the insulation.

(4) In the case of receptacles containing mixtures P 1 and P 2 of item 4 (c) or dissolved acetylene [item 9 (c)], metal parts of closing devices in contact with the contents shall not contain more than 70% copper. Receptacles for dissolved acetylene [item 9 (c)] may also have stop valves taking yoke connectors.

(5) Receptacles containing oxygen of item 1 (a) or item 7 (a) and fitted in fish-tanks are likewise to be accepted if they are provided with an apparatus enabling the oxygen to escape gradually.

2. Official test of receptacles (for aluminium-alloy receptacles, see also Appendix II under A).

215

(1) Metal receptacles shall be subjected to initial and periodic tests under the supervision of an expert approved by the competent authority. The nature of these tests is specified in marg. 216 and 217.

(2) In order to ensure that the requirements of marg. 204 and 221 (2) are complied with, tests of receptacles intended to contain dissolved acetylene [item 9 (c)] shall comprise, in addition, an examination of the nature of the porous material and the quantity of the solvent.



- 216 (1) The initial test of new or unused receptacles comprises:
- A. On an adequate sample of receptacles:
- (a) The test of the material of construction shall include at least determination of the yield stress, tensile strength and permanent elongation at fracture; the values yielded by these tests shall comply with national regulations;
- (b) Measurement of thickness at the thinnest point of the wall and calculation of the stress;
- (c) Checking the homogeneity of the material for each manufacturing batch, and inspecting the external and internal condition of the receptacles;
- B. For all receptacles:
- (d) A hydraulic pressure test in conformity with the provisions of marg. 219 to 221;
- (e) An inspection of the markings on the receptacles (see marg. 218).
- C. In addition, for receptacles intended for the carriage of dissolved acetylene [item 9 (c)]:
- (f) Inspection as required by national regulations.
- (2) Receptacles shall withstand the test pressure without undergoing permanent deformation or exhibiting cracks.
- (3) At the periodic inspection the following shall be repeated:
- The hydraulic pressure test, check of the external and internal condition of the receptacle (e.g. by weighing, internal inspection, checks of wall thickness), verification of the equipment and markings and, if necessary, verification of the characteristics of the material by suitable tests.
- Periodic inspections shall be carried out:
- (a) Every 2 years in the case of receptacles intended for the carriage of gases of items 1 (*at*) and (*ct*); town gas of item 2 (*bt*); gases of item 3 (*at*) other than ammonia, hexafluoropropylene and methyl bromide; cyanogen chloride of item 3 (*ct*); and substances of item 5 (*at*) (see also Appendix XI);
- (b) Every 5 years in the case of receptacles intended for the carriage of other compressed and liquefied gases (subject to the provisions of subparagraph (c) below) and of receptacles for the carriage of ammonia dissolved under pressure [item 9 (*at*)];
- (c) Every 10 years in the case of receptacles intended for the carriage of gases of item 1 (*a*), other than oxygen; of mixtures of nitrogen with rare gases of item 2 (*a*); of gases of items 3 (*a*) and (*b*) other than 1,1-difluoroethane, 1-chloro-1,1-difluoroethane, methylsilane, dimethyl ether and 1,1,1-trifluoroethane, of mixtures of gases of items 4 (*a*) and (*b*) if the receptacles have a capacity of not more than 150 litres and the country of origin does not prescribe a shorter interval;
- (d) In the case of receptacles intended for the carriage of dissolved acetylene [item 9 (*c*)], marg. 217 (1) shall apply, and in that of receptacles conforming to marg. 207 (1), marg. 217 (2) shall apply.
- 217 (1) The external condition (corrosion, deformation) of, and the condition (loosening, settlement) of the porous material in, receptacles intended for the carriage of dissolved acetylene [item 9 (*c*)] shall be examined every 5 years. Sampling shall be performed by cutting up, if considered necessary, a suitable number of receptacles and inspecting them internally for corrosion and for any

changes that may have occurred in the materials of construction and in the porous material.

(2) Receptacles conforming to marg. 207 (1) shall be subjected every 5 years to external inspection and a leakproofness test. The leakproofness test shall be carried out with the gas contained in the receptacle or with an inert gas at a pressure of 200 kPa (2 bar). Checking shall be by means of a pressure gauge or by vacuum measurement. The thermal insulation shall not be removed. There shall be no drop in pressure during the 8-hour test period. Changes resulting from the nature of the test gas or from variations in temperature shall be taken into account.

3. Marks on receptacles (for tank wagons, see Appendix XI; for tank-containers, see Appendix X).

218 (1) Metal receptacles shall bear the following particulars in clearly legible and durable characters:

- (a) One of the names of the gas or of the mixture of gases in full, as given in marg. 201, items 1 to 9, the name or mark of the maker or owner, and the number of the receptacle [see also marg. 202 (3)]. In the case of halogenated hydrocarbons of items 1 (a), 3 (a), (at), (b) and (ct), 4 (a), 5 (a) and 6 (a), the use of the letter R followed by the substance identification number is also permitted;
- (b) The tare of the receptacle, without fittings or accessories;
- (c) In addition, in the case of receptacles intended for liquefied gases, the tare of the receptacle including such fittings and accessories as valves, metal plugs, etc., but excluding the protective cap;
- (d) The test pressure (see marg. 219 to 221) and the date (month, year) of the last test undergone (see marg. 216 and 217);
- (e) The stamp of the expert who carried out the tests and inspections; and in addition;
- (f) In the case of compressed gases or mixtures of compressed gases [items 1, 2, 12 and 13]; the maximum filling pressure at 15°C allowed for the receptacle in question (see marg. 219);
- (g) In the case of boron trifluoride [item 1 (at), liquefied gases (items 3 to 6) and ammonia dissolved in water [item 9 (at)]: the maximum filling allowed, and the capacity. In the case of deeply-refrigerated gases of items 7 and 8: the capacity;
- (h) In the case of acetylene dissolved in a solvent [item 9 (c)]: the permitted filling pressure [see marg. 221 (2)]; the mass of the empty receptacle including the mass of the fittings and accessories, the porous material and the solvent;
- (i) In the case of mixtures of gases of item 12 and test gases of item 13, the words "mixtures of gases" or "test gases", as the case may be shall be engraved on the receptacle as an indication of the load. The exact description of the contents shall be shown in a durable form throughout carriage;
- (k) In the case of metal receptacles which, under marg. 202 (3), are accepted for the carriage of various gases (multi-purpose receptacles), the exact description of the contents shall be shown in a durable form during carriage.

NOTE to (b) and (c). These particulars of the mass, in so far as they are not already marked on the receptacle, shall be so marked at the next periodic test.

(2) The marks shall be engraved either on a reinforced part of the receptacle or on a ring or data plate immovably fixed to the receptacle. In addition, the name of the substance may be indicated on the receptacle by an inscription in adherent and clearly visible paint, or by any other equivalent process.

*c. Test pressure, degree of filling and limitation of capacity of receptacles*  
[see also marg. 233 (2)]

219 (1) In the case of receptacles intended for the carriage of compressed gases of items 1, 2 and 12, the internal pressure (test pressure) to be applied in the hydraulic pressure test shall be at least one and one-half times the filling pressure at 15°C indicated on the receptacle, but shall not be less than 1 MPa (10 bar).

(2) In the case of receptacles used for the carriage of substances of item 1 (*a*) other than tetrafluoromethane, of deuterium and hydrogen of item 1 (*b*) and of gases of item 2 (*a*), the filling pressure shall not exceed 30 MPa (300 bar) referred to a temperature of 15°C. In the case of batteries of receptacles, and batteries of large receptacles, the filling pressure shall not exceed 25 MPa (250 bar) referred to a temperature of 15°C.

In the case of receptacles, batteries of receptacles, and batteries of large receptacles used for the carriage of other gases of items 1 and 2, the filling pressure shall not exceed 20 MPa (200 bar) referred to a temperature of 15°C.

(3) In the case of receptacles intended for the carriage of fluorine [item 1 (*at*)], the internal pressure (test pressure) to be applied in the hydraulic pressure test shall be equal to 20 MPa (200 bar) and filling pressure shall not exceed 2.8 MPa (28 bar) at a temperature of 15°C; in addition, no receptacle may contain more than 5 kg fluorine.

In the case of receptacles intended for the carriage of boron trifluoride [item 1 (*at*)], the hydraulic pressure to be applied in the test (test pressure) shall be 30 MPa (300 bar) and the maximum permissible mass of the contents per litre of capacity shall not exceed 0.86 kg, or 22.5 MPa (225 bar) in which case the maximum permissible mass of the contents per litre of capacity shall not exceed 0.715 kg.

(4) In the case of receptacles intended for the carriage of nitric oxide [item 2 (*ct*)], the capacity shall be limited to 50 litres; the hydraulic pressure to be applied in the test (test pressure) shall be 20 MPa (200 bar) and the filling pressure shall not exceed 5 MPa (50 bar) at a temperature of 15°C.

(5) In the case of receptacles intended for the carriage of mixtures of hydrogen with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume [item 2 (*bt*)]; mixtures of hydrogen with not more than 10% diborane by volume and mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% diborane by volume [item 2 (*ct*)], the capacity shall be limited to 50 litres, the hydraulic pressure to be applied in the test (test pressure) shall be not less than 20 MPa (200 bar) and the filling pressure shall not exceed 5 MPa (50 bar) at a temperature of 15°C.

(6) Receptacles in conformity with marg. 207 (1) shall not, at filling temperature and at a pressure of 100 kPa (1 bar), be filled beyond 98% of their capacity.

When oxygen of item 7 (*a*) is carried, steps shall be taken to prevent any spillage of the liquid phase.

(7) When dissolved acetylene [item 9 (*c*)] is carried in receptacles in conformity with marg. 212 (1) (*b*) the capacity of the receptacles shall not exceed 150 litres.

(8) The capacity of receptacles intended for the carriage of mixtures of gases of item 12 shall not exceed 50 litres. The pressure of the mixture shall not exceed 15 MPa (150 bar) at a temperature of 15°C.

(9) The capacity of receptacles intended for the carriage of test gases of item 13 shall not exceed 50 litres. The filling pressure at a temperature of 15°C shall not exceed 7% of the test pressure of the receptacle.

(10) In the case of tungsten hexafluoride [item 3 (at)], the capacity of the receptacles shall be limited to 60 litres.

The capacity of receptacles for silicon tetrafluoride [item 1 (at)], boron trichloride, nitrosyl chloride and sulphuryl fluoride [item 3 (at)], methylsilane [item 3 (b)], arsine, dichlorosilane, dimethylsilane, hydrogen selenide and trimethylsilane [item 3 (bt)], cyanogen chloride and cyanogen [item 3 (ct)], mixtures of methylsilanes [item 4 (bt)], ethylene oxide containing not more than 50% methyl formate by mass with nitrogen up to a maximum total pressure of 1 MPa (10 bar) at 50°C [item 4 (ct)], silane [item 5 (b)] and substances of items 5 (bt) and (ct) shall be limited to 50 litres.

(11) In the case of receptacles intended for chlorine trifluoride [item 3 (at)], capacity shall be limited to 40 litres. After filling, a receptacle of chlorine trifluoride [item 3 (at)] shall be kept for not less than seven days in order to verify that it is leak-proof before it is handed over for carriage.

220

(1) In the case of receptacles intended for the carriage of liquefied gases of items 3 to 6, and in the case of those intended for the carriage of gases dissolved under pressure of item 9, the hydraulic pressure to be applied in the test (test pressure) shall be not less than 1 MPa (10 bar).

(2) In the case of liquefied gases of items 3 and 4, the following values shall be complied with for the hydraulic pressure to be applied to the receptacles in the test (test pressure), and for the maximum degree of filling allowed.\*

Description of substance	Item number	Min. test pressure bar	Max. mass of contents per litre of capacity kg
Bromochlorodifluoromethane (R 12B1) . . . . .	3 (a)	10	1.61
Chlorodifluoromethane (R 22) . . . . .	3 (a)	29	1.03
Chloropentafluoroethane (R 115) . . . . .	3 (a)	25	1.06
1-Chloro-2,2,2-trifluoroethane (R 133a) . . . . .	3 (a)	10	1.18
Dichlorodifluoromethane (R 12) . . . . .	3 (a)	18	1.15
Dichlorofluoromethane (R 21) . . . . .	3 (a)	10	1.23
1,2-Dichloro-1,1,2,2-tetrafluoroethane (R 114) . . . . .	3 (a)	10	1.30
Octafluorocyclobutane (R C318) . . . . .	3 (a)	11	1.34
Ammonia . . . . .	3 (at)	33	0.53
Boron trichloride . . . . .	3 (at)	10	1.19
Chlorine . . . . .	3 (at)	22	1.25
Chlorine trifluoride . . . . .	3 (at)	30	1.40
Hexafluoropropylene (R 1216) . . . . .	3 (at)	22	1.11
Hydrogen bromide . . . . .	3 (at)	60	1.54
Methyl bromide . . . . .	3 (at)	10	1.51
Nitrogen dioxide . . . . .	3 (at)	10	1.30
Nitrosyl chloride . . . . .	3 (at)	13	1.10
Phosgene . . . . .	3 (at)	20	1.23
Sulphur dioxide . . . . .	3 (at)	14	1.23
Sulphuryl fluoride . . . . .	3 (at)	50	1.10
Tungsten hexafluoride . . . . .	3 (at)	10	2.70
Butane . . . . .	3 (b)	10	0.51
1-Butene . . . . .	3 (b)	10	0.53
1-Chloro-1, 1-difluoroethane (R 142b) . . . . .	3 (b)	10	0.99

Description of substance	Item number	Min. test pressure bar	Max. mass of contents per litre of capacity kg
Cis-2-butene	3 (b)	10	0.55
Cyclopropane	3 (b)	20	0.53
1,1-Difluoroethane (R-152a)	3 (b)	18	0.79
Dimethyl ether	3 (b)	18	0.58
Isobutane	3 (b)	10	0.49
Isobutene	3 (b)	10	0.52
Methylsilane	3 (b)	225	0.39
Propane	3 (b)	25	0.42
Propylene	3 (b)	30	0.43
Trans-2-butene	3 (b)	10	0.54
1,1,1-Trifluoroethane	3 (b)	35	0.75
Arsine	3 (bt)	42	1.10
Dichlorosilane	3 (bt)	10	0.90
Dimethylamine	3 (bt)	10	0.59
Dimethylsilane	3 (bt)	225	0.39
Ethylamine	3 (bt)	10	0.61
Ethyl chloride	3 (bt)	10	0.80
Hydrogen selenide	3 (bt)	31	1.60
Hydrogen sulphide	3 (bt)	55	0.67
Methylamine	3 (bt)	13	0.58
Methyl chloride	3 (bt)	17	0.81
Methyl mercaptan	3 (bt)	10	0.78
Trimethylamine	3 (bt)	10	0.56
Trimethylsilane	3 (bt)	225	0.39
1,2-Butadiene	3 (c)	10	0.59
1,3-Butadiene	3 (c)	10	0.55
Vinyl chloride	3 (c)	12	0.81
Cyanogen	3 (ct)	100	0.70
Cyanogen chloride	3 (ct)	20	1.03
Ethylene oxide	3 (ct)	10	0.78
Methyl vinyl ether	3 (ct)	10	0.67
Trifluorochloroethylene (R 1113)	3 (ct)	19	1.13
Vinyl bromide	3 (ct)	10	1.37
Mixture F 1	4 (a)	12	1.23
Mixture F 2	4 (a)	18	1.15
Mixture F 3	4 (a)	29	1.03
Mixture of gases R 500	4 (a)	22	1.01
Mixture of gases R 502	4 (a)	31	1.05
Mixture of 19 to 21% by mass dichlorodifluoromethane (R 12) and 79 to 81% by mass bromochlorodifluoromethane (R 12B1)	4 (a)	12	1.50
Mixtures of methyl bromide and chloropicrin	4 (at)	10	1.51
Mixture A (trade name: butane)	4 (b)	10	0.50
Mixture A O (trade name: butane)	4 (b)	15	0.47
Mixture A I	4 (b)	20	0.46
Mixture B	4 (b)	25	0.43
Mixture C (trade name: propane)	4 (b)	30	0.42
Mixtures of hydrocarbons containing methane	4 (b)	225	0.187
		300	0.244
Mixtures of methylsilanes	4 (bt)	225	0.39
Mixtures of methyl chloride and methylene chloride	4 (bt)	17	0.81
Mixtures of methyl chloride and chloropicrin	4 (bt)	17	0.81
Mixtures of methyl bromide and ethylene bromide	4 (bt)	10	1.51

Description of substance	Item number	Min. test pressure bar	Max. mass of contents per litre of capacity kg
Mixtures of 1,3-butadiene and hydrocarbons of item 3 (b) . . . .	4 (c)	10	0.50
Mixtures of methylacetylene/propadiene and hydrocarbons: . .			
Mixture P 1 . . . . .	4 (c)	30	0.49
Mixture P 2 . . . . .	4 (e)	24	0.47
Ethylene oxide containing not more than 10% carbon dioxide by mass . . . . .	4 (ct)	28	0.73
Ethylene oxide containing not more than 50% methyl formate by mass with nitrogen up to a maximum total pressure of 1 MPa (10 bar) at 50°C . . . . .	4 (ct)	25	0.80
Ethylene oxide with nitrogen up to a total pressure of 1 MPa (10 bar) at 50°C . . . . .	4 (ct)	15	0.78
Dichlorodifluoromethane containing 12% ethylene oxide by mass . . . . .	4 (ct)	18	1.09

\* 1. The test pressures prescribed are at least equal to the vapour pressures of the liquids at 70°C, reduced by 0.1 MPa (1 bar), the minimum test pressure required being however 1 MPa (10 bar).

2. In view of the high degree of toxicity of phosgene [item 3 (at)] and of cyanogen chloride [item 3 (ct)], the minimum test pressure for these gases has been fixed at 2 MPa (20 bar).

3. The maximum values prescribed for the degree of filling in kg/litre have been determined as follows: maximum degree of filling allowed = 0.95 times the specific gravity of the liquid phase at 50°C; in addition, the vapour phase must not disappear below 60°C.

(3) In the case of receptacles intended to contain liquefied gases of items 5 and 6, the degree of filling shall be such that the internal pressure at 65°C does not exceed the test pressure of the receptacles. The following values shall be complied with [see also paragraph (4)]:

Description of substance	Item number	Min. test pressure bar	Max. mass of contents per litre of capacity kg
Bromotrifluoromethane (R 13B1) . . . . .	5 (a)	42	1.13
		120	1.44
		250	1.60
		190	0.66
Carbon dioxide . . . . .	5 (a)	250	0.75
		100	0.83
Chlorotrifluoromethane (R 13) . . . . .	5 (a)	120	0.90
		190	1.04
		250	1.10
		200	1.10
Hexafluoroethane (R 116) . . . . .	5 (a)	180	0.68
		225	0.74
Nitrous oxide N <sub>2</sub> O . . . . .	5 (a)	250	0.75
		70	1.04
		140	1.33
Sulphur hexafluoride . . . . .	5 (a)	160	1.37
		190	0.87
		250	0.95
Trifluoromethane (R 23) . . . . .	5 (a)	130	1.24
		100	0.30
Xenon . . . . .	5 (at)	120	0.56
		150	0.67
		200	0.74
		100	0.30
Hydrogen chloride . . . . .	5 (at)	120	0.56
		150	0.67
		200	0.74

Description of substance	Item number	Min. test pressure		Max. mass of contents per litre of capacity kg
		bar		
Ethane . . . . .	5 (b)	95		0.25
		120		0.29
		300		0.39
Ethylene . . . . .	5 (b)	225		0.34
		300		0.37
Silane . . . . .	5 (b)	225		0.32
		250		0.41
Germane . . . . .	5 (bt)	250		1.02
Phosphine . . . . .	5 (bt)	225		0.30
		250		0.51
		250		0.77
1,1-Difluoroethylene . . . . .	5 (c)	250		0.64
Vinyl fluoride . . . . .	5 (e)	250		0.64
Diborane . . . . .	5 (ct)	250		0.072
Constituents (% by mass)				
Carbon dioxide containing 1 — 10% nitrogen, oxygen, air or rare gases by mass . . . . .	6 (a)	190	1	0.64
		190	1 to 10	0.48
		250	1	0.73
		250	1 to 10	0.59
Mixture of gases R 503 . . . . .	6 (a)	31		0.11
		42		0.20
		100		0.66
Carbon dioxide containing not more than 35% ethylene oxide by mass . . . . .	6 (c)	190		0.66
		250		0.75
Ethylene oxide containing more than 10% but not more than 50% carbon dioxide by mass . . . . .	6 (ct)	190		0.66
		250		0.75

(4) For substances of item 5 other than hydrogen chloride [item 5 (at)], germane and phosphine [item 5 (bt)] and diborane [item 5 (ct)], and of item 6, the use of receptacles tested at a lower pressure than that indicated in paragraph (3) for the substance in question is allowed. However the quantity of substance per receptacle shall not exceed that which would, at 65°C, produce inside the receptacle a pressure equal to the test pressure. In this case, the permissible maximum load shall be prescribed by the expert approved by the competent authority.

221

(1) In the case of gases dissolved under pressure of item 9, the following values shall be complied with for the hydraulic pressure to be applied to the receptacles in the test (test pressure), and for the maximum degree of filling allowed:

Description of substance	Item number	Min. test pressure		Max. mass of contents per litre of capacity kg
		bar		
Ammonia dissolved under pressure in water with more than 35% but not more than 40% ammonia . . . . .	9 (at)	10		0.80
		12		0.77
Dissolved acetylene . . . . .	9 (c)	60		see paragraph (2)

(2) In the case of dissolved acetylene [item 9 (c)], once equilibrium has been achieved at 15°C, the cylinder-filling pressure shall not exceed the figure prescribed by the competent authority for the porous mass, and which shall be engraved on the cylinder. The quantity of solvent and the quantity of acetylene shall likewise correspond to the figures specified in the approval.

### 3. *Mixed packing*

222

(1) Substances of this class other than substances of items 7 and 8 may be enclosed in the same package if they are contained:

(a) In metal pressure-receptacles of a volume not exceeding 10 litres;

(b) In thick-walled glass tubes or glass syphons in accordance with marg. 205 and 206, provided that these fragile receptacles are secured in accordance with the requirements of marg. 4 (7). The cushioning materials shall be suited to the properties of the contents. The inner packagings shall be placed in an outer packaging in which they shall be effectively kept apart from one another.

(2) Articles of items 10 and 11 may be enclosed in the same package under the conditions prescribed in marg. 210.

(3) In addition, substances packed in accordance with marg. 205 and 206 may be enclosed in the same package subject to the following special conditions.

(4) A package which meets the conditions of (1) and (3) shall not weigh more than 100 kg, or more than 75 kg if it contains fragile receptacles.

### *Special conditions*

Item No. or letter	Description of substance	Maximum quantity		Special requirements
		per receptacle	per package	
(a) (at) (b)	Gases packed in accordance with marg. 205  All gases listed in this marginal	in the quantities prescribed in marg. 205	6 kg	Chlorine [item 3 (at)] shall not be packed together with sulphur dioxide [item 3 (at)]
	Non-inflammable gases			Shall not be packed together with substances of Classes 1, 3, 4.2, 5.2 and 7
	Non-inflammable toxic gases			Shall not be packed together with substances of Classes 1, 3, 4.1, 4.2, 4.3, 5.1, 5.2, 7 and 8
(a) (at)	Gases packed in accordance with marg. 206  All gases listed in this marginal except ammonia and cyclopropane Non-inflammable gases	150 g	6 kg	Shall not be packed together with substances of Classes 1, 3, 4.2, 5.2 and 7
	Non-inflammable toxic gases			



Item No. or letter	Description of substance	Maximum quantity		Special requirements
		per receptacle	per package	
(b) (bt) (c) (ct)	Inflammable gases Inflammable toxic gases Chemically unstable gases Chemically unstable toxic gases	150 g	6 kg	Shall not be packed together with substances of Classes 1, 3, 4.1, 4.2, 4.3, 5.1, 5.2 and 7
3 (at) 3 (b)	Ammonia Cyclopropane	20 g	6 kg	

#### 4. Marking and danger labels on packages (see Appendix IX)

- 223 (1) Every package containing receptacles holding gases of items 1 to 9, 12 and 13 or non-refillable containers of gas under pressure of item 11 shall be marked legibly and indelibly with an indication of its contents, with the addition: "Class 2". This marking shall be in an official language of the country of origin and also in English, French, German or Italian, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

This provision need not be complied with if the receptacles and their markings are clearly visible.

(2) Packages containing aerosol dispensers of item 10 shall be marked with the word "AEROSOL" in clearly legible and indelible characters.

(3) In the case of full wagon loads, the markings referred to in paragraph (1) are not mandatory if the wagon itself bears these particulars on both sides.

- 224 (1) Packages which contain receptacles made of materials, such as glass or certain plastics, that are liable to shatter shall bear a label conforming to model No. 12.

(2) Every package containing gases of items 7 (a) and 8 (a) shall bear, on two opposite sides, labels conforming to model No. 11, and if the substances it contains are enclosed in glass receptacles [marg. 207 (2) (a)] it shall, in addition, bear a label conforming to model No. 12.

(3) Every package containing aerosol dispensers of items 10 (b) 2., (bt) 2., (c) and (ct) or non-refillable containers of gas under pressure of items 11 (b), (bt), (c) and (ct) shall bear a label conforming to model No. 3.

#### B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

- 225 (1) Substances and articles of Class 2, except the gases mentioned in marg. 212 (3) (b), may also be sent by express parcel. A package shall not weigh more than 50 kg.

(2) Carbon dioxide and nitrous oxide of item 7 (a), mixtures containing carbon dioxide and nitrous oxide of item 8 (a) and the gases of items 7 (b) and 8 (b) may only be carried in tank wagons or tank-containers. The sender and the railway shall come to agreement on the conditions of carriage before consignments are handed over for carriage; the same agreement is necessary for the carriage of the other gases of items 7 (a) and 8 (a) in tank wagons or tank-containers fitted with safety valves.

(3) Consignments of chlorine trifluoride of item 3 (at) of a total mass exceeding 500 kg shall be accepted only in full wagon loads and subject to a maximum of 5,000 kg per wagon.

## C. PARTICULARS IN THE CONSIGNMENT NOTE

226

(1) The description of the goods in the consignment note shall be:

- (a) In the case of pure and technically pure gases of items 1, 3, 5, 7 and 9 and of aerosol dispensers of item 10 and non-refillable containers of gas under pressure of item 11: one of the names printed *in italics* in marg. 20i;
- (b) In the case of mixtures of gases of items 2, 4, 6, 8, 12 and 13: "*mixture of gases*". This description shall be supplemented by an indication of the composition of the mixture of gases in per cent by volume or per cent by mass. Constituents below one per cent need not be indicated. In the case of mixtures of gases of items 2 (a), (b), and (bt), 4 (a), (b) and (c), 6 (a), 8 (a) and (b), the descriptions or names customary in the trade which are printed *in italics* in marg. 201 may likewise be used, without indication of the composition.

These descriptions shall be followed by *particulars of the class, the item number (together with the letter, if any), and the initials RID e.g. 2, item 5 (at), RID*. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

(2) In the case of consignments of gases which are listed among the chemically unstable gases, the sender shall certify as follows in the consignment note: "*The necessary steps have been taken to satisfy the requirements of RID marg. 200 (4)*". In the case of consignments of mixtures of gases of item 12 or test gases of item 13, the sender shall certify as follows in the consignment note: "*The conditions laid down in RID marg. 201, item 12 or 13 have been complied with*".

(3) In the case of consignments of chlorine trifluoride [item 3 (at)], the sender shall certify as follows in the consignment note: "*After filling with chlorine trifluoride, the receptacle has been kept under observation for not less than seven days and its leakproofness has been verified*".

(4) In the case of tank wagons and tank-containers containing gases of items 7 (a) and 8 (a) other than carbon dioxide and nitrous oxide, the sender shall include in the consignment note one of the following entries, as appropriate:

"*The tank is in permanent communication with the atmosphere*";

"*The tank is closed by valves guaranteed to be incapable of opening before . . . . . (date agreed by the railway)*".

(5) In the case of tank wagons and tank-containers containing carbon dioxide and nitrous oxide of item 7 (a), mixtures containing carbon dioxide and nitrous oxide of item 8 (a), and gases of items 7 (b) and 8 (b), the sender shall include in the consignment note the following entry:

"*The tank is closed by valves guaranteed to be incapable of opening before . . . . . (date agreed by the railway)*".

## D. TRANSPORT EQUIPMENT

## 1. Conditions relating to wagons and their loading

## a. For packages

227

- (1) Packages shall not be thrown or subjected to impact.
- (2) Receptacles shall be stowed in wagons so that they cannot overturn or fall, and comply with the following requirements:
- (a) The cylinders referred to in marg. 212 (1) (a) shall be laid parallel to or at right angles to the longitudinal axis of the wagon; however, those situated near the end walls shall be laid at right angles to the said axis.

Short cylinders of large diameter (about 30 cm and over) may be stowed longitudinally with their valve protective devices directed towards the middle of the wagon.

Cylinders which are sufficiently stable or which are carried in suitable devices preventing them from overturning may be placed upright.

Cylinders which are laid flat shall be so wedged, made fast or otherwise suitably and securely fixed that they cannot shift;

- (b) Receptacles containing gases of items 7 (a) and 8 (a) shall always be placed in the position for which they were designed and be protected against any possibility of being damaged by other packages;
- (c) Receptacles designed to be rolled shall be laid with their longitudinal axis parallel to that of the wagon and shall be secured against any lateral movement.

(3) When pallets loaded with aerosol dispensers in the manner prescribed in marg. 210 (3) are stacked, each tier of pallets shall be evenly distributed over the lower tier, if necessary by the interposition of a material of adequate strength.

b. *For small containers*

228 (1) With the exception of packages containing gases of items 7 (a) and 8 (a), packages containing substances set out in this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 230 shall be applied to the contents of a small container.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

229 (1) Wagons in which packages containing articles of items 10 (b), 2., (bt) 2., (c) and (ct), 11 (b), (bt) (c) and (ct) are loaded shall bear on both their sides a label conforming to model No. 3.

(2) Wagons handed over for carriage as full wagon loads of receptacles containing gases of items 1 (b), 2 (b), 3 (b) and (c), 4 (b) and (c), 5 (b) and (c), 6 (c), 9 (c), and mixtures of item 12 containing an inflammable gas, shall bear on both sides a label conforming to model No. 3.

Wagons handed over for carriage as full wagon loads of receptacles containing gases of items 1 (at) and (ct), 3 (at), cyanogen chloride [item 3 (ct)], gases of items 4 (at), 5 (at), 9 (at), 10 (at), 11 (at), or mixtures of item 12 containing a toxic gas, shall bear on both sides a label conforming to model No. 6.1.

Wagons handed over for carriage as full wagon loads of receptacles containing gases of items 1 (bt), 2 (bt) and (ct), 3 (bt), vinyl bromide, ethylene oxide, cyanogen, methyl vinyl ether or trifluorochloroethylene [item 3 (ct)], gases of items 4 (bt) and (ct), 5 (bt) and (ct), 6 (ct), 10 (bt), 11 (bt), and mixtures of item 12 containing an inflammable and toxic gas, shall bear on both sides labels conforming to models Nos. 3 and 6.1.

(3) Tank wagons and wagons carrying tank-containers shall bear a label conforming to model No. 13 on both their sides.

(4) Tank wagons and tank-containers containing substances of items 1 (b), 2 (b), 3 (b), ethyl chloride of item 3 (bt), substances of items 3 (c), 4 (b) and (c), 5 (b) and (c), 6 (c), 7 (b) and 8 (b) shall bear on both sides a label conforming to model No. 3.

Tank wagons and tank-containers containing oxygen of item 1 (a), mixtures containing more than 20% oxygen by volume [item 2 (a)], nitrous oxide of

item 5 (a), nitrous oxide and oxygen of item 7 (a), air or mixtures containing more than 20% oxygen by mass of item 8 (a), shall bear on both sides a label conforming to model No. 5.

Tank wagons and tank-containers containing boron trifluoride of item 1 (at), ammonia, methyl bromide, chlorine or sulphur dioxide [item 3 (at)], shall bear on both sides a label conforming to model No. 6.1.

Tank wagons and tank-containers containing gases of items 1 (bt) and 2 (bt), ethylamine, dimethylamine, methylamine, methyl chloride, methyl mercaptan, hydrogen sulphide or trimethylamine [item 3 (bt)], vinyl bromide or methyl vinyl ether of item 3 (ct) or substances of item 4 (ct) shall bear on both sides labels conforming to models Nos. 3 and 6.1.

Tank wagons and tank-containers containing nitrogen dioxide and phosgene [item 3 (at)] shall bear on both sides labels conforming to models Nos. 5 and 6.1.

Tank wagons and tank-containers containing hydrogen bromide [item 3 (at)] or hydrogen chloride [item 5 (at)] shall bear on both sides labels conforming to models Nos. 6.1 and 8.

(5) Small containers shall be labelled in conformity with the provisions of paragraphs (1) and (2).

Small containers containing packages bearing a label conforming to model No. 12 shall themselves also bear this label.

#### E. PROHIBITIONS ON MIXED LOADING

230 Substances and articles of Class 2 enclosed in packages bearing a label conforming to model No. 3 shall not be loaded together in the same wagon with substances or articles of Classes 1 and 5.2 enclosed in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

231 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

#### F. EMPTY PACKAGINGS

232 (1) Receptacles, tank wagons and tank-containers, empty and uncleaned, of item 14 shall be closed in the same manner as though they were full.

(2) Receptacles, tank wagons and tank-containers, empty and uncleaned, of item 14 shall bear the same danger labels as though they were full.

(3) The description in the consignment note shall conform to one of the names in *italics* in item 14 e.g. “*Empty receptacle, 2, item 14, RID*”. A cross shall be inserted in the appropriate box on the consignment note.

This description shall be completed by adding the words “Last load” together with the name and item number of the goods last loaded e.g. “*Last load: chlorine, item 3 (at)*”.

For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. “*Last load: 266 1017 chlorine, item 3 (at)*”.

(4) The receptacles of item 14 referred to in marg. 212 (1) (a), (b) and (d) may be transported after the expiry of the time-limit set for the periodic test prescribed in marg. 215, for the purpose of undergoing the test.

#### G. OTHER REGULATIONS

233 (1) In so far as marginals 201 to 232 and Appendices X and XI do not lay down any conditions to be fulfilled by receptacles intended for the carriage of gases compressed, liquefied or dissolved under pressure, the regulations of the

country of origin shall apply, whether they are individual receptacles or form a part of tank wagons.

(2) The transitional provisions which follow are applicable to receptacles for gases compressed, liquefied or dissolved under pressure:

- (a) Receptacles already in service shall, subject to the exception mentioned hereunder, be accepted in international traffic, as long as the regulations of the contracting state in which the tests were carried out in accordance with marg. 216 permit it and the intervals prescribed for periodic inspections in marg. 216 (3) and 217 are observed.
- (b) For receptacles which were constructed under the previous regulations (permissible stress 2/3 instead of 3/4 of the yield stress), no increase in either the test pressure or the filling pressure shall be permitted [see marg. 211 (1)];
- (c) Transitional measures for tank-containers, see Appendix X;
- (d) Transitional measures for tank wagons, see Appendix XI.

234-  
299

### CLASS 3. INFLAMMABLE LIQUIDS

#### 1. *List of substances*

300 (1) Among the inflammable substances and mixtures which are liquid or viscous at a temperature not exceeding 35°C,<sup>(1)</sup> those listed in marginal 301 or which fall under a collective heading of that marginal are subject to the conditions prescribed in marg. 300 (2) to 322 and are consequently substances of RID.<sup>(2)</sup>

(2) Inflammable liquids, within the meaning of RID, are inflammable substances which have a vapour pressure not exceeding 300 kPa (3 bar) at a temperature of 50°C and a flash-point not exceeding 100°C. This excludes those inflammable liquids which, because of supplementary dangerous properties, are listed in, or assimilable to, other classes. The flash-point shall be determined as indicated in Appendix III A.

(3) Substances of Class 3, other than those of items 12 and 13, classified under the various item numbers of marg. 301 shall be assigned to one of the following groups, according to their degree of danger:

- (a) Very dangerous substances: inflammable liquids having a boiling point or initial boiling point not exceeding 35°C, and inflammable liquids having a flash-point below 21°C, which are either highly toxic according to the criteria of marg. 600 or highly corrosive according to the criteria of marg. 800;
- (b) Dangerous substances: inflammable liquids having a flash-point below 21°C which are not classified under letter (a), with the exception of substances of marg. 301, item 5 (c);
- (c) Substances presenting a minor danger: inflammable liquids having a flash-point of 21°C to 100°C and substances of marg. 301, item 5 (c).

(4) When, as a result of additions, the flash-point, boiling point, initial boiling point or vapour pressure of a substance of Class 3 is not within the limits prescribed for the various items of marg. 301 such a mixture shall be classified

<sup>(1)</sup> To determine the fluidity of substances and mixtures at 35°C, the penetrometer test (see Appendix III B) should be applied.

<sup>(2)</sup> For the quantities of substances of marg. 301 which are not subject to the requirements of the section headed "Conditions of Carriage", see marg. 301a.

under the item number to which it belongs on the basis of its flash-point, boiling point, initial boiling point or vapour pressure as actually determined.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes), see also marg. 3 (3).

(5) Substances of Class 3 which are liable to form peroxides easily (as happens with ethers or with certain heterocyclic oxygenated substances) are not to be handed over for carriage unless their peroxide content, calculated as hydrogen peroxide ( $H_2O_2$ ), does not exceed 0.3%. The peroxide content shall be determined as indicated in Appendix III A.

(6) Chemically unstable substances of Class 3 are not to be handed over for carriage unless the necessary steps have been taken to prevent their dangerous decomposition or polymerization during carriage. To this end, care should in particular be taken to ensure that receptacles do not contain any substance liable to promote these reactions.

301 NOTE. Even if no substance is listed under letters (a), (b) or (c) of the various items of this marginal, substances, solutions, mixtures and preparations may be classified under these letters in accordance with the criteria set out in marg. 300.

A. SUBSTANCES HAVING A FLASH-POINT BELOW 21°C, NOT TOXIC AND NOT CORROSIVE

1. Substances, solutions and mixtures (such as preparations and wastes) having a vapour pressure at 50°C of more than 175 kPa (1.75 bar) such as:

(a) *Acetaldehyde (aldehyde), 2-chloropropene, vinylidene chloride, crotonylene (2-butyne), methyl isopropyl ether, methyl formate, isopentane, 2-methyl-1-butene, 3-methyl-1-butene (isopropylethylene), 1,4-pentadiene, normal amylylene (1-pentene).*

2. Substances, solutions and mixtures (such as preparations and wastes) having a vapour pressure at 50°C of more than 110 kPa (1.10 bar) but not more than 175 kPa (1.75 bar), such as:

(a) *Ethyl ether, isoprene, propylene oxide;*

(b) *1-chloropropane (propyl chloride), 2-chloropropane (isopropyl chloride), cyclopentene, dimethoxymethane (methylal), vinyl ethyl ether, methyl propyl ether, 2-methyl-2-butene, normal pentane, 2-pentene, dimethyl sulphide.*

3. Substances, solutions and mixtures (such as preparations and wastes) having a vapour pressure at 50°C of not more than 110 kPa (1.10 bar), such as:

(b) Certain *crude petroleum*s and other *crude oils*, volatile products from the distillation of petroleum and of other crude oils (of the tars of coal, lignite, shale, wood or peat), such as:

*petrol (gasoline), petroleum ether, condensation products of natural gas;*

NOTE. While in some climatic conditions petrol (gasoline) may have a vapour pressure at 50°C of more than 110 kPa (1.10 bar), but not more than 150 kPa (1.50 bar), it is to continue to be classified under this item number.

Hydrocarbons, such as: *benzene, cycloheptane, cyclohexane, cyclohexene, cyclopentane, ethylbenzene, technical, heptanes, heptenes, hexanes, octanes, octenes, toluene;*

Halogenated substances, such as: *2-bromopropane, normal butyl bromide, amyl chloride, butyl chlorides (chlorobutanes), 1,1,-dichloroethane (ethylidene chloride), propylene dichloride;*

NOTE. Toxic halogenated substances are substances of item 16; corrosive halogenated substances are substances of items 21 or 25.

Alcohols, such as: *tertiary amyl alcohol*, *tertiary butanol (tertiary butyl alcohol)*, *ethanol (ethyl alcohol)* and its aqueous solutions containing more than 70 per cent alcohol, *isopropanol (isopropyl alcohol)*, *technical diacetone alcohol*;

Ethers, such as: *acetal (1,1-diethoxyethane)*, *1-2-dimethoxyethane*, *dioxane*, *dioxolane*, *ethyl butyl ether*, *vinyl isobutyl ether*, *diisopropyl ether*, *tetrahydrofuran*;

Aldehydes, such as: *butyraldehyde*, *propionaldehyde*;

Ketones, such as: *acetone*, *ethyl methyl ketone*, *methyl isobutyl ketone*, *methyl propyl ketone*, *methyl vinyl ketone*;

Esters, such as: *secondary butyl acetate*, *ethyl acetate*, *isobutyl acetate*, *isopropyl acetate*, *methyl acetate*, *normal propyl acetate*, *vinyl acetate*, *ethyl acrylate*, *methyl acrylate*, *triethyl borate*, *trimethyl borate*, *methyl butyrate*, *dimethyl carbonate*, *ethyl formate*, *propyl formates*, *methyl methacrylate*, *ethyl propionate*, *methyl propionate*;

Substances containing sulphur, such as: *amyl mercaptan*, *butyl mercaptan*, *propyl mercaptan*, *thiophene*.

NOTE. Toxic substances containing sulphur are substances of item 18.

4. Solutions of nitrocellulose in mixtures of substances of items 1 to 3 containing more than 20% but not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6% (*nitrocellulose paints, lacquers and varnishes, collodion solutions, semi-collodion solutions, and other nitrocellulose solutions*):

- (a) Having a boiling point or initial boiling point not exceeding 35°C;
- (b) Having a boiling point or initial boiling point exceeding 35°C.

NOTE. 1. Mixtures having a flash-point below 21°C and

— Containing more than 55% nitrocellulose, whatever its nitrogen content; or

— Containing not more than 55% nitrocellulose with a nitrogen content above 12.6%,

are substances of Class 1, (see marg. 101, item 4, No. 0340 or item 22, No. 0342), or of Class 4.1 [see marg. 401, item 7 (a)].

2. Mixtures containing 20% or less nitrocellulose with a nitrogen content not exceeding 12.6% are substances of item 5.

5. Viscous substances such as: *adhesives, enamels, paints, polishes, varnishes* and certain *colours for leathers* and for *rotogravures* including substances containing 20% or less nitrocellulose with a nitrogen content not exceeding 12.6% such as *nitrocellulose paints, lacquers and varnishes, collodion solutions, semi-collodion solutions* and other *nitrocellulose solutions*.

- (a) Having a boiling point or initial boiling point not exceeding 35°C, provided that they do not come under (c)
- (b) Having a boiling point or initial boiling point exceeding 35°C, provided that they do not come under (c)
- (c) If they meet the following requirements:
  - 1. That less than 3% of the clear solvent layer separates in the solvent-separation test;<sup>(1)</sup> and

<sup>(1)</sup> Solvent-separation test: This test is carried out at 23°C using a 100-ml graduated measuring cylinder of the stoppered type of approximately 25 cm total height and of a uniform internal diameter of approximately 3 cm over the calibrated section. The substance should be stirred to obtain a uniform consistency and poured into the measuring cylinder up to the 100-ml mark. The stopper should be inserted and the cylinder left standing undisturbed for 24 hours. After 24 hours the height of the upper separated layer should be measured and the layer's height as a percentage of the total height of the sample should be calculated.

2. That the viscosity<sup>(1)</sup> and flash-point are in accordance with the following table:

Kinematic viscosity $v$ (extrapolated) (at near-zero shear rate) mm <sup>2</sup> /s at 23°C	Flow time $t$ in accordance with ISO 2431-1984		Flash-point in °C
	in s	Jet diameter in mm	
20 < $v$ ≤ 80	20 < $t$ ≤ 60	4	above 17
80 < $v$ ≤ 135	60 < $t$ ≤ 100	4	above 10
135 < $v$ ≤ 220	20 < $t$ ≤ 32	6	above 5
220 < $v$ ≤ 300	32 < $t$ ≤ 44	6	above - 1
300 < $v$ ≤ 700	44 < $t$ ≤ 100	6	above - 5
700 < $v$	100 < $t$	6	- 5 and below

NOTE. Mixtures containing more than 20% but not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6% are substances of item 4.

Mixtures having a flash-point below 21°C and containing

— More than 55% nitrocellulose, whatever their nitrogen content, or

— Not more than 55% nitrocellulose, with a nitrogen content above 12.6%,

are substances of Class 1 (see marg. 101, item 4, No. 0340, or item 22, No. 0342) or of Class 4.1 [see marg. 401, item 7 (a)].

6. Harmful substances and preparations used as pesticides and having a flash-point below 21°C:

(a) Having a boiling point or initial boiling point not exceeding 35°C;

(b) Having a boiling point or initial boiling point exceeding 35°C.

NOTE. The classification of substances and preparations of this item is based on the criteria for harmful substances in foot-note 1 to marg. 600 (1), and the Notes to items 71 to 88 of marg. 601.

7. (b) *Nitroglycerine, solution in alcohol* with not more than 1% nitroglycerine.

8. *Nitroglycerine, solution in alcohol* with more than 1% but not more than 5% nitroglycerine.

NOTE. Special packing conditions are applicable for this substance (see marg. 303); see also Class 1, marg. 101, item 4, No. 0144.

#### B. TOXIC SUBSTANCES HAVING A FLASH-POINT BELOW 21°C

NOTE. 1. Toxic substances having a flash-point of 21°C or above, hydrocyanic acid and solutions thereof, and metal carbonyls, are substances of Class 6.1.

2. For toxicity criteria, see foot-note 1 to marg. 600 (1).

3. Harmful substances having a flash-point below 21°C are substances of items 1 to 6 of this class.

11. Nitriles and isonitriles (isocyanides), such as:

(a) *Acrylonitrile, tertiary butyl isocyanide*;

<sup>(1)</sup> Viscosity determination: Where the substance concerned is non-Newtonian, or where a flow cup method of viscosity determination is otherwise unsuitable, a variable shear-rate viscometer should be used to determine the coefficient of dynamic viscosity of the substance, at 23°C, at a number of shear rates, the values obtained are plotted against shear rate and then extrapolated to zero shear rate. The dynamic viscosity thus obtained, divided by the specific gravity, gives the apparent kinematic viscosity at near-zero shear rate.



(b) *Acetonitrile, butyronitrile, 2-chloroacrylonitrile, isobutyronitrile, methacrylonitrile, pivalonitrile, propionitrile.*

12. Imines, such as: *ethyleneimine, propyleneimine.*

NOTE. Special packing conditions are applicable for these substances (see marg. 303).

13. *Ethyl isocyanate, methyl isocyanate*

NOTE. Special packing conditions are applicable for these substances (see marg. 304).

14. Other isocyanates, such as:

(a) *Tertiary butyl isocyanate, methoxymethyl isocyanate, propyl isocyanates;*

(b) *Normal butyl isocyanate, isobutyl isocyanate, solutions of isocyanates of Class 6.1, items 18 and 19 having a flash-point below 21°C.*

15. Other substances containing nitrogen, such as:

(a) *Allylamine, 1,2-dimethylhydrazine;*

(b) *Pyridine.*

16. Halogenated organic substances, such as:

(a) *Allyl bromide, ethyl chloroformate, methyl chloroformate, chloroprene, allyl chloride;*

(b) *Methyl chlorothioformate, 1,2-dichloroethane (ethylene dichloride), methyl-chloromethyl ether.*

17. Oxygenated organic substances, such as:

(a) *Acrolein, methyl orthosilicate (tetramethoxysilane);*

(b) *Allyl acetate, methanol (methyl alcohol), diallyl ether, methacrylaldehyde.*

18. Organic substances containing sulphur, such as:

(a) *Isopropyl isothiocyanate, carbon disulphide;*

(b) *Ethyl mercaptan, diethyl sulphide, solutions of isothiocyanates of Class 6.1, item 20 (b) having a flash-point below 21°C.*

19. Highly toxic or toxic substances and preparations used as pesticides having a flash-point below 21°C:

(a) With a boiling point or initial boiling point not exceeding 35°C and/or highly toxic;

(b) With a boiling point or initial boiling point exceeding 35°C and toxic.

NOTE. 1. The classification of substances and preparations under item 19 (a) or (b) shall be based on the criteria for highly toxic or toxic substances contained in foot-note 1 to marg. 600 (1) and in the Notes to items 71 to 88 of marg. 601.

2. Harmful substances and preparations used as pesticides having a flash-point below 21°C are substances of item 6 (a) or (b).

20. Highly toxic or toxic substances, solutions and mixtures (such as preparations and wastes) having a flash-point below 21°C which cannot be classified under other collective headings:

(a) With a boiling point or initial boiling point not exceeding 35°C and/or highly toxic;

(b) With a boiling point or initial boiling point exceeding 35°C and toxic.

NOTE. The classification of substances, solutions, mixtures and preparations under item 20 (a) or (b) shall be based on the criteria applicable to highly toxic or toxic substances contained in foot-note 1 to marg. 600 (1).

C. CORROSIVE SUBSTANCES HAVING A FLASH-POINT BELOW 21°C

NOTE. 1. Corrosive substances having a flash-point of 21°C or above and some acid halides having a flash-point below 21°C are substances of Class 8.

2. For corrosivity criteria, see foot-note 1 to marg. 800 (1).

21. Chlorosilanes, such as:

- (a) *Dimethyldichlorosilane, ethyltrichlorosilane, methyltrichlorosilane, trimethylchlorosilane, vinyltrichlorosilane.*

NOTE. Chlorosilanes which give off inflammable gases on contact with water or moist air are substances of Class 4.3 and are not to be accepted for carriage unless specifically listed thereunder.

22. Amines and their solutions, such as:

- (a) *Isopropylamine, aqueous solutions of dimethylamine, of ethylamine, of methylamine and of trimethylamine, having a boiling point not exceeding 35°C.*
- (b) *N-amylamine, n-butylamine, diallylamine, diethylamine, diisopropylamine, dimethyl-N-propylamine, isobutylamine, n-propylamine, pyrrolidine, triethylamine, aqueous solutions of dimethylamine, of ethylamine, of methylamine and of trimethylamine, having a boiling point exceeding 35°C.*

NOTE. Anhydrous dimethylamine, ethylamine, methylamine and trimethylamine are substances of Class 2 [see marg. 201, item 3 (bt)].

23. Alkylhydrazines, such as:

- (a) *1,1-dimethylhydrazine, methylhydrazine.*

24. Solutions of alcoholates, such as:

- (b) *Alcoholic solutions of sodium methylate.*

25. Other halogenated corrosive substances, such as:

- (a) *Isopropyl chloroformate, allyl iodide;*

- (b) *Acetyl chloride, propionyl chloride.*

26. Highly corrosive or corrosive substances, solutions and mixtures (such as preparations and wastes) having a flash-point below 21°C which cannot be classified under other collective headings:

- (a) *With a boiling point or initial boiling point not exceeding 35°C and/or highly corrosive;*
- (b) *With a boiling point or initial boiling point exceeding 35°C and corrosive.*

NOTE. The classification of substances, solutions, mixtures or preparations under item 26 (a) or (b) shall be based on the criteria applicable to highly corrosive and corrosive substances contained in foot-note 1 to marg. 800 (1).

D. NON-TOXIC AND NON-CORROSIVE SUBSTANCES, HAVING A FLASH-POINT BETWEEN 21°C AND 100°C INCLUSIVE

NOTE. Non-toxic and non-corrosive solutions and homogeneous mixtures having a flash-point of 21°C or over (such as certain paints or varnishes, excluding substances containing more than 20% nitrocellulose) shall not be subject to the requirements of RID if, in the solvent-separation test, as described in foot-note 1 to item 5, the height of the separated layer of solvent is less than 3% of the total height, and if the substances at 23°C have, in the flow cup conforming to ISO 2431-1984 having a jet 6 mm in diameter, a flow time of:

- (a) *Not less than 60 seconds, or*

- (b) *Not less than 40 seconds and contain not more than 60% of substances of Class 3.*

31. Substances, solutions and mixtures (such as preparations and wastes) having a flash-point between 21°C and 55°C inclusive, such as:

- (c) Certain *crude petroleum*s and other *crude oils*, semi-heavy products from the distillation of petroleum or other crude oils (of the tars of coal, lignite, shale, wood or peat), such as: *kerosene*, *petroleum*, *solvent naphtha*, *white spirit* (turpentine substitute);

Hydrocarbons, such as: *cumene* (*isopropylbenzene*), *cymenes* (*methyl isopropyl benzenes*), *n-decane*, *dicyclopentadiene*, *ethylbenzene*, chemically pure, *mesitylene* (*1, 3, 5-trimethylbenzene*), *nonane*, *pentamethylheptane* (*isododecane*), *styrene* (*vinylbenzene*), *turpentine*, *m-xylene* (*1,3-dimethylbenzene*), *oxylene* (*1,2 dimethyl benzene*), *p-xylene* (*1,4-dimethylbenzene*);

Halogenated substances, such as: *chlorobenzene* (*phenyl chloride*), *dichloropentanes*, *1,3-dichloropropene*;

Alcohols, such as: *n-amyl alcohol*, *sec-amyl alcohol*, *butanol* (*n-butyl alcohol*), *n-butanol-2* (*sec-butyl alcohol*), *isobutanol* (*isobutyl alcohol*), *methyl amyl alcohol* (*methyl isobutyl carbinol*), *cyclopentanol*, *diacetone alcohol*, chemically pure, *2-ethoxy ethanol* (*ethylene glycol monoethyl ether*), *methoxy ethanol*, *n-propanol*, *aqueous solutions of ethyl alcohol* in a concentration above 24% but not exceeding 70%.

NOTE. Aqueous solutions of ethyl alcohol in a concentration not exceeding 24% are not subject to the requirements of RID.

Ethers, such as: *1,2-diethoxyethane* (*ethylene glycol diethyl ether*), *di-n-butylether* (*n-butylether*), *diisooamyl ether*, *phenyl methyl ether* (*anisole*).

Aldehydes, such as: *2-ethyl hexaldehyde*, *hexaldehyde*, *paraldehyde*;

Ketones, such as: *cyclohexanone*, *cyclopentanone*, *diisobutyl ketone*, *mesityl oxide*.

Esters, such as: *amyl acetates*, *n-butyl acetate*, *ethylene glycol monomethyl ether acetate*, *2-ethoxy ethyl acetate* (*ethylene glycol monoethyl ether acetate*), *2-ethyl butyl acetate*, *n-butyl acrylate*, *methyl amyl acetate*, *ethyl butyrate*, *isoamyl formate*, *ethyl lactate*, *triethyl phosphite*, *trimethyl phosphite*, *tetraethyl silicate*.

Nitrogenous substances, such as: *dimethyl ethanolamine* (*dimethylamino-ethanol*), *morpholine*, *amyl nitrate*, *nitromethane*, *nitropropanes*, *picolines* (*methylpyridines*).

32. Substances, solutions and mixtures (such as preparations and wastes) having a flash-point above 55°C, but not exceeding 100°C, such as:

- (c) Certain *crude petroleum*s and other *crude oils*, heavy products from the distillation of petroleum or other crude oils, certain *gas oils*, certain *tars* and their distillation products, *heating oils*, *diesel oils*;

Hydrocarbons, such as: *decahydronaphthalene* (*decalin*), *diethyl benzenes*, *tetrahydronaphthalene*, *undecane*;

Oxygenated substances, such as: *cyclohexyl acetate*, *diisobutyl carbinol* (*2,6-dimethyl heptanol*), *furfural* (*furfuraldehyde*), *hexanols*;

Halogenated substances, such as: *1-bromopropane*, *2-ethyl hexyl chloride*;

Nitrogenous substances, such as: *N,N-dimethyl-formamide*;

33. c) Solutions of nitrocellulose in mixtures of substances of item 31 (c) containing not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6% (*solutions of collodions*, of *semi-collodions* other *nitrocellulose solutions* and *nitrocellulose paints*, *varnishes* and *lacquers*).

NOTE. Mixtures containing more than 55% nitrocellulose, whatever its nitrogen content, or containing not more than 55% nitrocellulose with a nitrogen content above 12.6%, are substances of Class 1 (see marg. 101, item 4, No. 0340 or item 22, No. 0342) or of Class 4.1 [see marg. 401, item 7 (a)].

34. (c) Solutions of nitrocellulose in mixtures of substances of item 32 (c) containing not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6% (*solutions of collodions, of semi-collodions, other nitrocellulose solutions and nitro-cellulose paints, varnishes and lacquers*).

NOTE. Mixtures containing more than 55% nitrocellulose, whatever its nitrogen content, or containing not more than 55% nitrocellulose with a nitrogen content above 12.6%, are substances of Class 1 (see marg. 101, item 4, No. 0340 or item 22, No. 0342) or of Class 4.1 [see marg. 401, item 7 (a)].

#### E. EMPTY PACKAGINGS

41. *Empty packagings* including *empty intermediate bulk containers* (IBCs), *empty tank wagons* and *empty tank-containers*, uncleaned, which have contained substances of Class 3.

301a

Substances of items 1 to 6, 21 to 26 and 31 to 34 carried in conformity with the following provisions are not subject to the requirements of Section 2, "Conditions of Carriage":

- (1) (a) Substances classified under (a) of each item:  
not more than 500 ml per inner packaging and not more than 1 litre per package;
- (b) Substances classified under (b) of each item:  
not more than 3 litres per inner packaging and not more than 6 litres per package;
- (c) Substances classified under (c) of each item:  
not more than 3 litres per inner packaging and not more than 45 litres per package.

These quantities of substances shall be carried in combination packagings which at least meet the conditions of marg. 1538.

The "General conditions of packing" of marg. 1500 (1), (2) and (5) to (7) shall be observed.

NOTE. In the case of homogeneous mixtures containing water, the quantities specified relate only to the substances of this class contained in those mixtures.

(2) Alcoholic beverages of item 31 (c) in packagings containing not more than 250 litres.

(3) The motor-fuel contained in the tanks of transport vehicles for their propulsion or the operation of their specialized equipment (refrigerators, for example). The fuel cock between the engine and the fuel tank of motorcycles and motor-assisted pedal cycles whose tanks contain fuel, must be closed during transport; in addition, these motorcycles and motor-assisted pedal cycles must be loaded upright and secured against falling.

## 2. Conditions of carriage

(The conditions of carriage for empty packagings are included under F.)

### A. PACKAGES

#### 1. General conditions of packing

302 (1) Packagings shall satisfy the conditions of Appendix V, unless special conditions for the packing of certain substances are prescribed under A.2.

(2) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI.

(3) In accordance with the provisions of marg. 300 (3) and 1511 (2) or 1600 (3), the following shall be used:

— Packagings of packing group I, marked with the letter "X", for the very dangerous substances classified under (a) of each item;

— Packagings of packing groups II or I, marked with the letter "Y" or "X", for IBCs of packing group II, marked with the letter "Y", for the dangerous substances classified under (b) of each item;

— Packagings of packing groups III, II or I, marked with the letter "Z", "Y" or "X", or IBCs of packing groups III or II, marked with the letter "Z" or "Y", for the less dangerous substances classified under (c) of each item.

(4) For the carriage of substances of Class 3 in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

#### 2. Packing of individual substances

303 Nitroglycerine, solution in alcohol, of item 8 shall be packed in metal cans of not more than 1 litre capacity each, overpacked in a wooden box capable of containing not more than 5 litres of solution. Metal cans shall be completely surrounded with absorbent cushioning material. Wooden boxes shall be completely lined with suitable material impervious to water and nitroglycerine.

Packages of this kind shall satisfy the test requirements for combination packagings in accordance with Appendix V for packing group II.

304 (1) (a) Imines of item 12 shall be packed in steel receptacles of sufficient thickness, which shall be closed by a screw-threaded bung or plug rendered leak-proof both to liquid and to vapour by means of a suitable gasket. The receptacles shall initially and periodically, at least every five years, be tested at a pressure of not less than 0.3 MPa (3 bar) (gauge pressure) in accordance with marg. 216. Each receptacle shall be secured by absorbent cushioning materials in a strong leak-proof protective metal packaging. The protective packaging shall be hermetically closed and its closure shall be secured against any inadvertent opening. The mass of the contents shall not exceed 0.67 kg per litre of capacity. A package shall not weigh more than 75 kg. Packages weighing more than 30 kg, other than those forwarded as a full wagon load, shall be fitted with means of handling.

(b) Imines of item 12 may also be packed in steel receptacles of sufficient thickness, which shall be closed by a screw-threaded bung and a screw-threaded protective cap or equivalent device leak-proof both to liquid and to vapour. The receptacles shall initially and periodically, at least every five years, be tested at a pressure of not less than 1 MPa (10 bar) (gauge pressure) in accordance with

marg. 216. The mass of the contents shall not exceed 0.67 kg per litre of capacity. A package shall not weigh more than 75 kg.

(2) Methyl isocyanate and ethyl isocyanate of item 13 shall be packed:

- (a) In hermetically-closed receptacles made of pure aluminium and having a capacity not exceeding one litre, which shall not be filled beyond 90% of their capacity. The receptacles shall be secured, not more than 10 to a box, with appropriate cushioning material in a wooden box. Packages of this kind shall satisfy the test requirements for combination packagings conforming to marg. 1538 for packing group I, and shall not weigh more than 30 kg; or
- (b) In receptacles made of pure aluminium having a wall thickness of not less than 5 mm or in receptacles of stainless steel. The receptacles shall be fully welded and shall initially and periodically, at least every five years, be tested at a pressure of not less than 0.5 MPa (5 bar) (gauge pressure) in accordance with marg. 216. They shall be so closed as to be leak-proof by means of two closures one above the other, one of which shall be screw-threaded or secured in an equally effective manner.

The degree of filling shall be not more than 90%.

Drums weighing more than 100 kg shall be fitted with expanded (pressed out) rolling hoops or separate (fitted) rolling hoops.

305 Substances classified under (a) of the various items of marg. 301 shall be packed:

- (a) In non-removable head steel drums conforming to marg. 1520, or
- (b) In non-removable head aluminium drums conforming to marg. 1521, or
- (c) In non-removable head steel jerricans conforming to marg. 1522, or
- (d) In non-removable head plastics drums of a capacity not exceeding 60 litres or non-removable head plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings with inner receptacles of glass, plastics material or metal conforming to marg. 1538.

306 (1) Substances classified under (b) of the various items of marg. 301 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521 or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538.

NOTE to (a), (b), (c) and (d). Simplified conditions are applicable to removable-head drums and jerricans for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C (see marg. 1512, 1553, 1554 and 1560).

(2) Substances classified under (b) of items 3, 6, 15, 17, 22, 24 and 25 may also be packed in composite packagings (glass, porcelain or stoneware) conforming to marg. 1539.

(3) Substances classified under (b) of the various items of marg. 301 which have a vapour pressure at 50°C of not more than 110 kPa (1.10 bar) may also be packed in metallic IBCs conforming to marg. 1611.

307 (1) Substances classified under (c) of the various items of marg. 301 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538, or
- (g) In composite packagings (glass, porcelain or stoneware) conforming to marg. 1539.

NOTE 1 to (a), (b), (c) and (d). Nitromethane of item 31 (c) shall not be carried in removable-head packagings.

NOTE 2 to (a), (b), (c) and (d). Simplified conditions are applicable to removable-head drums and jerricans for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C (see marg. 1512, 1553, 1554 and 1560).

NOTE. 3. Packagings conforming to marg. 307 containing substances of items 32 (c) and 34 (c) need only meet the requirements of marg. 1500 (1), (2) and (4) to (7).

(2) Substances classified under (c) of the various items of marg. 301, with the exception of nitromethane of item 31 (c), may also be packed in metallic IBCs conforming to marg. 1611.

308 (1) Ethyl alcohol and its aqueous solutions of items 3 (b) and 31 (c) may also be packed in bung-type wooden barrels conforming to marg. 1524.

(2) Substances of items 3 (b), 4 (b), 5(b), 5 (c), 6 (b), 31 (c), 32 (c), 33 (c) and 34 (c) may also be packed in light gauge metal packagings conforming to marg. 1540. Simplified conditions are applicable to removable-head light gauge metal packagings for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C and for substances of item 5 (c) (see marg. 1512, 1552 to 1554).

NOTE. 1. Nitromethane of item 31 (c) shall not be carried in removable-head packagings.

2. Packagings conforming to marg. 308 (2) containing substances of items 32 (c) and 34 (c) need only meet the requirements of marg. 1500 (1), (2) and (4) to (7).

309 The openings of receptacles for substances of items 6 (a), 6 (b), 11 (a), 11 (b), 14 (a), 14 (b), 15 (a), 15 (b), 16 (a), 16 (b), 17 (a), 17 (b), 18 (a), 18 (b), 19 (a), 19 (b), 20 (a) and 20 (b) shall be so closed as to be leakproof by means of two closures in series, one of which must be screw-threaded or secured in an equally effective manner.

NOTE. For IBCs see, however, marg. 1601 (8).

310 Packagings or IBCs containing preparations of items 31 (c) or 32 (c) which give off small quantities of carbon dioxide and/or nitrogen, shall be vented in accordance with marg. 1500 (8) or 1607 (4).

### 3. *Mixed packing*

311 (1) Substances covered by the same item number may be packed together in a combination packaging conforming to marg. 1538.

(2) Substances of different items of Class 3 in quantities not exceeding five litres per receptacle may be packed together and/or with goods not subject to the requirements of RID, in a combination packaging conforming to marg. 1538 if they do not react dangerously with one another.

(3) Except as otherwise specially provided below, substances of Class 3, in quantities not exceeding five litres per receptacle, may be packed together in a combination packaging conforming to marg. 1538 with substances or articles of other classes, provided that mixed packing is also permitted for the substances or articles of these classes, and/or with goods which are not subject to the requirements of RID, if they do not react dangerously with one another.

(4) The following are considered dangerous reactions:

- (a) Combustion and/or giving off considerable heat;
- (b) Emission of inflammable and/or toxic gases;
- (c) Formation of corrosive liquids;
- (d) Formation of unstable substances.

(5) The mixed packing of acid substances with basic substances in a package shall not be permitted if the two substances are packed in fragile receptacles.

(6) The requirements of marg. 4 (7), 8 and 302 shall be complied with.

(7) If wooden or fibreboard boxes are used, a package shall not weigh more than 100 kg.

*Special conditions*

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
7, 8	Nitroglycerine, solution in alcohol	Mixed packing not permitted		
12	Imines			
13	Methyl and ethyl isocyanates			
	Substances classified under (a) in each item	0.5 litre	1 litre	Shall not be packed together with substances or articles of Classes 1, 5.2 (other than hardeners and compound systems) and 7.

4. *Marking and danger labels on packages* (see Appendix IX)

312

(1) Packages containing substances of items 1 to 8, 11 to 26, 31 and 33 shall bear a label conforming to model No. 3. However, if substances are packed in composite packagings (glass, porcelain or stoneware) conforming to marg. 1539 of a capacity exceeding five litres, the packages shall bear two labels conforming to model No. 3 (see marg. 10).

(2) Packages containing substances of item 6 shall in addition bear a label conforming to model No. 6.1A; those containing substances of items 11 to 20 a label conforming to model No. 6.1 and those containing substances of items 21 to 26 a label conforming to model No. 8.

(3) Packages containing fragile receptacles not visible from the outside shall bear on two opposite sides a label conforming to model No. 12.

(4) Packages containing receptacles the closures of which are not visible from the outside and packages containing vented receptacles or vented recepta-



cles without outer packaging shall bear on two opposite sides a label conforming to model No. 11.

#### B. METHOD OF DISPATCH AND RESTRICTIONS ON FORWARDING

313 With the exception of substances of items 12 and 13 and substances classified under (a) of each item, packages containing other substances of this class may be sent as express parcels if they contain:

— Not more than 6 litres per package of substances classified under (b) of each item;

— Not more than 45 litres per package of substances classified under (c) of each item.

A package containing substances classified under (c) of each item shall not, however, weigh more than 50 kg.

#### C. PARTICULARS IN THE CONSIGNMENT NOTE

314 (1) The description of the goods in the consignment note shall conform to one of the names printed *in italics* in marg. 301. If the substance is not mentioned by name, the chemical name shall be entered. For substances and preparations of items 6 and 19, this name shall be entered for the most dangerous component, both of the pesticide element<sup>(1)</sup> and of the inflammable element (e.g. "*parathion in hexane*"). The description of the goods shall be followed by *particulars of the class, the item number (together with the letter, if any), and the initials "RID"* e.g., 3, item 14 (a), *RID*. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "*Waste, containing methanol, 3, item 17 (b), RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

(2) For consignments of chemically unstable substances, the sender shall certify in the consignment note: "*Measures taken in accordance with marg. 300 (6).*"

#### D. TRANSPORT EQUIPMENT

##### 1. Conditions relating to wagons and loading

##### a. For packages

315 (1) For the use of wagons fitted with electrical equipment for the carriage of substances of items 1 to 8, 11 to 26, 31 and 33 in packages of more than 50 kg, see Appendix IV.

(2) Packages bearing labels conforming to models Nos. 6.1 or 6.1A shall be kept apart, in wagons, from foodstuffs, other articles of consumption and animal feedstuffs.

(3) Packages shall be so loaded in wagons that they cannot shift dangerously, overturn or fall.

Packages hearing two labels conforming to model No. 3 in accordance with marg. 312 (1) and those bearing labels conforming to model No. 12 in accordance

<sup>(1)</sup> For the description of the pesticide element, the name according to ISO Standard R.1750 (see also marg. 601, items 71 to 88) should be used, if it appears therein.

with marg. 312 (3) shall be protected against any damage that might be caused by other packages.

(4) Wagons which have contained substances of items 6 and 11 to 20 as full wagon-loads shall be checked, after unloading, for any residues of the load (see also marg. 322).

b. *Carriage in small containers*

316 (1) Packages containing substances of this class may be carried in small containers.

(2) The prohibition of mixed loading laid down in marg. 318 shall also be observed inside small containers.

(3) The requirements of marg. 315 (4) and 322 are also applicable, by analogy, to carriage in small containers.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers* (see Appendix IX)

317 (1) Wagons, tank wagons and tank-containers carrying substances of items 1 to 8, 11 to 26, 31 and 33, as well as wagons carrying such tank-containers, shall bear on both sides a label conforming to model No. 3.

(2) Wagons, tank wagons and tank-containers containing substances of item 6 as well as wagons carrying such tank-containers shall in addition bear on both sides a label conforming to model No. 6.1A; those carrying substances of items 11 to 20 shall in addition bear on both sides a label conforming to model No. 6.1; those carrying substances of items 21 to 26 shall in addition bear on both sides a label conforming to model No. 8.

(3) Small containers shall be labelled in accordance with marg. 312 (1) and (2). Small containers containing packages bearing labels conforming to model No. 12 shall themselves also bear that label.

E. PROHIBITION ON MIXED LOADING

318 (1) Substances of Class 3 contained in packages bearing one or two labels conforming to model No. 3 shall not be loaded in the same wagon together with substances and articles of Classes 1 or 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

(2) Substances of Class 3 contained in packages bearing two labels conforming to model No. 3 shall not be loaded in the same wagon together with:

(a) Substances of Class 5.1 or Class 5.2 contained in packages bearing two labels conforming to model No. 5;

(b) Substances of Class 6.1 or Class 8 contained in packages bearing two labels conforming to models Nos. 6.1, 6.1A or 8.

319 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

F. EMPTY PACKAGINGS

320 (1) Empty packagings including empty IBCs, empty tank wagons and empty tank-containers, uncleaned, of item 41 shall be closed in the same way and with the same degree of leakproofness as if they were full.

(2) Empty packagings including empty IBCs, empty tank wagons and empty tank-containers, uncleaned, of item 41 shall bear the same danger labels as if they were full.

(3) Empty packagings including empty IBCs, uncleaned, bearing labels conforming to models Nos. 6.1 or 6.1A shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in wagons and in warehouses.

(4) The description in the consignment note shall conform to one of the names *printed in italics*, in item 41, e.g.: “*Empty packaging, 3, item 41, RID*”. A cross shall be inserted in the appropriate box on the consignment note. For empty tank-wagons or empty tank-containers, uncleaned, this description shall be completed by adding the words “Last load” together with the name and item number of the goods last loaded e.g. “*Last load: Petrol, item 3 (b)*”.

For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. “*Last load 33 1203 petrol, item 3 (b)*”.

#### G. OTHER REQUIREMENTS

321 Packages bearing labels conforming to model No. 6.1 or 6.IA shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in warehouses.

322 If a leakage of substances of items 6 and II to 20 occurs and they have been spilled in a wagon, the wagon may not be used again until it has been thoroughly cleaned and, if necessary, decontaminated. Any other goods and articles carried in the same wagon must be inspected for possible contamination.

323-  
399

### CLASS 4.1. INFLAMMABLE SOLIDS

#### 1. *List of substances*

400 Among the substances covered by the heading of Class 4.1, those listed in marg. 401 are subject to the conditions set out in marg. 401 to 424 and are consequently substances of RID.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes), see also marg. 3 (3).

401 1. (a) Substances which can easily be ignited by sparks, e.g. *wood flour, sawdust, wood shavings, wood fibre, wood charcoal, wood parings and wood cellulose, old paper and waste paper, paper fibres, rushes* (except Spanish broom), *reeds, hay, straw*, also when damp (including *maize, rice and flax straw*), *vegetable textile substances and waste of vegetable textile substances, cork* in powder or granular form, whether expanded or not, with or without admixtures of tar or of other substances not subject to spontaneous oxidation, and *cork waste* in small pieces. See also Class 4.2, marg. 431, items 8 to 10, and marg. 431a under (a).

NOTE. 1. Unfermented hay or hay liable to undergo fermentation is not to be accepted for carriage when it still has a degree of humidity which might lead to fermentation.

2. Wrappings and slabs of expanded cork, manufactured under pressure, with or without admixtures of tar or of other substances not liable to spontaneous oxidation, are not subject to the requirements of RID.

3. Cork impregnated with substances still liable to spontaneous oxidation is a substance of Class 4.2 (see marg. 431, item 9).

4. Substances of item 1 (a) used as packing or filling materials are not regarded as substances of RID.

(b) Wastes consisting of solids containing inflammable liquids.

2. (a) *Sulphur* (including *flowers of sulphur*);  
(b) *Sulphur in the molten state*.
3. *Celloidin*, produced by incomplete evaporation of the alcohol contained in collodion and consisting mainly of collodion cotton.
4. *Celluloid* in slabs, sheets, rods or tubes and *fabrics coated with nitrocellulose*.
5. *Film celluloid*, i.e. the raw material for films without emulsion, in rolls, and developed *celluloid films*.
6. *Celluloid waste* and *celluloid film waste*.

NOTE. Nitrocellulose film waste, free from gelatine, in reels, sheets or strips, is a substance of Class 4.2 (see marg. 431, item 4).

7. (a) Highly nitrate *nitrocellulose* (such as *guncotton*), i.e. with a nitrogen content of more than 12.6%, well stabilized and containing in addition not less than 25% water; weakly nitrated *nitrocellulose* (such as *collodion cotton*), i.e. with a nitrogen content not exceeding 12.6%, well stabilized and containing in addition not less than 25% water or alcohol (methyl, ethyl, normal propyl or isopropyl, butyl or amyl alcohol, or mixtures thereof), also if denatured, solvent naphtha, benzene, toluene, xylene, mixtures of denatured alcohol and xylene, mixtures of water and alcohol, or alcohol containing camphor in solution;

NOTE. 1. Nitrocellulose in the dry state or wetted with less than 25% water or alcohol is a substance of Class 1.

Nitrocellulose with a nitrogen content of not more than 12.6%, wetted with at least 25% alcohol, is a substance of Class 1 unless it is packed in receptacles so constructed that explosion by reason of increased internal pressure is not possible.

2. When the nitrocellulose is wetted with denatured alcohol, the denaturing substance must not have a harmful effect on the stability of the nitrocellulose.

- (b) Plasticized *nitrocellulose, non-pigmented*, containing not less than 18% plasticizer (butyl phthalate or a plasticizer of at least equivalent quality) and in which the nitrocellulose has a nitrogen content not exceeding 12.6%; the nitrocellulose may be in the form of chips;

NOTE. Plasticized nitrocellulose, non-pigmented, containing not less than 12% and less than 18% butyl phthalate or a plasticizer of at least equivalent quality to butyl phthalate is a substance of Class 1 (see marg. 101, item 4, No. 0341 or item 22, No. 0343).

- (c) Plasticized *nitrocellulose, pigmented*, containing not less than 18% plasticizer (butyl phthalate or a plasticizer of at least equivalent quality), in which the nitrocellulose has a nitrogen content not exceeding 12.6% and which contains not less than 40% nitrocellulose; the nitrocellulose may be in the form of chips.

NOTE. Plasticized nitrocellulose, pigmented, containing less than 40% nitrocellulose is not subject to the requirements of RID.

For (a), (b) and (c): weakly nitrated nitrocellulose and plasticized nitrocellulose, pigmented or not, are not to be accepted for carriage unless they satisfy the stability and safety conditions of Appendix I or the conditions set out above concerning the nature and quantity of the additional substances.

For (a), see also Appendix I, marg. 1102 (1); for (b) and (c), see also Appendix I, marg. 1102 (2).

8. *Red phosphorus (amorphous), phosphorus sesquisulphide and phosphorus pentasulphide.*

NOTE. Phosphorus pentasulphide which is not free from white or yellow phosphorus is not to be accepted for carriage.

9. *Ground rubber, rubber dust.*

10. *Dust of coal, lignite, lignite coke and peat, artificially prepared (e.g. by pulverization or other processes), as well as coke from carbonized lignite rendered inert (i.e. not liable to spontaneous combustion).*

NOTE. 1. Natural dusts obtained as residues from the production of coal, coke, lignite or peat are not subject to the requirements of RID.

2. Coke from carbonized lignite which has not been rendered completely inert is not to be accepted for carriage.

11. (a) *Crude naphthalene* with a melting point below 75°C;

(b) *Pure naphthalene and crude naphthalene* with a melting point of 75°C or over;

(c) *Naphthalene in the molten state.*

For (a) and (b), see also marg. 401a.

12. *Expandable polystyrenes* giving off inflammable vapour with a flash point not exceeding 55°C.

13. (a) *Safety matches* (with a potassium chlorate and sulphur base);

(b) *Matches with a base of potassium chlorate and of phosphorus sesquisulphide, also friction igniters.*

20. The following water-wetted explosives:

*Ammonium picrate, wetted with not less than 10% water by mass;*

*Dinitroresorcinol, wetted with not less than 15% water by mass;*

*Nitroguanidine, wetted with not less than 20% water by mass;*

*Nitrostarch, wetted with not less than 20% water by mass;*

*Trinitrophenol, wetted with not less than 30% water by mass;*

*Silver picrate, wetted with not less than 30% water by mass;*

*Sodium picramate, wetted with not less than 20% water by mass;*

*Trinitrobenzene, wetted with not less than 30% water by mass;*

*Trinitrobenzoic acid, wetted with not less than 30% water by mass;*

*Trinitrotoluene, wetted with not less than 30% water by mass;*

*Urea nitrate, wetted with not less than 20% water by mass;*

*Urea nitrate mixtures, wetted with not less than 10% water by mass and not less than 15% inert inorganic material by mass;*

*Zirconium picramate, wetted with not less than 20% water by mass.*

21. The following water-wetted explosives, toxic:

*dinitrophenol, wetted with not less than 15% water by mass;*

*dinitrophenolates, wetted with not less than 15% water by mass;*

*sodium dinitro-ortho-cresolate, wetted with not less than 15% water by mass.*

NOTE to items 20 and 21. 1. Explosives of items 20 and 21 with a water content less than the limits quoted are substances of Class 1.

2. Other water-wetted explosives shall not be accepted for carriage as substances of Class 4.1.

3. The water shall be evenly distributed over the explosive. During carriage, no separation of the mixture shall occur that would prevent the inerting.

4. The water-wetted explosives shall not be capable of being brought to the point of detonation by the standard detonator<sup>(1)</sup> and shall not be capable of being brought to the point of mass explosion by the effect of a powerful booster.

401a Naphthalene in balls or flakes of items 11 (a) and (b) is not subject to the requirements of Section 2 "Conditions of carriage" if it is packed, not more than 1 kg per box, in tightly closed fibreboard or wooden boxes and these boxes are enclosed, not more than 10 per case, in wooden cases.

## 2. Conditions of carriage

### A. PACKAGES

#### 1. General conditions of packing

402 (1) Packagings shall be so closed and arranged as to prevent any loss of the contents.

(2) The materials of which the packagings and their closures are made must not be liable to attack by the contents or form harmful or dangerous compounds therewith.

(3) Packagings, including their closures, must be sufficiently rigid and strong in all their parts to prevent any loosening during the journey and to meet the normal requirements of carriage. Solid substances shall be firmly secured in their packagings, and inner packagings shall be firmly secured in outer packagings. Unless otherwise specified in the section headed "Packing of individual substances", inner packagings may be enclosed in outer packagings either singly or in groups.

(4) Cushioning materials shall be suited to the nature of the contents; in particular they must be absorbent when the contents are liquid or might exude liquid.

(5) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI. Unless specified otherwise in the packing conditions for single substances, IBCs tested and approved for packing group III may be used.

#### 2. Packing of individual substances

403 (1) Substances of item 1 and sulphur of item 2 (a) may be carried in bulk in conformity with marg. 418 (1) and (3) and marg. 419 (3) and may also be carried in metallic or flexible IBCs conforming to marg. 1611 or 1621. For the carriage of sulphur of item 2 (a) in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

(2) Sulphur of item 2 (b) shall only be carried in tank wagons (see Appendix XI) or in tank-containers (see Appendix X).

404 Celloidin (item 3) shall be so packed as to prevent its desiccation.

405 (1) Celluloid in slabs, sheets, rods or tubes and fabrics coated with nitrocellulose (item 4) shall be enclosed:

(a) In firmly closed wooden packagings; or

<sup>(1)</sup> See *Recommendations on the Transport of Dangerous Goods, Tests and Criteria, Part 1, Addendum 1* (ST/SG/AC.10/11), first edition.

- (b) In a stout paper wrapping, which shall be placed
1. In crates; or
  2. Between frames made of boards, the edges of the frames extending beyond the paper wrapping and the frames being bound together with iron bands; or
  3. In wrappings of closely woven fabric.

(2) A package shall not weigh more than:

- 75 kg in the case of celluloid in slabs, sheets or tubes and of fabrics coated with nitrocellulose, if the outer packaging is made of fabric in accordance with (1) (b) 3;
- 120 kg in all other cases.

406 Celluloid in rolls and developed celluloid films (item 5) shall be enclosed in wooden packagings or in fibreboard boxes.

407 (1) Celluloid waste and celluloid film waste (item 6) shall be enclosed in wooden packagings or in two strong bags made of closely woven jute, fireproofed so as not to ignite even on contact with a flame, and with strong and continuous seams. These bags shall be placed one inside the other; after filling, their openings shall be separately and several times folded over or closely stitched so as to prevent any escape of the contents. However, celluloid waste may be packed in single bags of coarse canvas or jute, closely woven, provided that it is first wrapped in stout packing paper or in a suitable plastics material and the sender certifies that the celluloid waste does not contain any waste in the form of dust.

(2) Packages having a raw canvas or jute packaging shall not weigh more than 40 kg in single packaging nor more than 80 kg in double packaging.

(3) For the particulars in the consignment note, see marg. 416 (2).

408 (1) Substances of item 7 (a) shall be packed:

(a) In wooden receptacles or in waterproof fibreboard drums; these receptacles and drums shall be fitted with a lining impervious to the liquids contained therein; their closure shall be leakproof; or

(b) In bags impervious to the vapour from the liquids contained therein (e.g. made of rubber or a suitable plastics material which is not readily inflammable), placed in a wooden or fibreboard box or in a metal receptacle. Fibreboard boxes of type 4G shall meet the requirements of Appendix V. Only packagings of packing group II, marked with the letter "Y", may be used; or

(c) In zinc-lined or lead-lined iron drums; or

(d) In receptacles made of tinplate, zinc sheet or aluminium sheet and secured by cushioning materials in wooden boxes.

(2) Nitrocellulose of item 7 (a), if it is wetted exclusively with water, may be packed in fibreboard drums; this fibreboard shall have undergone a special treatment to render it completely waterproof; the closures of the drums shall be impervious to water vapour.

(3) Nitrocellulose of item 7 (a) with added xylene may not be packed otherwise than in metal receptacles.

(4) Substances of items 7 (b) and (c) shall be packed:

(a) In wooden packagings lined with stout paper or with zinc sheet or aluminium sheet; or

(b) In strong fibreboard drums or, if the substances are dust-free and the sender certifies this in the consignment note, in solid fibreboard cases which have been waterproofed; or

(c) In sheet metal packagings.

(5) For substances of item 7, metal receptacles shall be so constructed as to yield, by reason of the method of assembly of their walls, their method of closure or the existence of a safety device, when the internal pressure reaches a value equal to not more than 300 kPa (3 bar); the presence of these closures or safety devices shall not weaken the strength of the receptacle nor impair its closure.

(6) A package shall not weigh more than 75 kg or, if it can be rolled, not more than 300 kg; however, a package in the form of a fibreboard drum shall not weigh more than 75 kg and one in the form of a fibreboard case not more than 35 kg.

(7) For the particulars in the consignment note, see marg. 416 (3).

409

(1) Red phosphorus and phosphorus pentasulphide (item 8) shall be packed:

(a) In sheet-iron or tinplate receptacles, which shall be placed in a strong wooden case; a package shall not weigh more than 100 kg; or

(b) In receptacles made of glass or stoneware, not less than 3 mm thick, or in a suitable plastics material, each containing not more than 12.5 kg of substance. These receptacles shall be secured with cushioning materials in a strong wooden case; a package shall not weigh more than 100 kg; or

(c) In metal receptacles which, if with their contents they weigh more than 200 kg, shall be fitted with reinforcing hoops at their ends and with rolling hoops; or

(d) In metallic IBCs conforming to marg. 1611; IBCs intended for the carriage of phosphorus pentasulphide shall be tested and approved for packing group II.

(2) Phosphorus sesquisulphide of item 8 shall be packed:

(a) In leakproof metal receptacles, which shall be secured by cushioning materials in wooden boxes with closely fitting sides. A package shall not weigh more than 75 kg; or

(b) In metallic IBCs conforming to marg. 1611; the IBCs shall be tested and approved for packing group II.

(3) For the carriage of phosphorus pentasulphide and phosphorus sesquisulphide (item 8) in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

410

Substances of item 9 shall be packed in firmly closed leakproof receptacles or in metallic or flexible IBCs conforming to marg. 1611 or 1621; the IBCs shall be tested and approved for packing group II.

411

(1) Substances of item 10 shall be packed in metal or wooden receptacles or in strong bags, or in metallic or flexible IBCs conforming to marg. 1611 or 1621.

(2) For artificially prepared coal dust, lignite dust or peat dust, however, wooden receptacles, bags and flexible IBCs are not to be accepted unless these dusts have been completely cooled after drying by heat.

(3) For the particulars in the consignment note, see marg. 416 (4).

412

(1) Naphthalene of item 11 (a) shall be packed in firmly closed wooden or metal receptacles, or in metallic IBCs conforming to marg. 1611.

(2) Naphthalene of item 11 (b) shall be packed in wooden or metal receptacles, or in stout fibreboard cases, or in strong bags made of textile, four-ply paper or a suitable plastics material, or in metallic or flexible IBCs conforming to marg. 1611 or 1621.

A package in the form of a fibreboard case shall not weigh more than 30 kg.



(3) Naphthalene of items 11 (a) and (b) may also be carried in bulk in accordance with marg. 418 (2) and marg. 419 (3). For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

(4) Naphthalene of item 11 (c) shall only be carried in tank wagons (see Appendix XI) or tank-containers (see Appendix X).

(5) Expandable polystyrenes of item 12 shall be packed in firmly closing leakproof packagings or in metallic or flexible IBCs conforming to marg. 1611 or 1621. They may also be carried in bulk in accordance with marg. 418 (3) and 419 (3).

(6) Articles of item 13 (a) shall be packed in boxes or in books. These boxes or books shall be wrapped in stout paper to form a collective packet all the folds of which shall be glued. The books may also be placed in boxes made of thin fibreboard or of a material not readily inflammable (e.g. cellulose acetate). The fibreboard boxes or the collective packets shall be placed in a stout case made of wood, metal, compressed-wood hardboard, strong solid fibreboard or double-faced corrugated fibreboard.

All joints of metal cases shall be secured by soft soldering or by double-seaming.

Fibreboard cases shall be closed by means of joined flaps. The edges of the outer flaps as well as all joints shall either be glued or firmly closed by some other suitable means.

If the fibreboard boxes or the collective packets are packed in fibreboard cases, a package shall not weigh more than 20 kg.

(7) Articles of item 13 (b) shall be packed in boxes so as to prevent any movement. Not more than 12 of these boxes shall be included in a packet all the folds of which shall be glued.

Not more than 12 of these packets shall be wrapped in stout paper, all the folds of which shall be glued, to form a collective packet. The collective packets shall be placed in a strong case made of wood, metal, compressed-wood hardboard, strong solid fibreboard or double-faced corrugated fibreboard.

All joints of metal cases shall be secured by soft soldering or by double-seaming. Fibreboard cases shall be closed by means of joined flaps. The edges of the outer flaps, as well as all joints, shall either be glued or firmly closed by some other suitable means.

If the collective packets are packed in fibreboard cases, a package shall not weigh more than 20 kg.

(8) The packagings for substances of items 20 and 21 shall fulfil the conditions of Appendix V. Only packagings of packing group I, marked with the letter "X", may be used.

Substances of items 20 and 21 shall be packed:

- (a) In removable-head drums made of plywood in conformity with marg. 1523, fibre in conformity with marg. 1525, or plastics material in conformity with marg. 1526, all with one or more moisture-proof inner bags; or
- (b) In combination packagings in conformity with marg. 1538 with moisture-proof inner packagings. However, no inner or outer packagings made of metal shall be permitted.

The packagings shall be so designed that during carriage the water content of the explosive cannot diminish.

### 3. *Mixed packing*

413

(1) Substances grouped under the same item number may be included in the same package. The inner packagings shall conform to what is prescribed for each substance and the outer packaging shall be that laid down for the substances of the item number in question. A package containing celluloid rods and tubes packed together in a fabric wrapping shall not weigh more than 75 kg.

(2) Unless smaller quantities are prescribed in the section entitled "Packing of individual substances", substances of this class, in quantities not exceeding 6 kg for all of the substances listed under the same item number or the same letter, may be enclosed in the same package either with substances of another item number or another letter of the same class or with substances or articles belonging to other classes — provided that mixed packing is also allowed for the latter — or with other goods, subject to the following special conditions.

The inner packagings shall comply with the general and special conditions of packing. In addition, the general requirements of marg. 4 (7) and marg. 8 shall be observed.

A package shall not weigh more than 150 kg, or more than 75 kg if it contains fragile receptacles.

#### *Special conditions*

Item	Description of substance or article	Maximum net filling quantity		Special requirements
		per receptacle	per package	
2(a)	Sulphur	5 kg	5 kg	Shall not be packed together with chlorates, permanganates, perchlorates, peroxides (other than solutions of hydrogen peroxide).
7(a)	Weakly nitrated nitrocellulose (such as collodion cotton)	100 kg	1 kg	Shall not be packed together with substances of Classes 4.2 and 5.1.
8	Red phosphorus (amorphous)	5 kg	5 kg	
8	Phosphorus sesquisulphide	Mixed packing not permitted		
13	Matches	5 kg	5 kg	Shall not be packed together with substances of Classes 3, 4.1 and 4.2.

(3) Substances of items 20 and 21 shall not be combined in a package with other goods.

### 4. *Marking and danger labels on packages* (see Appendix IX)

414

(1) Packages containing substances of items 1 (b), 4 to 8, 20 and 21 shall bear a label conforming to model No. 4.1.

If substances of items 4 to 7 are packed in wrappings made of closely woven fabric in conformity with marg. 405 (1) (b) 3., in fibreboard boxes or cases in conformity with marg. 406 and 408 (4) (b), in jute bags in conformity with marg. 407 (1) or in fibre drums in conformity with marg. 408 (1) (a), (2) and (4) (b),

the packages shall, however, bear two labels conforming to model No. 4.1 (see marg. 10).

Packagings containing expandable polystyrenes of item 12 shall bear the following marking: "Keep away from any source of ignition". This marking shall be in an official language of the country of departure, and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

Packages containing substances of item 21 shall also bear a label conforming to model No. 6.1.

(2) Packages containing fragile receptacles not visible from outside shall bear a label conforming to model No. 12. If these fragile receptacles contain liquids, the packages shall in addition, except in the case of sealed ampoules, bear labels conforming to model No. 11; these labels shall be placed high up on two opposite sides of a case, or in an equivalent manner for other types of packaging.

#### B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

415 Developed celluloid films (item 5) may be forwarded as express parcels if they are packed in boxes made of wood, tinplate or aluminium sheet, or in hardened fibre-board, and then placed in wooden cases with complete sides, and if the sender certifies this method of packing in the transport document by the words "*Packed for express parcels*"; in this case a package shall not weigh more than 50 kg.

#### C. PARTICULARS IN THE CONSIGNMENT NOTE

416 (1) The description of the goods in the consignment note shall conform to one of the names *in italics* in marg. 401. Where the name of the substance is not mentioned for item 1 (a), the chemical name shall be entered. The description of the goods shall be followed by *particulars of the Class, the item number (adding the letter where given) and the initials "RID"* e.g. 4.1, item 7 (a), *RID*. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "*Waste, earth containing toluene, 4.1, item 1 (b), RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

(2) For celluloid waste (item 6) packed in stout packing paper or in a suitable plastics material and placed, so packed, in bags made of closely woven coarse canvas or jute, the sender shall certify in the consignment note: "*Free from waste in the form of dust*".

(3) For substances of items 7 (b) and (c) packed in fibreboard cases, the sender shall certify in the consignment note: "*Dust-free substances*".

(4) For artificially prepared coal dust, lignite dust or peat dust (item 10), packed in wooden receptacles or in bags or in IBCs [see marg. 411 (2)], the sender shall certify in the consignment note: "*Substances completely cooled after drying by heat*".

#### D. TRANSPORT EQUIPMENT

##### 1. Conditions relating to wagons and loading

###### a. For packages

417 (1) Substances of items 4 to 8, 20 and 21 shall be loaded in covered wagons or sheeted open wagons.

(2) For the use of wagons fitted with electrical equipment for the carriage of substances of items 3 to 7, see Appendix IV.

b. *For carriage in bulk*

418 (1) Substances of items 1 (a) and 2 (a), in bulk, shall be loaded in covered wagons or sheeted open wagons. For rushes and reeds without leaves or beards, tightly bundled, open wagons without sheets are also acceptable during the months of October to April. For sawdust, open wagons without sheets are also acceptable if the load is covered in another way without leaving any gaps, for example with boards or waste timbers which partly overlap.

NOTE. The requirement for loading in covered wagons or sheeted open wagons is not applicable if the substances of item 1 (a) are used as packing or filling material and do not weigh more than 3% of the total mass of the consignment.

(2) Naphthalene of items 11 (a) and (b), in bulk, shall be loaded in iron wagons with a movable cover, or in open iron wagons, covered with non-inflammable sheets, or in open wagons which have their wooden floor protected by a closely woven sheet and are covered with non-inflammable sheets. For naphthalene of item 11 (a), the wagon floor shall be protected by an oil-proof lining.

(3) Substances of item 1 (b) and expandable polystyrenes of item 12 may be carried in bulk, in open wagons sheeted and with adequate ventilation, or in wagons with a roof that opens. For substances of item 1 (b), appropriate measures shall be taken to ensure that no leakage of the contents, in particular liquids, can occur.

c. *For small containers*

419 (1) Packages containing substances listed in this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 421 shall be observed inside a small container.

(3) Substances of item 1, sulphur of item 2 (a) and naphthalene [items 11 (a) and (b)] as well as expandable polystyrenes of item 12 may also be enclosed without inner packaging in small containers of the closed type with complete sides. For the carriage of naphthalene, small containers made of wood shall have an oil-proof lining.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

420 (1) Wagons in which substances of items 1 (b), 4 to 8, 20 and 21 are loaded, tank wagons and tank-containers containing sulphur of item 2 (b) or naphthalene of item 11 (c), phosphorus sesquisulphide or phosphorus pentasulphide (item 8) shall bear on both their sides a label conforming to model No. 4.1. When substances of item 21 are carried, labels conforming to model No. 6.1 shall also be affixed.

(2) Small containers shall be labelled in conformity with marg. 414 (1).

Small containers enclosing packages bearing a label conforming to model No. 12 shall themselves also bear this label.

Small containers containing expandable polystyrenes of item 12 shall bear the marking: "Keep away from any source of ignition". This marking shall be in an official language of the country of departure, and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

## E. PROHIBITIONS ON MIXED LOADING

421 (1) Substances of Class 4.1 contained in packages bearing one or two labels conforming to model No. 4.1 shall not be loaded in the same wagon with substances or articles of Classes 1 or 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

(2) Substances of Class 4.1 contained in packages bearing two labels conforming to model No. 4.1 shall not be loaded in the same wagon with:

(a) Substances of Classes 5.1 (marg. 501) or 5.2 (marg. 551) contained in packages bearing two labels conforming to model No. 5;

(b) Liquid substances of Classes 6.1 (marg. 601) or 8 (marg. 801) contained in packages bearing two labels conforming to models Nos. 6.1, 6.1A or 8.

422 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

## F. EMPTY PACKAGINGS

423 Uncleaned empty packagings which have contained substances of items 20 and 21 are not to be accepted for carriage.

## G. OTHER REQUIREMENTS

424 No requirements

425-  
429

## CLASS 4.2. SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION

1. *List of substances*

430 Among the substances and articles covered by the heading of Class 4.2, only those listed in marg. 431 are to be accepted for carriage, and then only under the conditions set out in marg. 431 to 453. These substances and articles to be accepted for carriage under certain conditions are to be considered as substances and articles of RID.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes) containing one or more components listed in marg. 431, see also marg. 3 (3).

431 1. *White or yellow phosphorus.*

2. Compounds of phosphorus with alkali metals or alkaline earth metals, e.g. *sodium phosphide, calcium phosphide, strontium phosphide.*

NOTE. 1. Aluminium, magnesium and zinc phosphides are substances of Class 6.1 [see marg. 601, item 43 (a) and (b)].

2. Other compounds of phosphorus with so-called heavy metals such as iron, copper, tin, etc. are not subject to the requirements of RID.

3. Organo-metallic compounds liable to spontaneous combustion, such as: *aluminium alkyls, aluminium alkyl halides, aluminium alkyl hydrides, lithium alkyls, magnesium alkyls, zinc alkyls, gallium alkyls and boron alkyls*, and their solutions liable to spontaneous combustion.

NOTE. 1. Organo-metallic compounds and their solutions which are not liable to spontaneous combustion, but which on contact with water give off inflammable gases, are substances of Class 4.3 [see marg. 471, item 2 (e)].

2. Inflammable solutions of substances of item 3 in concentrations which are not liable to spontaneous combustion, and which on contact with water do not give off inflammable gases, are substances of Class 3. The sender shall enter in the consignment note the words:

“Substance not liable to spontaneous combustion” [see also Class 4.3, marg. 471, item 2 (e), Note 2].

4. Nitrocellulose film waste free from gelatine, in reels, sheets or strips.

NOTE. Nitrocellulose film waste free from gelatine is not to be accepted for carriage if it is dusty or includes dusty portions.

5. (a) Used rags and waste;  
 (b) Greasy or oily fabrics, wicks, cord or thread;  
 (c) The following substances, greasy or oily: wool, hair (and horse-hair), artificial wool, reclaimed wool (also called wool shoddy), cotton, recarded cotton, artificial fibres (rayon, etc.), silk, flax, hemp and jute, also in the form of spinning or weaving waste.

For (a), (b) and (c), see also marg. 431a under (a).

NOTE. Wetted substances of items 5 (b) and (c) are not to be accepted for carriage.

6. (a) Metals in pyrophoric form, such as: dust and powder of aluminium, magnesium, nickel, titanium, zinc or zirconium, also mixtures of powders and powders of alloys: dust from blast-furnace filters;

NOTE. Dust and powder of metals in a non-pyrophoric form which, on contact with water, give off inflammable gases are substances of Class 4.3 [see marg. 471, item 1 (d)].

- (b) Salts of dithionous (hydrosulphurous) acid ( $H_2S_2O_4$ ), such as: dithionites (hydrosulphites) of sodium, potassium, calcium and zinc;  
 (c) Anhydrous potassium sulphide and anhydrous sodium sulphide, and their hydrates containing less than 30% water of crystallization; sodium hydrogen sulphide containing less than 25% water of crystallization.

For (a), see also marg. 431a under (b); for (b), see also marg. 431a under (a).

NOTE. Potassium sulphide and sodium sulphide containing not less than 30% water of crystallization and sodium hydrogen sulphide containing not less than 25% water of crystallization are substances of Class 8 [see marg. 801, item 45 (b)].

7. Freshly calcined soot. See also marg. 431a under (a).

8. Freshly quenched charcoal in powder, grains or lumps. See also marg. 431a under (a) and Class 4.1, marg. 401, item 1 (a).

NOTE. By freshly quenched charcoal is meant: for charcoal in lumps, charcoal which has been quenched less than four days previously; for powdered charcoal or granulated charcoal in a granule size of less than 8 mm, charcoal which has been quenched less than eight days previously, provided it has been air-cooled in thin layers or by a process ensuring an equivalent degree of cooling.

9. Mixtures of granulated or porous combustible substances with constituents still liable to spontaneous oxidation, such as linseed oil or other natural drying oils, boiled or with added drying compounds, resin, resin oil, petroleum residues, etc. (e.g. the substance known as cork waste, lupuline) as well as only residues from the bleaching of soya oil. See also marg. 431a under (a) and Class 4.1, marg. 401, item 1 (a).

10. Paper, cardboard and products made of paper or cardboard (e.g. cardboard wrappings and cardboard rings), wood fibre sheets, skeins of thread, fabrics, string, thread, spinning or weaving waste, wastes consisting of packing materials or cleaning rags containing residues of dyestuffs, all impregnated with oils, greases, natural drying oils, boiled or with added drying compounds or other impregnating substances liable to spontaneous oxidation. See also marg. 431a under (a) and Class 4.1, marg. 401, item 1 (a).

NOTE. Substances of item 10 are not to be accepted for carriage if their humidity exceeds the hygroscopic humidity.

11. The *substance* with an iron oxide base *having been used for purifying lighting gas* (spent oxide of iron).

NOTE. If the substance which has been used for purifying lighting gas (spent oxide of iron) is, after storage and aeration, no longer liable to spontaneous combustion, and if this is certified by the sender in the consignment note by the entry: "*Substance not liable to spontaneous combustion*", it is not subject to the requirements of RID.

12. *Used yeast bags*, uncleaned. See also marg. 431a under (a).

13. *Empty sodium nitrate bags* made of a textile fabric.

NOTE. Textile bags from which all the nitrate impregnating them has been completely removed by washing are not subject to the requirements of RID.

14. *Empty packagings, empty tank wagons, and empty tank-containers*, uncleaned, which have contained phosphorus of item 1.

15. *Empty packagings, empty tank wagons and empty tank-containers*, uncleaned, which have contained substances of item 3.

NOTE to items 14 and 15. Empty packagings which have contained other substances of Class 4.2 are not subject to the requirements of RID.

431a

Substances handed over for carriage in conformity with the following provisions are not subject to the requirements of Section 2 "Conditions of carriage":

- (a) Substances of items 5, 6 (b), 7 to 10 and 12, if their condition is such as to exclude any danger of spontaneous combustion and if this is certified by the sender in the consignment note by the entry: "*Substance not liable to spontaneous combustion*"; for substances of item 8 and certain substances of items 9 and 10, see however Class 4.1, marg. 401, item 1 (a).
- (b) Dust and powder of aluminium or zinc of item 6 (a), e.g. packed together with varnish for use in the manufacture of colours, if packed with care in quantities not exceeding 1 kg.

## 2. Conditions of carriage

(The requirements relating to empty packagings are set out under F.)

### A. PACKAGES

#### 1. General conditions of packing

432

(1) Packagings shall be so closed and arranged as to prevent any loss of the contents.

(2) The materials of which the packagings and closures are made shall not be liable to attack by the contents nor form harmful or dangerous compounds therewith.

(3) Packagings, including their closures, shall be sufficiently rigid and strong in all their parts to prevent any loosening during the journey and to meet the normal requirements of carriage. In particular, where substances in the liquid state or immersed in a liquid or in solution are concerned and unless the section headed "Packing of individual substances" provides otherwise, receptacles and their closures shall be able to withstand any pressure which may arise inside the receptacles, taking into account also the presence of air, in normal conditions of carriage. For this purpose a free space shall be left, account being taken of the difference between the temperature of the substances at the time of filling and the highest mean temperature which they are likely to reach during carriage. Solid

substances shall be firmly secured in their packagings, and inner packagings shall be firmly secured in outer packagings. Unless otherwise specified in the section headed "Packing of individual substances", inner packagings may be enclosed in outer packagings either singly or in groups.

(4) Bottles and other glass receptacles must be free from faults liable to impair their strength; in particular, internal stresses shall have been suitably relieved. The thickness of the walls shall be not less than 3 mm for receptacles which, with their contents, weigh more than 35 kg and not less than 2 mm for other receptacles.

The tightness of the closure system shall be ensured by an additional device (cap, crown, seal, binding, etc.) capable of preventing any loosening of the closure system during carriage.

(5) When receptacles made of glass, porcelain, stoneware or similar materials are prescribed or allowed, they must be secured by cushioning materials in protective packagings.

Cushioning materials shall be suited to the nature of the contents; in particular, they shall be dry and absorbent when the contents are liquid or might exude liquid.

(6) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI.

## 2. *Packing of individual substances*

433

(1) Phosphorus of item 1 shall be packed:

(a) In leakproof tin-plate receptacles hermetically closed and placed in wooden cases; or

(b) In sheet-iron drums hermetically closed. Press-on lids shall not be allowed. The sheet-iron constituting the body, bottom and lid shall not be less than 1.5 mm thick. A package shall not weigh more than 500 kg. If it weighs more than 100 kg it shall be fitted with expanded (pressed out) rolling hoops or separate (fitted) rolling hoops, and shall be welded; or

(c) Not more than 250 kg per receptacle, in hermetically closed glass receptacles secured by cushioning materials in leakproof tinplate receptacles closed by soldering and secured, likewise by cushioning materials, in wooden cases.

(2) Receptacles and drums containing phosphorus shall be filled with water.

(3) For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

434

(1) Substances of item 2 shall be packed in leakproof tinplate receptacles hermetically closed and placed in wooden cases.

(2) They may also be packed, not more than 2 kg per receptacle, in receptacles made of glass, porcelain, stoneware or similar materials, secured by cushioning materials in wooden cases.

435

(1) Substances of item 3 shall be packed in hermetically closed metal receptacles not liable to be attacked by the contents, of a capacity not exceeding 450 litres.

The receptacles shall either

— Be secured in outer packagings of fire-resistant materials; or

— Have a wall thickness of not less than 3 mm, with the closure of the filling and discharge device secured by a protective cap.

Receptacles shall be subjected to the initial test and to periodical tests every five years with an inert test substance at a pressure of not less than 1 MPa (10 bar)



(gauge pressure). The receptacles shall not be filled to more than 90% of their capacity; however, 5% ullage shall remain when the liquid is at a mean temperature of 50°C. When handed over for carriage, the liquid shall be under a layer of inert gas, the gauge pressure of which shall not exceed 50 kPa (0.5 bar).

The following particulars must be stamped on the data plate of the receptacle:

- (a) "Organo-metallic compounds, Class 4.2";
- (b) The tare of the receptacle, including fittings and accessories;
- (c) The test pressure and the date (month, year) of the last test;
- (d) The stamp of the expert who carried out the tests;
- (e) The capacity of the receptacle and the maximum permissible load.

The exact designation of the contents and the words: "Do not open during carriage: liable to spontaneous combustion" shall be durably marked in an official language of the country of departure, and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

A package shall not weigh more than 1,000 kg.

(2) Substances of item 3 may also be packed in hermetically closed glass receptacles of not more than 5 litres capacity, which shall be secured with cushioning materials in sheet-metal receptacles. The glass receptacles shall not be filled to more than 90% of their capacity.

(3) For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

436 (1) Substances of item 4 shall be packed in bags and placed in drums made of waterproof fibreboard or in receptacles made of zinc sheet or aluminium sheet. The walls of metal receptacles shall be lined with fibreboard. The bottoms and lids of fibreboard drums and of metal receptacles shall be lined with wood.

(2) Metal receptacles shall be fitted with closures or safety devices which will yield when the internal pressure reaches a value not greater than 300 kPa (3 bar); the presence of these closures or safety devices shall not weaken the strength of the receptacle nor impair its closure.

(3) A package must not weigh more than 75 kg.

437 (1) Substances of item 5 (a) shall be tightly compressed and be placed in leakproof metal receptacles.

(2) Substances of items 5 (b) and (c) shall be tightly compressed and be packed either in wooden or fibreboard cases or in paper or textile wrappings firmly secured.

(3) Substances of item 5 may also be carried in bulk in conformity with marg. 447 and marg. 448 (3).

438 (1) Substances of item 6 (a) shall be packed in hermetically closed receptacles made of metal, glass or a suitable plastics material. The substances shall be dispatched under a protective liquid or gas. The receptacles shall, if necessary, be fitted with a suitable pressure-compensating device.

Glass receptacles shall be secured with cushioning materials in fibreboard or metal packagings; cushioning materials shall be non-combustible. Receptacles made of plastics material shall be placed in fibreboard or metal packagings. Packagings containing receptacles made of glass or a plastics material shall be placed in a wooden packing case. A package shall not weigh more than 75 kg.

(2) Substances of items 6 (b) and (c) shall be packed in hermetically closed sheet-metal receptacles or steel drums or in hermetically closed metallic IBCs conforming to marg. 1611, tested and approved for packing group II. However,

for zinc dithionite IBCs tested and approved for packing group III may be used. In the case of sheet-metal receptacles, a package shall not weigh more than 50 kg.

(3) For the carriage in bulk of dust from blast-furnace filters of item 6 (a), see marg. 447 and marg. 448 (3).

439 (1) Substances of items 7 to 10 and 12 shall be enclosed in tightly closed packagings or in metallic or flexible IBCs conforming to marg. 1611 or 1621, tested and approved for packing group III. Wooden packagings used for substances of items 7 and 8 shall be provided with a leakproof lining.

(2) For the carriage of freshly quenched charcoal in powder or in grains (item 8) in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

(3) For the carriage in bulk of substances of item 10, see marg. 447 and 448 (3).

440 The substance having been used for purifying lighting gas (spent oxide of iron) (item 11) shall be packed in tightly closed sheet-metal receptacles.

441 Empty sodium nitrate bags (item 13) shall be made into tightly packed bundles securely fastened with string and placed either in wooden cases or in a wrapping consisting of several thicknesses of stout paper or waterproofed fabric.

### 3. *Mixed packing*

442 (1) Substances grouped under the same item number may be included in the same package. The inner packagings shall conform to what is prescribed for each substance, and the outer packaging shall be that laid down for the substances of the item number in question.

(2) Unless smaller quantities are prescribed in the section entitled "Packing of individual substances", substances of this class, in quantities not exceeding 6 kg in the case of solids or 3 litres in the case of liquids for all of the substances listed under the same item number or the same letter, may be enclosed in the same package either with substances of another item number or another letter of the same class or with substances or articles belonging to other classes — provided that mixed packing is also allowed for the latter — or with other goods, subject to the following special conditions.

The inner packagings must comply with the general and special conditions of packing. In addition, the general requirements of marg. 4 (7) and marg. 8 shall be observed.

A package shall not weigh more than 150 kg, or more than 75 kg if it contains fragile receptacles.

#### *Special conditions*

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
1	Phosphorus, white or yellow	Mixed packing not permitted		
2	Phosphides			
3	Zinc alkyls, etc.			
6(a)	Metals in pyrophoric form	3 kg	3 kg	Shall not be packed together with weakly nitrated nitro-cellulose and red phosphorus of Class 4.1 nor with bifluorides
4, 5, 6(b) 7 to 12	All substances			

4. *Marking and danger labels on packages* (see Appendix IX)

- 443 (1) Packages containing substances of items 1 to 4 and 6 shall bear a label conforming to model No. 4.2. Packages containing substances of item 3 shall in addition bear a label conforming to model No. 4.3.

However, if substances of item 4 are packed in waterproofed fibreboard drums in conformity with marg. 436 (1), the packages shall bear two labels conforming to model No. 4.2 (see marg. 10).

(2) Drums containing phosphorus (item 1) and having a screw-cap lid shall — unless they are fitted with a device to keep them upright — bear in addition, high up at two diametrically opposite places, two labels conforming to model No. 11.

(3) Packages containing receptacles fitted with vents, and receptacles fitted with vents without outer packagings, containing substances of item 6 (a) shall bear on two opposite sides a label conforming to model No. 11.

Packages containing fragile receptacles not visible from outside shall bear a label conforming to model No. 12. If these fragile receptacles contain liquids, the packages shall in addition, except in the case of sealed ampoules, bear labels conforming to model No. 11; these labels shall be placed high up on two opposite sides of a case, or in an equivalent manner for other types of packaging.

B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

- 444 No restrictions in respect of *grande vitesse* and *petite vitesse*.

C. PARTICULARS IN CONSIGNMENT NOTE

- 445 The description of the goods in the consignment note shall conform to one of the names *in italics* in marg. 431. Where the name of the substance is not mentioned for items 2, 3, 9 and 10, the chemical name shall be entered. The description of the goods shall be followed by *particulars of the Class, the item number (adding the letter where given) and the initials "RID" e.g. 4.2, item 5 (a), RID*. For the carriage of wastes [see marg.3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "*Waste containing white phosphorus, 4.2, item 1, RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown.

For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

D. TRANSPORT EQUIPMENT

1. *Conditions relating to wagons and loading*

a. *For packages*

- 446 Packages containing substances of items 4 to 10 shall be loaded in covered wagons or sheeted open wagons.

b. *For carriage in bulk*

- 447 Substances of item 5, dust from blast-furnace filters [item 6 (a)] and substances of item 10 may be carried in bulk in metal wagons with a roof which opens. Dust from blast-furnace filters, in bulk, may also be loaded in sheeted open iron wagons.

c. *For small containers*

448 (1) Packages containing substances listed in this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 450 shall be observed inside a small container.

(3) Substances of item 5, dust from blast-furnace filters [item 6 (a)] and substances of item 10 may also be enclosed without inner packaging in small metal containers of the closed type with complete sides.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers* (see Appendix IX)

449 (1) Wagons in which substances of items 1 to 4 and 6 are loaded shall bear on both their sides a label conforming to model No. 4.2. Tank wagons and tank-containers containing substances of items 1 and 3 shall bear on both their sides a label conforming to model No. 4.2.

Wagons, tank wagons and tank-containers containing substances of item 3, as well as the wagons carrying such tank-containers, shall in addition bear on both their sides a label conforming to model No. 4.3.

(2) Small containers shall be labelled in conformity with marg. 443 (1).

Small containers enclosing packages bearing a label conforming to model No. 12 shall themselves also bear this label.

(3) In addition, wagons in which substances of item 3 are loaded and wagons carrying tank-containers containing such substances shall bear on both their sides a label conforming to model No. 13.

E. PROHIBITIONS ON MIXED LOADING

450 (1) Substances of Class 4.2 contained in packages bearing one or two labels conforming to model No. 4.2 shall not be loaded in the same wagon with substances and articles of Classes 1 or 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

(2) Substances of item 4 contained in packages bearing two labels conforming to model No. 4.2 shall not be loaded in the same wagon with:

(a) Substances of Classes 5.1 (marg. 501) or 5.2 (marg. 551) contained in packages bearing two labels conforming to model No. 5;

(b) Liquid substances of Classes 6.1 (marg. 601) or 8 (marg. 801) contained in packages bearing two labels conforming to models Nos. 6.1, 6.1A or 8.

451 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

F. EMPTY PACKAGINGS

452 (1) Empty packagings, tank wagons and tank-containers, uncleaned, of items 14 and 15 shall be closed in the same way and ensure the same degree of leakproofness as if they were full (for tank wagons, see Appendix XI, for tank-containers, see Appendix X).

(2) Empty packagings, tank wagons and tank-containers, uncleaned, of items 14 and 15 shall bear the same danger labels as if they were full.

(3) The description in the consignment note shall conform to one of the names in *italics* in items 14 and 15 e.g. "*Empty packaging, 4.2., item 14, RID*". A cross shall be inserted in the appropriate box on the consignment note. For empty tank wagons or tank-containers, uncleaned, this description shall be

completed by adding the words "Last load" together with the name and item number of the goods last loaded e.g. "*Last load, white phosphorus, item 1*".

For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. "*Last load 46 1381 white phosphorus, item 1*".

#### G. OTHER REQUIREMENTS

453 Receptacles containing substances of item 3 and damaged during the journey shall be unloaded immediately and, if repairs cannot be carried out speedily, they may be sold with their contents, without other formalities, for the account of the consignor.

454-  
469

### CLASS 4.3. SUBSTANCES WHICH GIVE OFF INFLAMMABLE GASES ON CONTACT WITH WATER

#### 1. *List of substances*

470 Among the substances and articles covered by the heading of Class 4.3, only those listed in marg. 471 are to be accepted for carriage, and then only under the conditions set out in marg. 471 to 489. These substances and articles to be accepted for carriage under certain conditions are to be considered as substances and articles of RID.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes) containing one or more components listed in marg. 471, see also marg. 3 (3).

- 471 1. (a) Alkali and alkaline-earth metals, e.g. *sodium, potassium, calcium*, as well as *alkali metal alloys, alkaline-earth metal alloys and alloys of alkali and alkaline-earth metals*;
- (b) *Alkali metal amalgams and alkaline-earth metal amalgams*;
- (c) *Alkali metal dispersions*;
- (d) Other metals and metal alloys which give off inflammable gases on contact with water, such as: *dust, powder and fine shavings of aluminium, zinc, magnesium and magnesium alloys with a magnesium content greater than 50%, all being free from particles likely to promote ignition, magnesium granules, coated, of a particle size not less than 149 µm.*

For (d), see also marg. 471a under (b).

NOTE. Dust and powder of metals in pyrophoric form are substances of Class 4.2 [see marg. 431, item 6 (a)].

2. (a) *Calcium carbide and aluminium carbide*;
- (b) Alkali metal and alkaline-earth metal *hydrides* (e.g. *lithium hydride, calcium hydride*), *mixed hydrides*, as well as *borohydrides and aluminium hydrides* of alkali metals and alkaline-earth metals;
- (c) *Alkali silicides*;
- (d) *Calcium silicide* in power, grains, or lumps, containing more than 50% silicon, *manganese calcium silicide (silicomanganese calcium)*;
- (e) Organo-metallic compounds which give off inflammable gases on contact with water, such as: *aluminium alkyls, aluminium alkyl*

*halides, aluminium alkyl hydrides, lithium alkyls, magnesium alkyls, zinc alkyls, gallium alkyls and boron alkyls, as well as solutions of these substances which give off inflammable gases on contact with water.*

NOTE. 1. Organo-metallic compounds and their solutions which are liable to spontaneous combustion are substances of Class 4.2 (see marg. 431, item 3).

2. Inflammable solutions of substances of item 2 (e) in concentrations which are not liable to spontaneous combustion, and which do not give off inflammable gases on contact with water, are substances of Class 3. The sender shall enter in the consignment note the words: "Substances not giving off inflammable gases on contact with water" (see also Class 4.2, marg. 431, item 3, Note 2).

3. *Amides of alkali metals and alkaline-earth metals, e.g. sodamide (sodium amide).* See also marg. 471a under (a).

NOTE. Calcium cyanamide is not subject to the requirements of RID.

4. (a) *Trichlorosilane (silicochloroform);*

(b) *Methyldichlorosilane, ethyldichlorosilane.*

5. *Boron trifluoride dimethyl etherate.*

6. *Empty packagings including empty intermediate bulk containers (IBCs), empty tank wagons, empty tank-containers and empty small bulk containers, uncleaned, which have contained substances of Class 4.3.*

471a Substances carried in conformity with the following provisions are not subject to the requirements of Section 2. "Conditions of Carriage":

(a) Sodamide (item 3), in quantities of not more than 200 g per package, packed in receptacles which are so closed as to be leakproof and which cannot be attacked by the contents, if these receptacles are packed with care in a strong, leakproof wooden packaging with a leakproof closure;

(b) Dust and powder of aluminium or zinc [item 1 (d)], e.g. packed together with varnish for use in the manufacture of colours, if packed with care in quantities not exceeding 1 kg.

## 2. Conditions of carriage

(The requirements relating to empty packagings are set out under F.)

### A. PACKAGES

#### 1. General conditions of packing

472 (1) Packagings shall be so closed and leakproof as to prevent the penetration of moisture and any loss of the contents.

(2) The materials of which the receptacles and their closures are made shall not be liable to attack by the contents, nor form harmful or dangerous compounds therewith. Receptacles shall in all cases be free from moisture.

(3) Packagings, including their closures, shall be sufficiently rigid and strong in all their parts to prevent any loosening during the journey and to meet the normal requirements of carriage. In particular, where solid substances immersed in a liquid are concerned and unless the section headed "Packing of individual substances" provides otherwise, receptacles and their closures shall be able to withstand any pressure which may arise inside the receptacles, taking into account also the presence of air, in normal conditions of carriage. For this purpose a free space shall be left, account being taken of the difference between the temperature of the substances at the time of filling and the highest mean

temperature which they are likely to reach during carriage. Solid substances shall be firmly secured in their packagings and inner packagings shall be firmly secured in outer packagings. Unless otherwise specified in the section headed "Packing of individual substances", inner packagings may be enclosed in outer packagings either singly or in groups.

(4) Bottles and other glass receptacles shall be free from faults liable to impair their strength; in particular, internal stresses shall have been suitably relieved. The thickness of the walls may in no case be less than 2 mm.

The tightness of the closure system must be ensured by an additional device (cap, crown, seal, binding, etc.) capable of preventing any loosening of the closure system during carriage.

(5) Cushioning materials shall be suited to the nature of the contents.

(6) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI.

## 2. *Packing of individual substances*

473

(1) Substances of items I (a) to (c) shall be packed:

(a) In receptacles made of sheet iron, lead-lined sheet iron or tinplate. For substances of item I (b), however, receptacles made of lead-lined sheet iron or tinplate are not to be accepted. These receptacles, with the exception of iron drums, shall be placed in wooden packing cases or in protective iron hampers; or

(b) Not more than 1 kg per receptacle, in glass or stoneware receptacles. Not more than 5 of these receptacles shall be packed in a wooden packing case with a leakproof lining of ordinary sheet iron, lead-lined sheet iron or tinplate, assembled by soldering. For glass receptacles containing quantities not exceeding 250 g, the wooden case may be replaced by an outer receptacle made of ordinary sheet iron, lead-lined sheet iron or tinplate. Glass receptacles shall be secured in the outer packagings by non-combustible cushioning materials.

(2) If a substance of item I (a) is not packed in a welded metal receptacle with a lid hermetically closed by soldering, then:

(a) It shall be completely covered with mineral oil having a flash-point above 50°C, or sprinkled sufficiently for the pieces to be coated with a film of this oil; or

(b) The air in the receptacle shall be completely replaced by a protective gas (e.g. nitrogen) and the receptacle so closed as to be gas-tight; or

(c) The substance shall be poured into the receptacle, which shall be filled to the brim and, after cooling, closed so as to be gas-tight.

(3) Iron receptacles shall have walls not less than 1.25 mm thick. If, with their contents, they weigh more than 75 kg, they must be hard-soldered or welded. If they weigh more than 125 kg, they shall in addition be fitted with end bands and rolling hoops.

(4) Substances of item I (d) shall be packed in hermetically closed receptacles made of metal, glass or a suitable plastics material, or in hermetically closed metallic IBCs conforming to marg. 1611, or in waterproof bags, or in moisture-proof flexible IBCs conforming to marg. 1621.

IBCs tested and approved for packing group II shall be used for substances of item I (d). However, IBCs tested and approved for packing group III may be used for magnesium granules, coated.

Glass receptacles and bags shall be secured with cushioning materials or placed in a wooden, metal or fibreboard outer packaging. A package shall not weigh more than 115 kg.

(5) For the carriage of sodium, potassium and alloys of sodium and potassium [item 1 (a)] in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

474

(1) Substances of item 2 (a) to (d) shall be packed:

(a) In receptacles made of sheet iron, lead-lined sheet iron or tinfoil. For substances of item 2 (b) and (c), a receptacle shall not contain more than 10 kg. These receptacles, with the exception of iron drums, shall be placed in wooden packing cases or in protective iron hampers; or

(b) Not more than 1 kg per receptacle, in receptacles made of glass, stoneware or suitable plastics material; not more than 5 of these receptacles shall be packed in a wooden packing case with a leakproof lining of ordinary sheet iron, lead-lined sheet iron or tinfoil, assembled by soldering. For glass receptacles containing quantities not exceeding 250 g, the wooden case may be replaced by an outer receptacle made of ordinary sheet iron, lead-lined sheet iron or tinfoil. Glass receptacles shall be secured in the outer packagings by non-combustible cushioning materials.

(c) Substances of item 2 (a) and (d) may also be packed in metallic IBCs conforming to marg. 1611, tested and approved for packing group II. However, IBCs tested and approved for packing group III may be used for manganese calcium silicide (silico-manganese-calcium).

(2) A package shall not weigh more than 75 kg if it contains substances of items 2 (b) or (c) and not more than 125 kg if it contains substances of item 2 (d).

(3) For the carriage of calcium carbide [item 2 (a)] and calcium silicide [item 2 (d)] in bulk, see marg. 483 and 484 (3).

(4) Substances of item 2 (e) shall be packed in hermetically closed metal receptacles not liable to be attacked by the contents, having a capacity of not more than 450 litres.

The receptacles shall either:

- Be secured in outer packagings made of fire-resistant materials; or
- Have a wall thickness of not less than 3 mm, the closure of the filling and discharge device being secured by a protective cap.

Receptacles shall be subject to the initial test and to periodical tests every five years with an inert test substance at a pressure of not less than 1 MPa (10 bar) (gauge pressure). The receptacles shall not be filled to more than 90% of their capacity; however, 5% ullage shall remain when the liquid is at a mean temperature of 50°C. When handed over for carriage, the liquid shall be under a layer of inert gas, the gauge pressure of which shall not exceed 50 kPa (0.5 bar).

The following particulars must be stamped on the data plate of the receptacle:

- (a) "Organo-metallic compounds, Class 4.3",
- (b) The tare of the receptacle, including fittings and accessories,
- (c) The test pressure and the date (month, year) of the last test,
- (d) The stamp of the expert who carried out the tests,
- (e) The capacity of the receptacle and the maximum permissible load.

The exact designation of the contents and the words: "Do not open during carriage. Forms inflammable gases on contact with water" shall be durably



marked in an official language of the country of departure, and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

A package shall not weigh more than 1,000 kg.

Substances of item 2 (e) may also be packed in hermetically closed glass receptacles of not more than 5 litres capacity, which shall be secured with cushioning materials in sheet-metal receptacles. The glass receptacles shall not be filled to more than 90% of their capacity.

(5) For carriage of substances of item 2 (e) in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

475 Amides of item 3 shall be packed in quantities of not more than 10 kg in hermetically closed metal boxes or drums, which shall be placed in wooden cases. A package shall not weigh more than 75 kg.

476 (1) Trichlorosilane (silicochloroform) of item 4 (a), methylchlorosilane and ethylchlorosilane of item 4 (b) shall be packed in corrosion-resistant steel receptacles, of a capacity of not more than 450 litres. The receptacles shall be hermetically closed; the closure device shall be specially protected by a cap. The receptacles shall be constructed as pressure vessels for a working pressure of 0.4 MPa (4 bar) and tested in accordance with the requirements valid for pressure vessels in the country of departure. Receptacles with a capacity not exceeding 250 litres shall have a wall thickness of not less than 2.5 mm, and those with a higher capacity a wall thickness of not less than 3 mm.

(2) If filling is based on mass, the degree of filling shall not exceed:

1.14 kg/l for trichlorosilane (silicochloroform),

0.95 kg/l for methylchlorosilane,

0.93 kg/l for ethylchlorosilane.

If it is carried out by volume, the degree of filling shall not exceed 85%.

(3) For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

477 Boron trifluoride dimethyl etherate of item 5 shall be packed:

(a) In amounts of not more than 1 litre per receptacle in hermetically closed receptacles made of glass, stoneware or a suitable plastics material, placed in wooden or fibreboard packing cases. Glass or stoneware receptacles shall be secured in the packing cases with appropriate absorbent, inert and non-combustible cushioning materials or placed in closely fitting packagings made of preformed inert plastics materials. A package shall not weigh more than 55 kg if the packing case is of fibreboard and not more than 125 kg if the packing case is of wood;

(b) In hermetically closed receptacles made of a suitable plastics material and having a capacity not exceeding 250 litres, each receptacle placed in a fitted steel protective packaging with complete walls;

(c) In hermetically closed corrosion-resistant steel drums of a capacity not exceeding 450 litres;

(d) In hermetically closed sheet steel IBCs conforming to marg. 1611, tested and approved for packing group II.

### 3. *Mixed packing*

478 (1) Substances grouped under the same item number may be included in the same package. The inner packagings shall conform to what is prescribed for each

substance, and the outer packaging shall be that laid down for the substances of the item number in question.

(2) Unless smaller quantities are prescribed in the section entitled "Packing of individual substances", substances of this class, in quantities not exceeding 6 kg in the case of solids or 3 litres in the case of liquids for all of the substances listed under the same item number or the same letter, may be enclosed in the same package either with substances of another item number or another letter of the same class or with substances or articles belonging to other classes — provided that mixed packing is also allowed for the latter — or with other goods, subject to the following special conditions.

The inner packagings shall comply with the general and special conditions of packing. In addition, the general requirements of marg. 4 (7) and marg. 8 must be observed.

A package shall not weigh more than 150 kg, or more than 75 kg if it contains fragile receptacles.

*Special conditions*

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
1(a)	Alkali and alkaline-earth metals, e.g. sodium, potassium, calcium, barium —in fragile receptacles —in other receptacles	500 g 1 kg	500 g 1 kg	The limits of 500 g or 1 kg apply to alkali and alkaline-earth metals of item 1(a) and to alkali metal and alkaline-earth metal hydrides of item 2(b) for the aggregate mass of these substances. Alkali and alkaline-earth metals, as well as substances of item 2(b), may not be packed together with acids, nor with liquids containing water.
2(a)	Calcium carbide	Mixed packing not allowed		
2(b)	Alkali metal and alkaline-earth metal hydrides (e.g. lithium hydride, calcium hydride), mixed hydrides, borohydrides and aluminium hydrides — in fragile receptacles — in other receptacles	500 g 1 kg	500 g 1 kg	
4	All substances	Mixed packing not allowed		
5	Boron trifluoride dimethyl etherate			

4. *Marking and danger labels on packages* (see Appendix IX)

479

(1) Every package containing substances of Class 4.3 shall bear a label conforming to model No. 4.3 and a label conforming to model No. 10.

(2) Every package containing substances of items 4 and 5 shall in addition bear labels conforming to models Nos. 3 and 8.

(3) Packages containing fragile receptacles not visible from outside shall bear a label conforming to model No. 12. If these fragile receptacles contain liquids, the packages shall in addition, except in the case of sealed ampoules, bear labels conforming to model No. 11; these labels shall be placed high up on two opposite sides of a case, or in an equivalent manner for other types of packaging.

B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

480 No restrictions in respect of *grande vitesse* and *petite vitesse*.

C. PARTICULARS IN THE CONSIGNMENT NOTE

481 The description of the goods in the consignment note shall conform to one of the names *in italics* in marg. 471. Where the name of the substance is not mentioned for item 1, the chemical name shall be entered. The description of the goods shall be followed by *particulars of the class, the item number (adding the letter where given) and the initials "RID" e.g. 4.3 item 2 (a), RID*. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "*Waste, containing sodium, 4.3, item 1 (a), RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

D. TRANSPORT EQUIPMENT

1. *Conditions relating to wagons and loading*

a. *For packages*

482 (1) Packages containing substances of Class 4.3 shall be loaded in covered wagons.

(2) Receptacles containing calcium carbide of item 2 (a) may also be loaded in sheeted open wagons.

b. *For carriage in bulk*

483 (1) Magnesium granules, coated of item 1 (d), calcium carbide of item 2 (a) and calcium silicide in lumps of item 2 (d) may be loaded in bulk in specially designed wagons.

(2) Receptacles of specially designed wagons and their closures shall be in conformity with the general conditions of packing in marg. 471 (1), (2) and (3). They must be constructed in such a way that the opening used for loading or unloading can be closed hermetically.

(3) When in lumps, calcium silicide of item 2 (d) may also be loaded in bulk in covered wagons.

c. *For small containers*

484 (1) Packages containing substances listed in this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 486 shall be observed inside a small container.

(3) Substances whose carriage in bulk is permitted may be enclosed without packaging in small containers, which must comply with the requirements of marg. 483.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

485 (1) Specially designed wagons containing magnesium granules, coated [item 1 (d)], calcium carbide [item 2 (a)] or calcium silicide in lumps [item 2 (d)] shall bear, next to the closure, the following clear and indelible markings: "*To be*

*so closed as to be leakproof after filling and emptying*". The marking shall be in an official language of the country of origin and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

(2) Wagons, tank wagons and tank-containers, as well as the wagons carrying those tank-containers, in which substances of this class are loaded shall bear on both their sides a label conforming to model No. 4.3. Wagons, tank wagons and tank-containers containing substances of item 4, as well as wagons carrying these tank-containers, and wagons containing boron trifluoride dimethyl etherate of item 5 shall in addition bear labels conforming to models Nos. 3 and 8.

(3) Small containers shall be labelled in accordance with marg. 479 (1) and (2).

Small containers enclosing packages bearing a label conforming to model No. 12 shall themselves also bear this label.

#### E. PROHIBITIONS ON MIXED LOADING

486 Substances of Class 4.3 shall not be loaded in the same wagon with substances and articles of Classes 1 or 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

487 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

#### F. EMPTY PACKAGINGS

488 (1) Empty packagings including empty IBCs, tank wagons, tank-containers and small containers, uncleaned, of item 6 shall be closed in the same way and ensure the same degree of leakproofness as if they were full.

(2) Empty packagings including empty IBCs, tank wagons, tank-containers and small containers, uncleaned, of item 6 shall bear the same danger labels as if they were full.

(3) The description in the consignment note shall conform to one of the names in *italics* in item 6 e.g. "*Empty packaging, 4.3, item 6, RID*". A cross shall be inserted in the appropriate box on the consignment note. For empty tank wagons, tank-containers or small containers, uncleaned, this description shall be completed by adding the words "Last load" together with the name and item number of the goods last carried e.g. "*Last load: trichlorosilane, item 4 (a)*". For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. "*Last load X338 1295 trichlorosilane, item 4 (a)*".

#### G. OTHER REQUIREMENTS

489 No requirements.

490-  
499

### CLASS 5.1. OXIDIZING SUBSTANCES

#### 1. List of substances

500 Among the substances and articles covered by the heading of Class 5.1, those listed in marg. 501 are subject to the conditions set out in marg. 501 to 521 and consequently substances and articles of RID.

NOTE. 1. Unless specifically listed in Class 1, mixtures of oxidizing substances with combustible substances are not to be accepted for carriage if they manifest explosive properties (determined on the basis of the Test Manual).

2. For the classification of solutions and mixtures (such as preparations and wastes), see also marg. 3 (3).

501 1. Stabilized aqueous *solutions of hydrogen peroxide*, containing more than 60% hydrogen peroxide, and stabilized *hydrogen peroxide*.

NOTE. 1. For aqueous solutions of hydrogen peroxide containing not more than 60% hydrogen peroxide, see marg. 801, item 62.

2. Non-stabilized solutions of hydrogen peroxide containing more than 60% hydrogen peroxide and non-stabilized hydrogen peroxide are not to be accepted for carriage.

2. *Tetranitromethane*, free from combustible impurities.

NOTE. Tetranitromethane not free from combustible impurities is not to be accepted for carriage.

3. *Perchloric acid* in aqueous solutions containing more than 50% but not more than 72.5% perchloric acid ( $\text{HClO}_4$ ). See also marg. 501a under (a).

NOTE. Perchloric acid in aqueous solutions containing not more than 50% perchloric acid ( $\text{HClO}_4$ ) is a substance of Class 8 (see marg. 801, item 4). Aqueous solutions of perchloric acid containing more than 72.5% perchloric acid are not to be accepted for carriage; the same applies to mixtures of perchloric acid with any liquid other than water.

4. (a) *Chlorates*; inorganic *chlorate weed-killers* consisting of mixtures of sodium chlorate, potassium chlorate or calcium chlorate with a hygroscopic chloride (such as magnesium chloride or calcium chloride);

NOTE. Ammonium chlorate is not to be accepted for carriage.

(b) *Perchlorates* (with the exception of ammonium perchlorate, see item 5);

(c) *Sodium and potassium chlorites*;

(d) *Mixtures of chlorates, perchlorates and chlorites* of (a), (b) and (c) with one another.

For (a), (b), (c) and (d), see also marg. 501a under (b).

5. *Ammonium perchlorate*. See also marg. 501a under (b).

6. (a) *Ammonium nitrate* containing not more than 0.2% combustible substances (including any organic substance calculated as carbon) to the exclusion of any other added substance.

NOTE. 1. Ammonium nitrate containing more than 0.2% combustible substances (including any organic substance calculated as carbon) is not to be accepted for carriage except as a substance of Class 1 (see marg. 101, item 4, No. 0222).

2. Aqueous solutions of ammonium nitrate, in a concentration not exceeding 80%, are not subject to the requirements of RID.

(b) *Ammonium nitrate fertilizers, type A(A1)*: uniform non-segregating mixtures containing 90% or more ammonium nitrate with added matter which is inorganic and chemically inert towards ammonium nitrate, and not more than 0.2% of combustible material (including organic material calculated as carbon), or mixtures containing less than 90% but more than 70% ammonium nitrate and not more than 0.4% combustible substances.

- (c) *Ammonium nitrate fertilizers, type A(A2)*: uniform non-segregating mixtures of ammonium nitrate with calcium carbonate and/or dolomite, containing more than 80% but less than 90% ammonium nitrate and not more than 0.4% combustible substances.
- (d) *Ammonium nitrate fertilizers, type A(A3)*: uniform non-segregating mixtures of ammonium nitrate/ammonium sulphate containing more than 45% but not more than 70% ammonium nitrate and not more than 0.4% combustible substances.
- (e) *Ammonium nitrate fertilizers, type A(A4)*: uniform non-segregating mixtures (compound fertilizers) of nitrogen/phosphate or nitrogen/potash types, or complete fertilizers of nitrogen/phosphate/potash type, containing more than 70% but less than 90% ammonium nitrate and not more than 0.4% combustible substances.

NOTE. 1. In determining the ammonium nitrate content, all nitrate ions for which a molecular equivalent of ammonium ions is present in the mixture shall be calculated as ammonium nitrate.

2. Fertilizers having an ammonium nitrate content or a content in combustible substances exceeding the values shown in items 6 (b) to (e) respectively are not to be accepted for carriage except under the conditions applicable to Class 1 (see marg. 101, item 4, No. 0223). See however Note 4.

3. Fertilizers having an ammonium nitrate content below the values shown in items 6 (b) to (e) respectively are not subject to the requirements of RID.

4. Fertilizers having an ammonium nitrate content not exceeding 45% and whose content of combustible substances is more than 0.4% are not subject to the requirements of RID, provided that the excess nitrate content for which a molecular equivalent of ammonium ions is not present in the mixture (calculated as potassium nitrate) does not exceed 10% by mass.

For (a) to (e) see also marg. 501a under (b).

- 7. (a) *Sodium nitrate*;
- (b) *Mixtures of ammonium nitrate with sodium, potassium, calcium or magnesium nitrate*;
- (c) *Barium nitrate, lead nitrate*.

For (a), (b) and (c), see also marg. 501a under (b).

NOTE. 1. If they do not contain more than 10% ammonium nitrate, mixtures of ammonium nitrate with calcium nitrate or with magnesium nitrate or with both are not subject to the requirements of RID.

2. Empty textile bags which have contained sodium nitrate and have not been entirely freed from the nitrate impregnating them are articles of Class 4.2 (see marg. 431, item 13).

- 8. *Inorganic nitrites*. See also marg. 501a under (b).

NOTE. Ammonium nitrite and mixtures of an inorganic nitrite with an ammonium salt are not to be accepted for carriage.

- 9. (a) *Peroxides of alkali metals and mixtures containing peroxides of alkali metals which are not more dangerous than sodium peroxide*;
- (b) *Peroxides of alkaline-earth metals, e.g. barium peroxide*;
- (c) *Sodium, potassium, calcium and barium permanganates*.

For (a), (b) and (c), see also marg. 501a under (b).

NOTE. Ammonium permanganate and mixtures of a permanganate with an ammonium salt are not to be accepted for carriage.

10. *Chromium trioxide (chromic anhydride; also called chromic acid)*. See also marg. 501a under (b).

NOTE. Solutions of chromic acid are substances of Class 8 [see marg. 801, item 11 (b)].

11. *Empty packagings including empty intermediate bulk containers (IBCs), empty tank wagons, empty tank containers and empty small bulk containers, uncleaned, which have contained substances of Class 5.1.*

NOTE. Empty packagings which have contained a chlorate, a perchlorate or a chlorite (items 4 and 5), an inorganic nitrite (item 8) or substances of items 9 and 10 with residues of their previous contents adhering to the outside are not to be accepted for carriage.

501a Substances handed over for carriage in conformity with the following provisions are not subject to the requirements of Section 2 "Conditions of carriage":

- (a) Substances of item 3, in quantities not exceeding 200 g, on condition that they are packed in receptacles so closed as to be leakproof and which are not liable to be attacked by the contents, and that the receptacles are packed, not more than 10 per case, in a wooden case with inert absorbent cushioning materials;
- (b) Substances of items 4 to 10, in quantities not exceeding 10 kg, packed not more than 2 kg per receptacle in receptacles so closed as to be leakproof and not liable to be attacked by the contents, these receptacles being enclosed in strong, leakproof packagings made of wood or sheet metal and with leakproof closures.

## 2. *Conditions of carriage*

(Requirements relating to empty packagings are set out under F.)

### A. PACKAGES

#### 1. *General conditions of packing*

502 (1) Receptacles shall be so closed and arranged as to prevent any loss of the contents.

(2) The materials of which the packagings and their closures are made shall not be liable to attack by the contents, cause the contents to decompose or form harmful or dangerous compounds therewith.

(3) Packagings, including their closures, shall be sufficiently rigid and strong in all their parts to prevent any loosening during the journey and to meet the normal requirements of carriage. In particular, where substances in the liquid state are concerned and unless the section headed "Packing of individual substances" provides otherwise, receptacles and their closures shall be able to withstand any pressure which may arise inside the receptacles, taking into account also the presence of air, in normal conditions of carriage. For this purpose a free space shall be left, account being taken of the difference between the temperature of the substances at the time of filling and the highest mean temperature which they are likely to reach during carriage. Unless otherwise specified in the section headed "Packing of individual substances", inner packagings may be enclosed in outer packagings either singly or in groups.

(4) Bottles and other glass receptacles shall be free from faults liable to impair their strength; in particular, internal stresses shall have been suitably relieved. The wall thickness shall be not less than 3 mm for receptacles which, with their contents, weigh more than 35 kg and not less than 2 mm for other receptacles.

The tightness of the closure system shall be ensured by an additional device (cap, crown, seal, binding, etc.) capable of preventing any loosening of the closure system during carriage.

(5) When receptacles made of glass, porcelain, stoneware or similar materials are prescribed or allowed, they shall be secured by cushioning materials in protective packagings. Cushioning materials shall be incombustible (glass wool, absorbent earth, diatomaceous earth, etc.) and incapable of forming dangerous compounds with the contents of the receptacles. If the contents are liquid, the cushioning materials shall also be absorbent and proportionate in quantity to the volume of the liquid; this interior absorbent layer shall not, however, be less than 4 cm thick at any point.

(6) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI. Unless specified otherwise in the packing conditions for single substances, IBCs tested and approved for packing group III may be used.

## 2. *Packing of individual substances*

503 (1) Aqueous solutions of hydrogen peroxide and hydrogen peroxide of item 1 shall be packed in drums or other receptacles made of aluminium of at least 99.5% purity or of special steel not liable to cause decomposition of the hydrogen peroxide. These receptacles shall be fitted with means of handling; they shall be able to remain upright in a stable fashion and shall:

(a) Be fitted in the upper part with a closing device ensuring equalization of the internal pressure with that of the atmosphere; this closing device shall prevent in all circumstances any escape of the liquid and any entry of foreign matter into the receptacle and shall be protected by a vented cap; or

(b) Be able to withstand an internal pressure of 250 kPa (2.5 bar) and be fitted in the upper part with a safety device yielding when the excess of internal pressure is not more than 100 kPa (1 bar).

(2) Receptacles shall not be filled to more than 90% of their capacity.

(3) A package shall not weigh more than 90 kg.

(4) For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

504 (1) Tetranitromethane (item 2) shall be contained in bottles made of glass, porcelain, stoneware or similar materials or of a suitable plastics material, with incombustible stoppers, placed inside a wooden case with complete sides; fragile receptacles shall be secured therein by absorbent earth cushioning. Receptacles shall not be filled to more than 93% of their capacity.

Packages containing fragile receptacles sent otherwise than in full wagon loads shall not weigh more than 75 kg and shall be fitted with means of handling.

(2) For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

505 (1) Perchloric acid in aqueous solutions (item 3) shall be contained in glass receptacles, which shall not be filled to more than 93% of their capacity. The receptacles shall be secured by absorbent and incombustible cushioning materials in incombustible protective packagings impermeable to liquids and capable of retaining the contents of the receptacles. The closures of the receptacles shall be protected by caps, if the protective packagings are not completely closed.

Glass bottles closed by glass stoppers may also be secured by absorbent and incombustible cushioning materials in wooden cases with complete sides.

Packages containing fragile receptacles sent otherwise than in full wagon loads shall not weigh more than 75 kg and shall be fitted with means of handling.



(2) For carriage in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

506

(1) Substances of items 4 and 5 and solutions of substances of item 4 shall be packed in receptacles made of glass, suitable plastics material or metal; solid substances of item 4 (b) may also be enclosed in hardwood casks.

(2) Fragile receptacles and receptacles made of plastics material shall be secured by cushioning materials in wooden or metal protective packagings. They may also be secured separately by incombustible cushioning materials in non-fragile intermediate receptacles, which in turn shall be firmly placed or secured by cushioning materials in protective packagings. Each receptacle shall contain not more than 5 kg of substance. For receptacles whose contents are liquid, the cushioning materials shall be absorbent.

(3) For receptacles made of plastics material and containing solutions of substances of item 4, protective packagings may be dispensed with if the walls are not less than 4 mm thick at every point, the walls are reinforced with strong rims, the ends are reinforced, the upper part is fitted with two strong handles and the opening is fitted with a screw-threaded closure.

(4) Receptacles for liquids shall not be filled to more than 95% of their capacity.

(5) Packages containing fragile receptacles or receptacles made of a plastics material [see (2) and (3)], if they contain liquids, and packages containing fragile receptacles or receptacles made of a plastics material [see (2)], if they contain only solid substances and are despatched otherwise than as a full wagon load, shall not weigh more than 75 kg. Packages carried otherwise than as a full wagon load shall be fitted with means of handling.

(6) Packages which can be rolled shall not weigh more than 400 kg; if they weigh more than 275 kg they shall be fitted with rolling hoops.

(7) Receptacles containing solid chlorates, with the exception of those referred to in paragraph (8), shall not contain any combustible material other than a small pad of waxed paper.

(8) If the chlorate is in the form of tablets, with or without a suitable binder, and is packed in bottles containing not more than 200 g, a sufficient quantity of cotton-wool may be used to prevent excessive movement of the tablets in the bottle. The bottles shall be packed in fibreboard boxes placed in an intermediate packaging separate from the outer packaging. An intermediate packaging may not contain more than 1 kg or a package more than 6 kg of chlorate.

(9) Substances of item 4 may also be packed in metallic IBCs conforming to marg. 1611. Solid substances of item 4 may also be packed in flexible IBCs conforming to marg. 1621. The IBCs shall be tested and approved for packing group II.

(10) For the carriage of solid substances in bulk, see marg. 515 and 516 (3); for the carriage of solutions and of powdery sodium chlorate, in the moist or dry state, in tank wagons, see Appendix XI; for the carriage of solutions and of moist sodium chlorate in tank-containers, see Appendix X.

507

(1) Substances of items 6, 7 and 8 shall be packed:

(a) In drums or cases; or

(b) In strong bags made of closely-woven fabric or of stout paper of at least five plies or, in quantities of not more than 50 kg, in bags made of a suitable plastics material sufficiently thick and strong to prevent any loss of the contents.

If the substance is more hygroscopic than sodium nitrate, bags made of closely-woven fabric or of stout paper of five plies shall be lined with a suitable plastics material or be waterproofed by suitable means.

Packages which can be rolled must not weigh more than 400 kg; if they weigh more than 275 kg, they shall be fitted with rolling hoops.

(2) Substances of items 6, 7 and 8 may also be packed in metallic or flexible IBCs conforming to marg. 1611 or 1621. IBCs intended for the carriage of substances of items 7 (c) and 8 shall be tested and approved for packing group II.

(3) For the carriage in bulk of substances of items 6 and 7, see marg. 515 and 516 (3); for the carriage of hot aqueous solutions of ammonium nitrate of item 6 (a) in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

508

(1) Substances of item 9 (a) shall be packed:

(a) In steel drums; or

(b) In receptacles made of sheet-metal, lead-lined sheet-iron or tinplate, secured in wooden packing cases fitted with a metal lining made leakproof, for example by soldering. When handed over for carriage in full wagon loads, substances of item 9 (a) may be packed in tinplate receptacles, placed only in protective iron hampers.

(2) Receptacles containing substances of item 9 (a) shall be so closed and leakproof as to prevent moisture from entering.

(3) Substances of items 9 (b) and (c) shall be packed:

(a) In incombustible receptacles fitted with a hermetic closure which is also incombustible. If the incombustible receptacles are fragile, each shall be secured separately by cushioning materials in a wooden case lined with strong paper; or

(b) In hardwood casks with closely fitting staves, lined with strong paper; or

(c) In metallic or flexible IBCs conforming to marg. 1611 or 1621, tested and approved for packing group II.

(4) Packages containing fragile receptacles despatched otherwise than as full wagon loads shall not weigh more than 75 kg and shall be fitted with means of handling. Packages which can be rolled shall not weigh more than 400 kg; if they weigh more than 275 kg, they shall be fitted with rolling hoops.

509

(1) Chromium trioxide (item 10) shall be packed:

(a) In receptacles made of glass, porcelain, stoneware or similar materials, tightly stoppered, which shall be secured by inert and absorbent cushioning materials in a wooden case; or

(b) In metal drums; or

(c) In metallic IBCs conforming to marg. 1611, tested and approved for packing group II.

(2) Packages containing fragile receptacles despatched otherwise than as full wagon loads shall not weigh more than 75 kg and shall be fitted with means of handling. Packages which can be rolled shall not weigh more than 400 kg; if they weigh more than 275 kg, they shall be fitted with rolling hoops.

### 3. *Mixed packing*

510

(1) Substances grouped under the same letter may be included in the same package. The inner packagings shall conform to what is prescribed for each substance, and the outer packaging shall be that laid down for the substances of the item number in question.

(2) Unless smaller quantities are prescribed in the section entitled "Packing of individual substances", substances of this class, in quantities not exceeding 6 kg in the case of solids or 3 litres in the case of liquids for all of the substances listed under the same item number or the same letter, may be enclosed in the same package either with substances of another item number or another letter of the same class or with substances or articles belonging to other classes — provided that mixed packing is also allowed for the latter — or with other goods, subject to the following special conditions.

The inner packagings shall satisfy the general and special conditions of packing. In addition, the general requirements of marg. 4 (7) and marg. 8 shall be observed.

A package shall not weigh more than 150 kg, or more than 75 kg if it contains fragile receptacles.

*Special conditions*

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
1	Hydrogen peroxide and aqueous solutions of hydrogen peroxide containing more than 60% hydrogen peroxide.	Mixed packing not allowed		
2	Tetranitromethane			
3	Perchloric acid			
4	Solutions of substances of item 4			
4(a)	Chlorates – in fragile receptacles – in other receptacles	1 kg 5 kg	2.75 kg 5 kg	Shall not be packed together with weakly-nitrated nitrocellulose, red phosphorus, bifluorides, liquid halogenated irritant substances, hydrochloric acid, sulphuric acid, chlorosulphonic acid, acetic acid, benzoic acid, salicylic acid, formic acid, nitric acid, free sulphonic acids, mixed nitrating acids, sulphur, hydrazine. Shall be separated from elemental carbon (in any form), hypophosphites, ammonia and its compounds, triethanolamine, aniline, xylydine, toluidine, or inflammable liquids having a flashpoint below 21°C.

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
4(b) and 5	Perchlorates	5 kg	5 kg	Shall not be packed together with weakly-nitrated nitrocellulose, red phosphorus, bifluorides, liquid halogenated irritant substances, hydrochloric acid, sulphuric acid, chlorosulphonic acid, nitric acid, mixed nitrating acids, aniline, pyridine, xylidine, toluidine, sulphur, hydrazine
4(c) and (d) 6, 7, 8	All substances			Shall not be packed together with weakly-nitrated nitrocellulose or red phosphorus.
9(a) and (b)	Peroxides – in fragile receptacles – in other receptacles	500 g 5 kg	2.5 kg 5 kg	Same substances prohibited as in the case of perchlorates, and also: aluminium dust, powder or granules, acetic acid, aqueous liquids, inflammable liquids of Classes 3 and 6.1, substances of Class 4.1; metallic peroxides shall not be packed in the same package with solutions of hydrogen peroxide. The limitation of 2.5 kg applies to peroxides of items 9(a) and (b) as a total for these substances. The use of sawdust or other organic filling materials is prohibited.
9(c)	Permanganates	5 kg	5kg	Same substances prohibited as in the case of chlorates, and also: solutions of hydrogen peroxide, glycerine, glycols. Shall be separated from the same substances as indicated in the case of chlorates.
10	Chromium trioxide (chromic acid)	4.5 kg	4.5 kg	The use of sawdust or other organic filling materials is prohibited.

4. *Marking and danger labels on packages* (see Appendix IX)

- 511 (1) Packages containing substances of Class 5.1 shall bear a label conforming to model No. 5. Packages containing substances of items 1 to 5 and 8 to 10, however, shall bear two labels conforming to model No. 5 (see marg. 10).

Packages containing substances of item 3 shall in addition bear a label conforming to model No. 8.

(2) Packages containing fragile receptacles not visible from the outside shall bear a label conforming to model No. 12. If these fragile receptacles contain liquids, the packages shall in addition, except in the case of sealed ampoules, bear labels conforming to model No. 11; these labels shall be affixed high up on two opposite sides of cases, or in an equivalent manner on other packagings.

B. METHOD OF DESPATCH, RESTRICTIONS ON FORWARDING

- 512 No restrictions in respect of *grande vitesse* and *petite vitesse*.

C. PARTICULARS IN THE CONSIGNMENT NOTE

- 513 The description of the goods in the consignment note shall conform to one of the names in *italics* in marg. 501; it shall be followed by the *particulars of the class, the item number (adding the letter where given) and the initials "RID"* e.g. 5.1, item 4 (a), RID. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "Waste, containing chlorates, 5.1, item 4 (a), RID". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

D. TRANSPORT EQUIPMENT

1. *Conditions relating to wagons and loading*

a. *For packages*

- 514 (1) Wagons intended to hold substances of Class 5.1 shall be carefully cleaned and in particular cleared of any combustible debris (straw, hay, paper, etc.).

(2) All fragile receptacles in a consignment shall rest on a strong flooring and be wedged so as to avoid any displacement and any spillage of the contents.

(3) The use of straw, or of any other readily inflammable substance, for chocking is forbidden.

(4) If a load includes both glass carboys and stoneware jars, these different kinds of receptacles shall be kept in separate groups.

(5) Metal receptacles containing substances of item 1 shall be placed so that their openings are on top and be wedged so that they cannot overturn.

(6) Tetranitromethane of item 2, barium chlorate of item 4 (a), barium perchlorate of item 4 (b), barium nitrate and lead nitrate [item 7 (c)], inorganic nitrites of item 8, barium peroxide of item 9 (b) and barium permanganate of item 9 (c) shall be kept apart from foodstuffs and other articles of consumption in wagons.

(7) For the use of wagons fitted with electrical equipment, see Appendix IV.

b. *For carriage in bulk*

515 (1) The only solid substances of Class 5.1 which may be carried in bulk are those of items 4 to 6, 7 (a) and (b), namely:

(a) Substances of items 4 and 5:

1. In metal vat-wagons which shall be covered with a waterproof non-inflammable sheet;
2. In leakproof large metal containers in which the product cannot come into contact with any part made of wood or other combustible substances;

(b) Substances of items 6 and 7 (a) and (b):

1. In metal wagons in which the product cannot come into contact with any part made of wood or other combustible substances;
2. In wooden wagons whose flooring and sides shall have been completely covered with a waterproof and incombustible lining or with a coating of sodium silicate or a similar product.

(2) If open wagons are used, they shall be fitted with a tilt-bar and covered with a waterproof non-inflammable sheet.

(3) After unloading, wagons which have contained substances of items 4 to 6, 7 (a) and (b) shall be swilled out.

(4) For the use of wagons fitted with electrical equipment, see Appendix IV.

c. *For small containers*

516 (1) With the exception of fragile packages as defined in marg. 4 (6) and packages containing hydrogen peroxide or solutions of hydrogen peroxide (item 1) or tetranitromethane (item 2), packages containing substances listed in this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 518 shall also be applied [to] small containers.

(3) Solid substances of items 4 to 6, 7 (a) and (b) may also be carried in metallic small containers of the closed type with complete walls.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

517 (1) Wagons, tank wagons and tank-containers in which substances of Class 5.1 are loaded shall bear on both their sides a label conforming to model No. 5.

(2) Small containers shall be labelled in accordance with marg. 511 (1).

(3) Small containers enclosing packages bearing a label conforming to model No. 12 shall themselves also bear this label.

E. PROHIBITIONS ON MIXED LOADING

518 (1) Substances of Class 5.1 contained in packages bearing one or two labels conforming to model No. 5 shall not be loaded in the same wagon with substances and articles of Classes 1 or 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

(2) Substances of Class 5.1 contained in packages bearing two labels conforming to model No. 5 shall not be loaded in the same wagon with:

- (a) Substances of Classes 3 (marg. 301), 4.1 (marg. 401) or 4.2 (marg. 431) contained in packages bearing two labels conforming to models Nos. 3, 4.1 or 4.2;

(b) Liquid substances of Classes 6.1 (marg. 601) or 8 (marg. 801) contained in packages bearing two labels conforming to models Nos. 6.1, 6.1A or 8.

519 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

#### F. EMPTY PACKAGINGS

520 (1) Empty packagings including IBCs, tank wagons, tank-containers and small containers, uncleaned, of item 11 shall be closed in the same manner and leakproof to the same degree as if they were full.

(2) Empty packagings including IBCs, tank wagons, tank-containers and small containers, uncleaned, of item 11 shall bear the same danger labels as if they were full.

(3) The description in the consignment note shall conform to one of the names in *italics* in item 11 e.g. "*Empty packaging, 5.1, item 11, RID*". A cross shall be inserted in the appropriate box on the consignment note. For empty tank wagons, tank-containers and small containers, uncleaned, this description shall be completed by adding the words "Last load" together with the name and item number of the goods last carried e.g. "*Last load, hydrogen peroxide, item 1*". For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. *Last load 559 2015 hydrogen peroxide, item 1*".

(4) Empty textile bags, uncleaned, which have contained sodium nitrate [item 7 (a)] are subject to the requirements of Class 4.2 (see marg. 441).

#### G. OTHER REQUIREMENTS

521 Tetranitromethane of item 2, barium chlorate of item 4 (a), barium perchlorate of item 4 (b), barium nitrate and lead nitrate of item 7 (c), inorganic nitrites of item 8, barium peroxide of item 9 (b) and barium permanganate of item 9 (c) shall be kept away from foodstuffs or other articles of consumption in goods depots.

522-  
549

### CLASS 5.2. ORGANIC PEROXIDES

#### 1. List of substances

550 Among the substances and articles covered by the heading of Class 5.2, only those listed in marg. 551 are to be accepted for carriage and then only under the conditions set out in marg. 551 to 570. These substances and articles to be accepted for carriage under certain conditions are to be considered as substances and articles of RID.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes) containing one or more components listed in marg. 551, see also marg. 3 (3).

#### 551 GROUP A

1. *Ditertiary butyl peroxide.*
2. *Tertiary butyl hydroperoxide* with at least 20% ditertiary butyl peroxide and with at least 20% phlegmatizer.

NOTE. Tertiary butyl hydroperoxide with at least 20% ditertiary butyl peroxide, but without phlegmatizer, is mentioned under item 31.

3. *Tertiary butyl peracetate* with at least 30% phlegmatizer.

4. *Tertiary butyl perbenzoate*.
5. *Tertiary butyl permaleate* with at least 50% phlegmatizer.
6. *Ditertiary butyl diperphthalate* with at least 50% phlegmatizer.
7. *2,2-Bis (tertiary butyl peroxy) butane* with at least 50% phlegmatizer.
8. *Benzoyl peroxide*:

- (a) With at least 10% water;
- (b) With at least 30% phlegmatizer.

NOTE. 1. Benzoyl peroxide in the dry state, or with less than 10% water or less than 30% phlegmatizer is a substance of item 23.

2. Benzoyl peroxide with a content of at least 70% dry and inert solid substances is not subject to the requirements of RID.

9. *Cyclohexanone peroxides* [1-hydroxy-1'-hydroperoxydicyclohexyl-peroxide and bis (1-hydroxycyclohexyl) peroxide and mixtures of these two compounds]:

- (a) With at least 5% water;
- (b) With at least 30% phlegmatizer.

NOTE. 1. Cyclohexanone peroxides and their mixtures in the dry state or with less than 5% water or less than 30% phlegmatizer are substances of item 24.

2. Cyclohexanone peroxides and their mixtures with a content of at least 70% dry and inert solid substances are not subject to the requirements of RID.

10.  $\alpha$ ,  $\alpha$ -*Dimethylbenzyl hydroperoxide* (*cumene hydroperoxide*, *cumyl hydroperoxide*) with a peroxide content not exceeding 95%.

11. *Dilauroyl peroxide*.

12. *1,2,3,4-Tetrahydro-1-naphthyl hydroperoxide* (*tetralin hydroperoxide*).

13. *2,4-Dichlorobenzoyl peroxide*:

- (a) With at least 10% water;
- (b) With at least 30% phlegmatizer.

14. *p-Menthanyl hydroperoxide* (*p-menthane hydroperoxide*) with a peroxide content not exceeding 95% (remainder: alcohols and ketones).

15. *2,6,6-Trimethyl norpinanyl hydroperoxide* (*pinanyl hydroperoxide*, *pinane hydroperoxide*) with a peroxide content not exceeding 95% (remainder: alcohols and ketones).

16. *Di-( $\alpha$ ,  $\alpha$ -dimethylbenzyl) peroxide* (*dicumyl peroxide*) with a peroxide content not exceeding 95%.

NOTE. Di-( $\alpha$ ,  $\alpha$ -dimethylbenzyl) peroxide with a content of 60% or more dry and inert solid substances is not subject to the requirements of RID.

17. *Parachlorobenzoyl peroxide*:

- (a) With at least 10% water;
- (b) With at least 30% phlegmatizer.

NOTE. 1. Parachlorobenzoyl peroxide in the dry state or with less than 10% water or less than 30% phlegmatizer is a substance of item 25.

2. Parachlorobenzoyl peroxide with a content of 70% or more dry and inert solid substances is not subject to the requirements of RID.

18. *Di-isopropylbenzene hydroperoxide* (*isopropylcumyl hydroperoxide*) with 45% of a mixture of alcohol and ketone.



19. *4-Methylpentan-2-one peroxide (isobutyl methyl ketone peroxide)* with at least 40% phlegmatizer.

20. *Tertiary butyl ( $\alpha$ ,  $\alpha$ -dimethylbenzyl) peroxide (tertiary butyl cumyl peroxide)* with not more than 95% peroxide.

21. *Diacetyl peroxide* with at least 75% phlegmatizer.

22. *Acetyl benzoyl peroxide* with at least 60% phlegmatizer.

23. *Benzoyl peroxide*:

(a) In the dry state or with less than 10% water;

(b) With less than 30% phlegmatizer.

NOTE. Benzoyl peroxide with not less than 10% water or not less than 30% phlegmatizer is a substance of item 8.

24. *Cyclohexanone peroxides (1-hydroxy-1'-hydroperoxy dicyclohexyl peroxide, bis- (1-hydroxycyclohexyl)-peroxide, and mixtures of these two compounds)*:

(a) In the dry state or with less than 5% water;

(b) With less than 30% phlegmatizer.

NOTE. Cyclohexanone peroxides and their mixtures with not less than 5% water or not less than 30% phlegmatizer are substances of item 9.

25. *Parachlorobenzoyl peroxide*:

(a) In the dry state or with less than 10% water;

(b) With less than 30% phlegmatizer.

NOTE. Parachlorobenzoyl peroxide with not less than 10% water or not less than 30% phlegmatizer is a substance of item 17.

NOTE to items 1 to 25. Substances which are inert to organic peroxides and which have a flash point of at least 100°C and a boiling point of at least 150°C are considered as phlegmatizing substances. Substances of Group A may, in addition, be diluted with solvents which are inert to these substances.

#### GROUP B

30. *Butanone peroxide (ethyl methyl ketone peroxide)*:

(a) With at least 50% phlegmatizer;

(b) In solutions containing not more than 12% of this peroxide in solvents which are inert to it.

31. *Tertiary butyl hydroperoxide*:

(a) With at least 20% ditertiary butyl peroxide, without phlegmatizer;

(b) In solutions containing not more than 12% of this hydroperoxide in solvents which are inert to it.

NOTE to items 30 and 31. Substances which are inert to organic peroxides and which have a flash point of at least 100°C and a boiling point of at least 150°C are considered as phlegmatizing substances.

#### GROUP C

35. *Peracetic acid* with a content of not more than 40% peracetic acid, not less than 45% acetic acid and not less than 10% water.

NOTE to Groups A, B and C. Mixtures of products listed in Groups A, B and C are to be accepted for carriage under conditions laid down for Group C where they contain peracetic acid, and, in other cases, under conditions of carriage laid down for Group B.

## GROUP D

40. Phlegmatized *organic peroxides* not listed under Groups A, B or C, as well as their solutions, handed over for carriage as samples, are to be accepted in quantities not exceeding 1 kg per package, provided that they have at least the same stability in storage as the substances listed in Groups A and B.

## GROUP E

50. *Empty packagings, empty tank wagons and empty tank containers* uncleaned, having contained substances of Class 5.2.

2. *Conditions of carriage*

(The regulations relating to empty receptacles are included under F.)

## A. PACKAGES

1. *General conditions of packing*

552 (1) The materials of which the packagings and their closures are made shall not be liable to attack by the contents, or form harmful or dangerous compounds therewith.

(2) Packagings, including their closures, shall be sufficiently rigid and strong in all their parts to prevent any loosening during the journey and to meet the normal requirements of carriage. Inner packagings shall be firmly secured in outer packagings. Unless otherwise stated in the section headed "Packing of individual substances", the inner packagings may be enclosed in outer packagings either singly or in groups.

(3) Cushioning materials shall not be readily inflammable; they shall, in addition, be suited to the nature of the contents and shall not cause the peroxides to decompose.

2. *Packing of individual substances*a. *Packing of substances of Group A*

553 Receptacles shall be so closed and leakproof as to prevent any loss of the contents.

554 (1) Substances of items 1 to 7, 8 (b), 9 (b), 10 to 12, 13 (b), 14 to 16, 17 (b) and 18 to 22 as well as their solutions shall be packed:

(a) In hot-dipped tinned receptacles or in receptacles made of aluminium not less than 99.5% pure; or

(b) In receptacles made of suitable plastics material, which shall be placed in protective packagings; or

(c) In quantities not exceeding 2 litres per bottle, in firmly closing glass bottles which shall be secured by means of cushioning materials, in a protective packaging so as to be protected against breakage.

(2) Substances of items 1 to 3, 5 to 7, 8 (b), 9 (b), 10 to 12, 13 (b), 16, 18 and 20 may also be packed in hot-dipped galvanised receptacles.

(3) Substances of items 8 (a), 9 (a), 13 (a) and 17 (a) shall be enclosed in waterproof packagings containing not more than 5 kg per packaging, which shall be placed in a wooden case.

(4) Pasty and solid peroxides may also be packed in bags made of suitable plastics material, which shall be placed in suitable protective packagings. The selected thickness of the packaging material shall be such as to prevent any loss of the contents from the bags in normal conditions of carriage. Solid peroxides may

be packed in quantities not exceeding 1 kg per receptacle, in receptacles made of paraffin-waxed fibreboard placed in a wooden case; however, for cyclohexanone peroxides of item 9 (a), the contents of the receptacles are limited to 500 g.

(5) Substances of items 10 and 14 to 18 may also be packed in receptacles made of sheet steel.

(6) With the exception of bags made of suitable plastics material, receptacles containing liquid or pasty organic peroxides shall not be filled beyond 93% of their capacity.

(7) A package must not weigh more than 50 kg. Packages weighing more than 15 kg shall be fitted with means of handling.

(8) Substances of items 23 to 25 shall be packed, not more than 500 g per bag, in firmly-tied bags made of a suitable flexible material; each bag shall be placed in a box made of fibreboard or fibre; these boxes, not more than 30 per packing case, shall be secured by cushioning materials in a wooden packing case with complete sides not less than 12 mm thick.

[A package shall not weigh more than 25 kg.]<sup>1</sup>

(9) For the carriage of substances of items 1, 10, 14, 15 and 18 in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

b. *Packing of substances of Group B*

555 (1) Receptacles filled with substances of items 30 (a) and 31 (a) shall be fitted with a venting device allowing for compensation between the internal pressure and the atmospheric pressure and in all circumstances — even in the event of expansion of the liquid by heating — preventing the liquid from splashing out and impurities from entering the receptacle. Only receptacles so closed and made leakproof as to prevent any loss of the contents shall be accepted for substances of items 30 (b) and 31 (b).

(2) Packages shall be fitted with a base which will keep them safely upright without danger of falling.

(1) Substances of items 30 (a) and 31 (a) shall be packed:

556 (a) In hot-dipped tinned or galvanised receptacles or in receptacles made of aluminium not less than 99.5% pure; or  
 (b) In receptacles made of suitable plastics material, which shall be placed in protective packagings. The strength of these receptacles shall be such as to prevent any loss of the contents in normal carriage; or  
 (c) In quantities not exceeding 2 litres per bottle, in glass bottles which shall be secured by means of cushioning material, in a protective packaging so as to be protected against breakage.

(2) Receptacles containing liquid or pasty organic peroxides shall only be filled to 90% of their capacity.

(3) A package shall not weigh more than 40 kg; packages weighing more than 15 kg shall be fitted with means of handling.

(4) Substances of items 30 (b) and 31 (b) may only be forwarded in quantities not exceeding 5 kg, in receptacles as specified under (1) but not fitted with a venting device (in glass bottles, only in quantities not exceeding 1.5 litre). Receptacles shall only be filled to not more than 75% of their capacity.

c. *Packing of substances of Group C*

557 (1) Substances of item 35 and mixtures containing peracetic acid shall be packed, in quantities of not more than 25 kg per receptacle, in receptacles made of

<sup>1</sup> The text between brackets does not appear in the authentic French text — Le texte entre crochets n'apparaît pas dans le texte authentique français.

glass with strong walls, or of suitable plastics material, fitted with a special closure made of suitable plastics material, capable of being sealed, in communication with the atmosphere by an opening situated above the level of the liquid and in all circumstances — even in the event of expansion of the liquid by heating — preventing the liquid from splashing out and impurities from entering the receptacle.

(2) Glass receptacles shall be firmly secured, by means of pure mica powder or glass wool used as cushioning material, in protective packagings made of sheet steel or of aluminium, capable of being closed, and fitted with means of handling and with a base which will keep them upright in a stable fashion: the securing by cushioning material must be carried out, even when the walls of the protective packagings are not complete. Receptacles of suitable plastics material must be placed in protective sheet steel packagings, which are close fitting and capable of being closed.

d. *Packing of substances of Group D*

558 Substances of Group D, in quantities not exceeding 1 kg per package, shall be packed in hot-dipped tinned receptacles or in receptacles made of aluminium not less than 99.5% pure, or in bottles made of a suitable plastics material injection-moulded or blown, with a sufficient wall thickness, or in glass bottles which shall be placed in protective packagings made of sheet steel, aluminium or wood. The glass bottles shall be firmly secured, by means of pure mica powder or glass wool used for cushioning, in the protective packaging. Solid compounds may be packed, in addition, in bags made of a suitable plastics material, of a sufficient thickness, which shall likewise be placed in protective packagings made of sheet steel, aluminium or wood. If the peroxides give off gases at a temperature lower than 40°C, the receptacles must satisfy the conditions of marg. 555.

e. *Packing of substances in small quantities*

559 Substances of items 1 to 22, 30 and 31, forwarded in small quantities, may also be packed as follows:

(a) *Liquid substances:*

Not more than 1 kg per package, in bottles made of aluminium, suitable plastics material or glass with stoppers of suitable plastics material or with a closure of the bayonet or screw type, with a resilient gasket. The bottles shall be secured by means of pure mica powder or glass wool used for cushioning, in fibreboard or wooden boxes. The filling material shall be sufficient in quantity to absorb the whole of the liquid. The bottles shall only be filled to not more than 75% of their capacity.

(b) *Pasty or powdery substances:*

Not more than 1 kg per package, in aluminium boxes or in fibreboard or wooden boxes (the two latter with a lining of aluminium or of suitable plastics material), with a strong closure. In the packagings a free space of 10% is to be left.

3. *Mixed packing*

560 Substances of Class 5.2 must not be included in the same package together with other substances and articles of RID or with other goods. Substances of Group C must not be included in the same package with substances of Groups A and B.

4. *Marking and danger labels on packages (see Appendix IX)*

561 (1) Packages containing substances of Class 5.2 shall bear two labels conforming to model No. 5 (see marg. 10). Packages containing substances of items 23, 24 and 25 shall also bear a label conforming to model No. 1.

(2) Packages containing fragile receptacles not visible from the outside shall bear a label conforming with model No. 12. If these fragile receptacles contain liquids, the packages shall in addition, except in the case of sealed ampoules, bear labels conforming to model No. 11; packages containing substances of items 30, 31, 35 and 40 must also bear labels conforming to model No. 11; these labels shall be affixed high up on two opposite sides of cases or in an equivalent manner when other packagings are used.

B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

562 No restrictions in respect of *grande vitesse* and *petite vitesse*.

C. PARTICULARS IN THE CONSIGNMENT NOTE

563 The description of the goods in the consignment note shall conform to one of the names printed *in italics* in marg. 551; it shall be followed by *particulars of the class, the item number (adding the letter where given), and the initials "RID"* e.g. 5.2, item 8 (a), *RID*. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "*Waste, containing peracetic acid, 5.2, item 35, RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

D. TRANSPORT EQUIPMENT

1. *Conditions relating to wagons and their loading*

a. *For packages*

- 564 (1) Substances of items 1 to 25, 30 and 31 shall be loaded in covered wagons.  
 (2) Packages containing liquid peroxides shall be kept upright, and so secured and fixed that they cannot overturn or fall. They shall be protected against any damage caused by other packages.  
 (3) Wagons shall be thoroughly cleaned before loading.

b. *For small containers*

565 (1) With the exception of fragile packages as specified in marg. 4 (6), packages containing substances set out in this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 567 shall be applied to the contents of a small container.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

566 (1) Wagons in which packages containing organic peroxides are loaded, and tank wagons and tank-containers containing substances of items 1, 10, 14, 15 and 18 shall bear a label conforming to model No. 5 on both their sides. Wagons in which packages containing substances of items 23 to 25 are loaded shall also bear a label conforming to model No. 1 on both their sides.

(2) Small containers shall be labelled in conformity with marg. 561 (1).

Small containers containing packages bearing a label conforming to model No. 12 shall themselves also bear this label.

## E. PROHIBITIONS ON MIXED LOADING

- 567 Substances of Class 5.2 shall not be loaded in the same wagon with:
- (a) Substances and articles of Class 1 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5;
  - (b) Substances of Classes 3 (marg. 301), 4.1 (marg. 401) or 4.2 (marg. 431) contained in packages bearing two labels conforming to models Nos. 3, 4.1 or 4.2;
  - (c) Liquid substances of Classes 6.1 (marg. 601) or 8 (marg. 801) contained in packages bearing two labels conforming to models Nos. 6.1, 6.1A or 8.
- 568 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

## F. EMPTY PACKAGINGS

- 569 (1) Empty packagings, tank wagons and tank-containers, uncleaned, of item 50 shall be closed in the same manner and leakproof to the same degree as if they were full.
- (2) Empty packagings, tank wagons and tank-containers, uncleaned, of item 50 shall bear the same danger labels as if they were full.
- (3) The description in the consignment note shall conform to one of the names *printed in italics* in item 50 e.g. "*Empty packaging, 5.2, item 50, RID*". A cross shall be inserted in the appropriate box on the consignment note. In the case of empty tank wagons or tank-containers, uncleaned, this description shall be completed by adding the words "last load" together with the name and item number of the goods last loaded e.g. "*Last load: 2,6,6-trimethyl norpinanyl hydroperoxide, item 15*". For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. "*Last load 539 2162 2,6,6-trimethyl norpinanyl hydroperoxide, item 15*".

## G. OTHER REQUIREMENTS

- 570 No requirements.
- 571-
- 599

## CLASS 6.1. TOXIC SUBSTANCES

1. *List of substances*

- 600 (1) Among the substances and articles covered by the heading of Class 6.1,<sup>(1)</sup> those which are listed in marg. 601 or are covered by a collective heading of that

<sup>(1)</sup> The heading of Class 6.1 covers the toxic substances of which it is known by experience or regarding which it is presumed from experiments on animals that in relatively small quantity they are able by a single action or by action of short duration to cause damage to human health, or death, by inhalation, by cutaneous absorption or by ingestion.

Substances, including pesticides of items 71 to 88, not expressly mentioned shall be classified under an appropriate item and letter according to the following criteria:

To assess the degree of toxicity, account shall be taken of human experience in instances of accidental poisoning, and of special properties possessed by any individual substances, such as liquid state, high volatility, any special likelihood of cutaneous absorption, and special biological effects.

(Continued on p. 309)

(Continued from p. 308)

In the absence of observations on man, the degree of toxicity shall be assessed using the available data from animal experiments, in accordance with the table below:

	Subdivision into groups within an item	Oral toxicity LD <sub>50</sub> (mg/kg)	Dermal toxicity LD <sub>50</sub> (mg/kg)	Toxicity on inhalation LC <sub>50</sub> Dusts and mists (mg/l)
Highly toxic	(a)	≤ 5	≤ 40	≤ 0.5
Toxic	(b)	> 5–50	> 40–200	> 0.5–2
Harmful	(c)	solids: > 50–200 liquids: > 50–500	> 200–1000	> 2–10

Where a substance exhibits different degrees of toxicity for two or more kinds of exposure, it should be classified under the highest such degree of toxicity.

Substances which by reason of toxicity criteria would normally fall within the classification "harmful", are classified as toxic if their vapour pressure at 20°C is sufficient to create an atmosphere producing on the eyes an irritant lachrymatory effect comparable to that of tear gases.

LD<sub>50</sub> value for acute oral toxicity:

That dose of the substance administered which is most likely to cause death within 14 days in one half of both male and female young adult albino rats. The number of animals tested shall be sufficient to give a statistically significant result and be in conformity with good pharmacological practices. The result is expressed in mg per kg body mass.

LD<sub>50</sub> value for acute dermal toxicity:

That dose of the substance which, administered by continuous contact for 24 hours with the bare skin of albino rabbits is most likely to cause death within 14 days in one half of the animals tested. The number of animals tested shall be sufficient to give a statistically significant result and shall be in conformity with good pharmacological practices. The result is expressed in mg per kg body mass.

LC<sub>50</sub> value for acute toxicity on inhalation:

That concentration of vapour, mist or dust which, administered by continuous inhalation for one hour to both male and female young adult albino rats, is most likely to cause death within 14 days in one half of the animals tested. If the substance is administered to the animals as dust or mist, more than 90% of the particles available for inhalation in the test shall have a diameter of 10 µm or less, provided that it is reasonably foreseeable that such concentrations could be encountered by man during transport. The result is expressed in mg per litre of air for dusts and mists and in ml per cubic metre of air (parts per million) for vapours.

The criteria for inhalation toxicity of dusts and mists are based on LC<sub>50</sub> data relating to 1 hour exposures, and where such information is available it should be used. However, where only LC<sub>50</sub> data relating to 4 hour exposures to dusts and mists are available, such figures can be multiplied by four and the product substituted in the above criteria, i.e. LC<sub>50</sub> (4 hour) × 4 is considered the equivalent of LC<sub>50</sub> (1 hour).

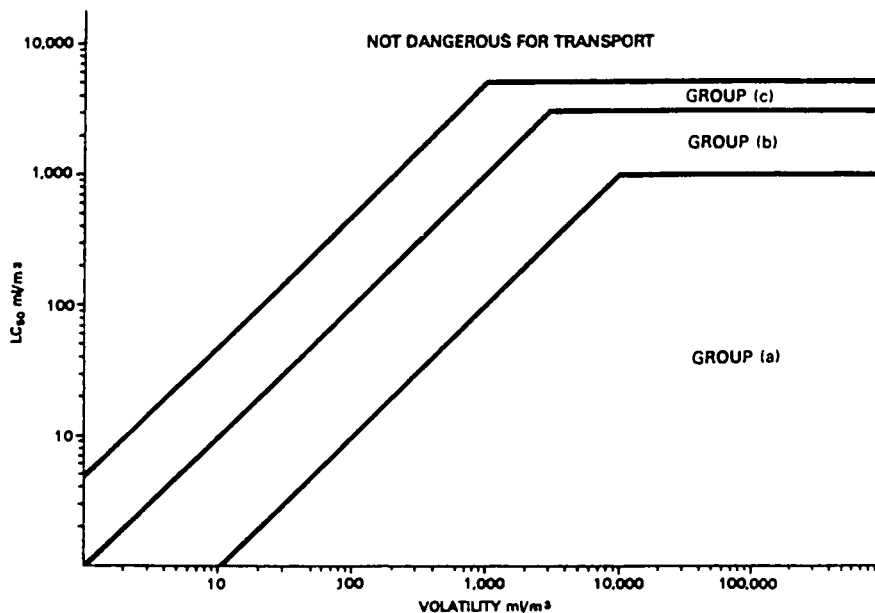
Inhalation toxicity of vapours:

The following criteria shall be used for the classification in groups (a) to (c) of liquids giving off toxic vapours. "V" being the saturated-vapour concentration in ml/m<sup>3</sup> air at 20°C and at standard atmospheric pressure:

	Subdivision into groups within an item	
Highly toxic .....	(a)	Where $V \geq 10 LC_{50}$ and $LC_{50} \leq 1,000 \text{ ml/m}^3$
Toxic .....	(b)	Where $V \geq LC_{50}$ and $LC_{50} \leq 3,000 \text{ ml/m}^3$ and the criteria for (a) are not met
Harmful .....	(c)	Where $V \geq 1/5 LC_{50}$ and $LC_{50} \leq 5,000 \text{ ml/m}^3$ and the criteria for (a) or (b) are not met

These criteria for inhalation toxicity of vapours are based on LC<sub>50</sub> data relating to one-hour exposure, and where such information is available it should be used. However, where only LC<sub>50</sub> data relating to four-hour exposure are available, such figures can be multiplied by two and the product substituted in the above criteria, i.e. LC<sub>50</sub> (four-hour) × 2 is considered the equivalent of LC<sub>50</sub> (one-hour).

## INHALATION TOXICITY OF VAPOURS: PACKAGING GROUP BORDERLINES



To allow rapid classification, the criteria are shown graphically in this chart. However, owing to the approximation inherent in the use of graphs, substances close to or just on the borderlines must be checked by means of the numerical criteria.

marginal are subject to the conditions set out in marg. 600 (2) to 624 and are consequently substances and articles of RID.<sup>(2)</sup>

Substances of Class 6.1, other than the substances of items 1 to 3, which are classified under the various items of marg. 601 shall be assigned to one of the following groups according to their degree of toxicity:

- (a) Highly toxic,
- (b) Toxic,
- (c) Harmful.

When as a result of additions, substances of Class 6.1 pass into categories of toxicity or boiling point other than those to which the substances specified in marg. 601 belong, such mixtures or solutions shall be classified under the items or letters to which they belong on the basis of their actual degree of toxicity or their boiling point.

When, as a result of additions, substances of Class 6.1 pass into the category having a flash-point below 21°C, such mixtures or solutions shall be classified under the corresponding items and letters of Class 3 taking into account their toxicity.

<sup>(2)</sup> For the quantities of substances of marg. 601 which are not subject to the requirements of the section "Conditions of Carriage", see marg. 601a.



When, as a result of additions of substances of Class 8, substances of Class 6.1 acquire a preponderance of corrosive properties, such mixtures or solutions shall be classified under the corresponding items and letters of Class 8.

NOTE. 1. Toxic inflammable liquids having a flash-point below 21°C, — other than hydrocyanic acid and its solutions and metal carbonyls, — are substances of Class 3 (see marg. 301, items 11 to 20).

2. For the classification of solutions and mixtures (such as preparations and wastes), see also marg. 3 (3).

(2) For the packaging requirements of marg. 605 (2), 606 (4) and 607 (3), substances or mixtures of substances having a melting point above 45°C are considered to be solids.

(3) Chemically unstable substances of Class 6.1 are to be handed over for carriage only if the necessary steps have been taken to prevent their dangerous decomposition or polymerization during carriage. To this end, care should in particular be taken to ensure that receptacles do not contain any substance which might promote these reactions.

(4) The flash-point referred to below shall be determined in the manner described in Appendix III A.

601 NOTE. Even if no substance is listed under letters (a), (b) or (c) of the various items of this marginal, substances, solutions, mixtures and preparations may be assimilated under these letters in accordance with the criteria set out in marg. 600.

A. HIGHLY TOXIC SUBSTANCES WHICH HAVE A FLASH POINT BELOW 21°C AND A BOILING POINT BELOW 200°C AND ARE NOT SUBSTANCES OF CLASS 3, SUCH AS:

1. *Hydrocyanic acid* containing not more than 3% water (completely absorbed by an inert porous substance or in the liquid state), on condition that the filling of the receptacles was carried out less than one year previously.

NOTE. 1. Special conditions of packing are applicable to this substance [see marg. 603 (1)].

2. Hydrocyanic acid not satisfying these conditions is not to be accepted for carriage.

2. The following solutions of hydrocyanic acid: aqueous *solutions of hydrocyanic acid* containing not more than 20% pure acid (HCN), alcoholic *solutions of hydrocyanic acid* containing not more than 45% pure acid (HCN) in methanol, alcoholic *solutions of hydrocyanic acid* containing not more than 40% pure acid (HCN) in ethanol.

NOTE. 1. Special conditions of packing are applicable to these substances [see marg. 603 (2)].

2. Solutions of hydrocyanic acid not satisfying these conditions are not to be accepted for carriage.

3. The following metal carbonyls: *iron pentacarbonyl*, *nickel tetracarbonyl*.

NOTE. 1. Special conditions of packing are applicable to these substances (see marg. 604).

2. Metal carbonyls having a flash-point of 21°C or over are substances of item 36. Other metal carbonyls having a flash-point below 21°C are not to be accepted for carriage.

B. ORGANIC SUBSTANCES WHICH HAVE A FLASH-POINT OF 21°C OR OVER OR ARE NON-INFLAMMABLE

NOTE. Organic substances and preparations used as pesticides are substances of items 71 to 77 and 81 to 83.

11. Nitrogenous substances having a boiling point below 200°C, such as:

- (a) *Acetone cyanohydrin*;
- (b) *Aniline, benzonitrile, dimethylaminoacetonitrile, N, N-dimethylaniline, dimethylpyridine, lactonitrile, methoxy-propionitrile, (mono)chloroacetonitrile, trichloroacetonitrile*;
- (c) *Diethylaminoacetonitrile, N-methylaniline*.

NOTE. Isocyanates having a boiling point below 200°C are substances of item 18.

12. Nitrogenous substances having a boiling point of 200°C or over, such as:

- (a) . . .
- (b) *2-aminobenzonitrile, aminonitrobenzonitrile, benzidine, bromoanilines, N-butylanilines, chloronitrobenzenes, dichloroanilines, benzidine dihydrochloride, dimethylaminoborane, dinitroanilines, dinitrobenzenes, dinitrotoluenes, ethyltoluidines, monochloroanilines, mononitroanilines, mononitrotoluenes, beta-naphthylamine, nitrobenzene, nitroxylenes, phenylhydrazine, benzidine sulphate, toluidines, nitrobenzotrifluorides, 3-nitro-4-chloro-benzotrifluoride, xylidines*.
- (c) *Acrylamide, adiponitrile, aminophenols, anisidines, benzyl cyanide (phenylacetonitrile), diaminodiphenylmethane, N, N-diethylaniline, ethylanilines, N-ethyl-N-benzylaniline, alpha-naphthylamine, nitroresols, nitrophenols, phenetidines, phenylenediamines, 2,4-toluylenediamine*.

NOTE. Isocyanates having a boiling point of 200°C or over are substances of item 19.

13. Oxygenated substances having a boiling point below 200°C, such as:

- (a) *Allyl alcohol, dimethyl sulphate*;
- (b) *Aldol (beta-hydroxybutyraldehyde), phenol, chlorodimethyl sulphate*;
- (c) *Furfuryl alcohol, triallyl borate, ethylene glycol monobutyl ether, ethyl oxalate*.

14. Oxygenated substances having a boiling point of 200°C or over, such as:

- (a) . . .
- (b) *Benzoquinone, chlorocresols, cresols, diethyl sulphate, xylenols*;
- (c) *Alkyloxyphenols, alkylphenols (with C<sub>2</sub> to C<sub>8</sub> chains), hydroquinone, pyrocatechol, quinhydrone, resorcinol*.

15. Halogenated hydrocarbons having a boiling point below 200°C, such as:

- (a) . . .
- (b) *Benzyl bromide, ethyl bromide, chloroform, benzyl chloride, ethylene dibromide (sym.-dibromoethane), methyl iodide, pentachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane (acetylene tetrachloride), carbon tetrachloride*.

NOTE. Mixtures of ethylene dibromide (sym.-dibromoethane) with methyl bromide having, at 50°C, a vapour pressure greater than 0.3 MPa (3 bar) are substances of Class 2 [see marg. 201, item 4 (b)].

- (c) *Bromoform, methylene chloride (dichloromethane), 1,2-dichlorobenzene, carbon tetrabromide, tetrachloroethylene (perchloroethylene), trichloroethylene, 1,1,1-trichloroethane, trichloropropane*.

NOTE. Mixtures of methylene chloride with methyl chloride having, at 50°C, a vapour pressure greater than 0.3 MPa (3 bar) are substances of Class 2 [see marg. 201, item 4 (b)].

16. Other halogenated substances having a boiling point below 200°C, such as:

- (a) *Chloropicrin, chlorotrifluoropyrimidine, epibromohydrin, perchloromethylmercaptan;*

NOTE. 1. Mixtures of chloropicrin with methyl bromide or methyl chloride having, at 50°C, a vapour pressure greater than 0.3 MPa (3 bar) are substances of Class 2 [see marg. 201, item 4 (a) or 4 (b)].

2. Symmetrical dichlorodimethyl ether is not to be accepted for carriage.

- (b) *Chloroacetaldehyde, chloroacetone, ethylbromoacetate, methylbromoacetate, bromoacetone, ethylchloroacetate, methylchloroacetate, cyclohexyl chloroformate, 2-ethylhexyl chloroformate, phenylchloroformate, 1-chloro-1-nitropropane, 1-chloro-2-propanol, 1,2-dibromo-3-butanone, sym.-dichloroacetone, 1,3-dichlorohydrin (1,3-dichloro-2-propanol), 1,1-dichloro-1-nitroethane, epichlorohydrin, 2,2'-dichloroethyl ether, dichloroisopropyl ether, ethylene chlorohydrin (2-chloroethanol), pentafluorobenzaldehyde, trichloroacetaldehyde (chloral), trichloronitroethane, 3-aminobenzotrifluoride.*

NOTE. Chloroformates having predominantly corrosive properties are substances of Class 8 (see marg. 801, item 64).

- (c) *2-chlorophenol, 3-chloro-1-propanol, methyl dichloroacetate, methyl trichloroacetate.*

17. Halogenated substances having a boiling point of 200°C or over, such as:

- (a) *Phenylcarbylamine chloride, alpha-bromobenzyl cyanide;*  
 (b) *Phenacyl bromide (omega-bromoacetophenone), nitrobenzyl bromide, xylol bromide, phenacyl chloride (omega-chloroacetophenone), benzylidene chloride, hexafluoroacetone hydrate, benzyl iodide, sodium pentachlorophenate, trichlorobutene.*  
 (c) *Chloroanisidines, chlorobenzaldehyde, tert-butylcyclohexyl-chloroformate, chloronitroanilines, chloronitrotoluenes, 3-chlorophenol, 4-chlorophenol, chlorotoluidines, bromobenzyl chloride, chlorobenzyl chlorides, dichlorophenols, dichlorotoluidines, hexachloroacetone, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, sodium monochloroacetate, 1,1,2,2-tetrabromoethane (acetylene tetrabromide), tetrachlorobenzenes, tetrachlorophenols, trichlorobenzenes, trichlorophenols.*

NOTE. 1. Chloroformates having predominantly corrosive properties are substances of Class 8 (see marg. 801, 64).

2. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) in concentrations regarded as highly toxic according to the criteria of footnote 1 to marg. 600 (1) is not to be accepted for carriage.

18. Isocyanates having a boiling point below 200°C, such as:

- (a) . . .  
 (b) *Chloroethyl isocyanate, cyclohexyl isocyanate, phenyl isocyanate, tolyl isocyanate;* solutions of isocyanates of items 18 (b) and 19 (b) having a flash-point of 21°C or over.

NOTE. Solutions of these isocyanates having a flash-point below 21°C are substances of Class 3 [see marg. 301, item 14 (b)].

- (c) . . .

19. Isocyanates having a boiling point of 200°C or over, such as:

- (a) . . .  
 (b) *Hexamethylene di-isocyanate, 2,4-toluylene di-isocyanate and isomeric mixtures, 3-chloro-4-methylphenyl isocyanate, 3-chlorophenyl isocyanate, 4-chlo-*

*rophenyl isocyanate, 3,4-dichlorophenyl isocyanate, alpha-naphthyl isocyanate, tosyl isocyanate;*

NOTE. 1. Solutions of these isocyanates having a flash-point below 21°C are substances of Class 3 [see marg. 301, item 14 (b)].

2. Solutions of these isocyanates having a flash-point of 21°C or over are substances of item 18 (b).

- (c) *4,4'-diphenylmethane di-isocyanate, isophorone di-isocyanate (3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate), 1,5-naphthylene di-isocyanate, trimethylhexamethylene di-isocyanate* and isomeric mixtures, *stearyl isocyanate*, solutions of isocyanates of item 19 (c), having a flash-point of 21°C or over.

20. Substances containing sulphur and having a boiling point below 200°C, such as:

(a) *Thiophenol;*

- (b) *2-ethylthiophene, furfurylmercaptan, allyl isothiocyanate, ethyl isothiocyanate, mercaptoethanol (thioglycol), thiophosgene*, solutions of isothiocyanates of item 20 (b) having a flash-point of 21°C or over;

NOTE. Solutions of these isothiocyanates having a flash-point below 21°C are substances of Class 3 [see marg. 301, item 18 (b)].

- (c) *Methyl isothiocyanate, 4-thia-pentanal.*

21. Substances containing sulphur and having a boiling point of 200°C or over, such as:

(a) . . .

- (b) *2-acetylthiophene, aminothiophenol;*

(c) . . .

22. Substances containing phosphorus and having a boiling point below 200°C, such as:

(a) . . .

- (b) *Triethyl phosphine;*

(c) . . .

23. Substances containing phosphorus and having a boiling point of 200°C or over, such as:

(a) . . .

- (b) *Ethylidiphenylphosphine, triphenylphosphine oxide, tricresyl phosphate* with more than 3% ortho isomer, *triethylenephosphoramidate;*

(c) . . .

24. Organic substances and solutions and mixtures of organic substances (such as preparations and wastes) which cannot be classified under other collective headings, such as:

(a) . . .

- (b) *Benzoyl cyanide;*

(c) *1,5,9-cyclododecatriene.*

### C. ORGANOMETALLIC COMPOUNDS AND CARBONYLS

NOTE. 1. Toxic organometallic compounds used as pesticides are substances of items 78 to 80.

2. Spontaneously inflammable organometallic compounds are substances of Class 4.2 (see marg. 431, item 3). Organometallic compounds which, in contact with water, release inflammable gases are substances of Class 4.3 [see marg. 471, item 2 (e)].

31. Organic lead compounds, such as:

(a) *Mixtures of lead alkyls with halogenated organic compounds, such as ethyl fluid (anti-knock additive for motor fuels), tetraethyl lead, tetramethyl lead.*

32. Organic tin compounds, such as:

(a) . . .

(b) *Dibutyl tin chloride, dimethyl tin chloride;*

(c) *Monoalkyl tin chlorides, other dibutyl tin compounds.*

NOTE. Butyl tin trichloride is a substance of Class 8 [see marg. 801, item 21 (b)].

33. Organic mercury compounds, such as:

(a) . . .

(b) . . .

(c) . . .

34. Organic arsenic compounds, such as:

(a) . . .

(b) . . .

(c) . . .

35. Other organometallic compounds, such as:

Organic compounds of antimony, cadmium, chromium, cobalt and thallium.

(a) . . .

(b) . . .

(c) . . .

36. Carbonyls, such as:

(a) . . .

(b) . . .

(c) *Chromium carbonyl, cobalt carbonyl.*

NOTE. Iron pentacarbonyl and nickel tetracarbonyl are substances of item 3.

**D. INORGANIC SUBSTANCES WHICH MAY RELEASE TOXIC GASES ON CONTACT WITH WATER (OR ATMOSPHERIC HUMIDITY), AQUEOUS SOLUTIONS OR ACIDS**

4I. Inorganic cyanides, such as:

(a) Solid cyanides, such as: *barium cyanide, calcium cyanide, potassium cyanide, sodium cyanide*; solutions of inorganic cyanides; preparations of inorganic cyanides; complex cyanides in solid form, such as: *sodium cuprocyanide, mercuric potassium cyanide*; solutions of complex cyanides.

(b) Solid cyanides, such as: *mercury cyanide*; complex cyanides in solid form, such as: *potassium cuprocyanide.*

(c) . . .

NOTE. Ferricyanides, ferrocyanides, alkaline thiocyanates and ammonium thiocyanate are not subject to the requirements of RID.

42. Azides, such as:

- (a) *Barium azide* with not less than 50% water or alcohols.
- (b) *Aqueous solutions of barium azide, sodium azide.*
- (c) . . .

NOTE. Barium azide in the dry state or with less than 50% water or alcohols is not to be accepted for carriage.

43. Preparations of phosphides containing additives inhibiting spontaneous ignition, such as:

- (a) *Aluminium phosphide, magnesium phosphide;*
- (b) *Zinc phosphide;*
- (c) . . .

NOTE. 1. These preparations are not to be accepted for carriage unless they contain additives inhibiting spontaneous ignition.

2. Preparations of sodium phosphide, calcium phosphide and strontium phosphide are substances of Class 4.2 (see marg. 431, item 2).

- 44. (b) *Ferro-silicon and mangano-silicon with more than 30% and less than 70% silicon, ferro-silicon alloys with aluminium, manganese, calcium or more than one of these metals, with a total content of silicon and of elements other than iron and manganese greater than 30% but less than 70%;*

(c) . . .

Substances of item 44 shall be accepted for carriage only if they have been stored for not less than three days in a dry place open to the air.

NOTE. 1. Ferro-silicon and mangano-silicon briquettes, whatever their silicon content, are not subject to the requirements of RID.

2. Substances of item 44 are not subject to the requirements of RID if they are not liable to release dangerous gases under the effect of moisture during carriage and the sender so certifies in the consignment note.

#### E. OTHER INORGANIC SUBSTANCES

51. Arsenical compounds, such as:

- (a) *Arsenic acid (liquid), liquid arsenical compounds, arsenic trichloride;*
- (b) *Arsenic acid (solid), arsenic trioxide (white arsenic), arsenic pentoxide, calcium arsenate, magnesium arsenate, potassium arsenate, sodium arsenate, potassium arsenite, sodium arsenite, arsenic bromide;*
- (c) . . .

NOTE. Substances and preparations containing arsenic and used as pesticides are substances of item 84.

52. Mercury compounds, such as:

- (b) *Mercuric acetate, mercuric chloride;*
- (c) . . .

NOTE. 1. Substances and preparations containing mercury and used as pesticides are substances of item 86.

2. Cinnabar and mercurous chloride (calomel) are not subject to the requirements of RID.

3. Fulminates of mercury are not to be accepted for carriage.

4. Mercuric potassium cyanide and mercury cyanide are substances of item 41.

53. Thallium compounds, such as:

(b) . . .

(c) . . .

NOTE. Substances and preparations containing thallium and used as pesticides are substances of item 88.

54. Beryllium and beryllium compounds, such as:

(b) *Beryllium* in powder form;

(c) . . .

55. Selenium and selenium compounds, such as:

(a) *Selenates, selenites*;

(b) *Selenium disulphide, selenium dioxide*;

(c) *Selenium metal*.

NOTE. Selenic acid is a substance of Class 8 [see marg. 801, item 11 (a)].

56. Osmium compounds such as:

(a) *Osmium tetroxide*;

(b) . . .

(c) . . .

57. Tellurium compounds, such as:

(b) *Tellurium dioxide, aluminium telluride, cadmium telluride, zinc telluride*;

(c) . . .

58. Vanadium compounds, such as:

(b) *Vanadium pentoxide, vanadates*;

(c) . . .

NOTE. 1. Vanadium oxytrichloride, vanadium tetrachloride and vanadium trichloride are substances of Class 8 (see marg. 801, items 21 and 22).

2. Vanadium chlorate and vanadium perchlorate are substances of Class 5.1 (see marg. 501, item 4).

3. Vanadium pentoxide, fused, is not subject to the requirements of RID.

59. Antimony compounds, such as:

(c) *Antimony oxides, antimony salts*.

NOTE. 1. Antimony pentachloride, antimony trichloride and antimony pentafluoride are substances of Class 8 (see marg. 801, items 21, 22 and 26).

2. Antimony chlorate and antimony perchlorate are substances of Class 5.1 (see marg. 501, item 4).

3. Antimony oxides with an arsenic content not exceeding 0.5% of the total mass, and stibnite, are not subject to the requirements of RID.

60. Barium compounds, such as:

(c) *Barium carbonate, barium chloride, barium fluoride, barium hydroxide, barium oxide, barium sulphide*.

NOTE. 1. Barium chlorate, barium nitrate, barium nitrite, barium perchlorate, barium permanganate and barium peroxide are substances of Class 5.1 (see marg. 501, items 4, 7, 8 and 9).

2. Barium azide is a substance of item 42.

3. Barium stearate, barium sulphate and barium titanate are not subject to the requirements of RID.

61. Cadmium compounds, such as:

(c) *Cadmium acetate, cadmium carbonate, cadmium nitrate, cadmium sulphate.*

NOTE. Cadmium pigments, such as cadmium sulphides, cadmium sulphydroselenides and cadmium salts of higher fatty acids (e.g. cadmium stearate), are not subject to the requirements of RID.

62. Lead compounds, such as:

(c) *Lead oxides, lead pigments, such as white lead and lead chromate, lead salts including lead acetate.*

NOTE. 1. Lead chlorate, lead nitrate and lead perchlorate are substances of Class 5.1 (see marg. 501, items 4 and 7).

2. Lead salts and lead pigments which, when mixed in a ratio of 1:1000 with 0.07 M hydrochloric acid and stirred for 1 hour at a temperature of  $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , exhibit a solubility of 5% or less are not subject to the requirements of RID.

63. (c) *Residues and wastes containing compounds of antimony or lead or of both, such as: lead sludge containing less than 3% free sulphuric acid, ashes of antimony or of lead or of antimony and lead.*

NOTE. Lead sludge containing 3% or more free sulphuric acid is a substance of Class 8 [see marg. 801, item 1 (b)].

64. Hydrazine salts, such as:

(c) *Hydrazine dihydrobromide, hydrazine dihydrochloride, hydrazine monohydrobromide, hydrazine monohydrochloride, hydrazine sulphate.*

65. Fluorides soluble in water, such as:

(c) *Ammonium fluoride, potassium fluoride, sodium fluoride.*

NOTE. Corrosive fluorides are substances of Class 8 (see marg. 801, items 25 and 26).

66. Silicofluorides, such as:

(c) *Ammonium silicofluoride.*

67. (c) *Oxalates soluble in water.*

68. Inorganic substances and solutions and mixtures of inorganic substances (such as preparations and wastes) which cannot be classified under other collective headings, such as:

(a) . . .

(b) . . .

(c) *Cobalt chloride, cupric chloride, molybdenum trioxide.*

NOTE. Substances and preparations containing copper and used as pesticides are substances of item 87.

#### F. SUBSTANCES AND PREPARATIONS USED AS PESTICIDES

NOTE. 1. Inflammable liquid substances and preparations, used as pesticides, which are highly toxic, toxic or harmful and have a flash-point below  $21^{\circ}\text{C}$  are substances of Class 3 (see marg. 301, items 6 and 19).

2. Articles impregnated with substances and preparations used as pesticides of items 71 to 88, such as fibreboard plates, paper strips, cotton-wool balls, sheets of plastics material, etc., in airtight hermetically-closed wrappings are not subject to the requirements of RID.



71 to 88

- (a) Substances and preparations with a very severe risk of poisoning, specified in the list below;
- (b) Substances and preparations with a severe risk of poisoning, specified in the list below;
- (c) Harmful substances and preparations, specified in the list below.

NOTE. 1. All active substances and their preparations used as pesticides shall be classified under items 71 to 88 (a), (b) and (c) in accordance with foot-note 1 to marg. 600 (1).

2. If only the LD<sub>50</sub> value of the active substance is known and not that of each preparation of the active substance, the preparations may be classified under items 71 to 88 (a), (b) and (c) using the following tables, where the figures shown in columns (a), (b) and (c) of items 71 to 88 represent the percentage of active pesticide substance in the preparations.

3. For any substance which is not named in the list, and for which only the LD<sub>50</sub> value of the active substance is known and not the LD<sub>50</sub> values of the various preparations, the classification of a preparation may be determined from the table in foot-note 1 to marg. 600 (1), using an LD<sub>50</sub> value obtained by multiplying the LD<sub>50</sub> value of the active substance by  $\frac{100}{X}$ , X being the percentage of active substance by mass, according to the following formula:

$$\text{LD}_{50} \text{ value of the preparation} = \frac{\text{LD}_{50} \text{ value of the active substance} \times 100}{\text{percentage of active substance by mass}}$$

4. The classification according to notes 2 and 3 above shall not be used when the preparations contain additives which affect the toxicity of the active substance or when a preparation contains more than one active substance. In such cases the classification shall be based on the LD<sub>50</sub> value of the preparation in question according to the criteria in foot-note 1 to marg. 600 (1). If the LD<sub>50</sub> value is not known, the substance shall be classified under (a) of items 71 to 88.

	(a)	(b)	(c)	
	%	%	solid %	liquid %
71. Organophosphorus compounds, such as:				
<i>azinphos-ethyl</i>	—	100- > 25	25-6	25-2
<i>azinphos-methyl</i>	—	100- > 10	10-2	10-1
<i>bromophos-ethyl</i>	—	—	100-35	100-14
<i>carbophenothion</i>	—	100- > 20	20-5	20-2
<i>chlorfenvinphos</i>	—	100- > 20	20-5	20-2
<i>chlormephos</i>	—	100- > 15	15-3	15-1
<i>chlorpyrifos</i>	—	—	100-40	100-10
<i>chlorthiophos</i>	—	100- > 15	15-4	15-1
<i>crotoxyphos</i>	—	—	100-35	100-15
<i>crufomate</i>	—	—	—	100-90
<i>cyanophos</i>	—	—	100-55	100-55
<i>DEF</i>	—	—	—	100-40
<i>demephion</i>	100- > 0	—	—	—
<i>demeton</i>	100- > 30	30- > 3	3-0.5	3- > 0
<i>demeton-O (systox)</i>	100- > 34	34- > 3.4	3.4-0.85	3.4-0.34
<i>demeton-O-methyl</i>	—	—	100-90	100-35
<i>demeton-S-methyl</i>	—	100- > 80	80-30	80-10
<i>demeton-S-methyl-sulfone</i>	—	100- > 74	74-18.5	74-7.4
<i>dialifos</i>	—	100- > 10	10-2.5	10-1
<i>diazinon</i>	—	—	100-38	100-15

	(a)	(b)	(c)	
	%	%	solid %	liquid %
71. (cont.)				
<i>dichlofenthion</i>	-	-	-	100-54
<i>dichlorvos</i>	-	100->35	35-7	35-7
<i>dicrotophos</i>	-	100->25	25-6	25-2
<i>dimefox</i>	100->20	20->2	2-0.5	2->0
<i>dimethoate</i>	-	-	100-73	100-29
<i>dioxathion</i>	-	100->40	40-10	40-4
<i>disulfoton</i>	100->40	40->4	4-1	4->0
<i>edifenphos</i>	-	-	100-75	100-30
<i>endothion</i>	-	100->45	45-10	45-4
<i>EPN</i>	100->62	62->12.5	12.5-2.5	12.5-2.5
<i>ethion</i>	-	100->25	25-5	25-2
<i>ethoate-methyl</i>	-	-	100-60	100-25
<i>ethoprophos</i>	100->65	65->13	13-2	13-2
<i>fenaminphos</i>	100->40	40->4	4-1	4->0
<i>fenitrothion</i>	-	-	-	100-48
<i>fensulfotthion</i>	100->40	40->4	4-1	4->0
<i>fenthion</i>	-	-	100-95	100-38
<i>fonofos</i>	100->60	60->6	6-1	6-0.5
<i>formothion</i>	-	-	-	100-65
<i>heptenophos</i>	-	-	100-48	100-19
<i>iprobenfos</i>	-	-	-	100-95
<i>isofenphos</i>	-	100->60	60-15	60-6
<i>isothioate</i>	-	-	100-25	100-25
<i>isoxathion</i>	-	-	100-55	100-20
<i>mecarbam</i>	-	100->30	30-7	30-3
<i>mephosfolan</i>	100->25	25->5	5->0.5	5->0.5
<i>methamidophos</i>	-	100->25	15-3	15-1.5
<i>methidathion</i>	-	100->40	40-10	40-4
<i>methyltrithion</i>	-	-	100-49	100-19
<i>mevinphos</i>	100->60	60->5	5-1	5-0.5
<i>monocrotophos</i>	-	100->25	25-7	25-0.5
<i>naled</i>	-	-	-	100-50
<i>omethoate</i>	-	-	100-25	100-10
<i>oxydemeton-methyl</i>	-	100->93	93-23	93-9
<i>oxydisulfoton</i>	100->70	70->5	5-1.5	5-0.5
<i>paraoxon</i>	100->35	35->3	3-0.9	3-0.35
<i>parathion</i>	100->40	40->4	4-1	4-0.4
<i>parathion-methyl</i>	-	100->12	12-3	12-1.2
<i>phenkapton</i>	-	-	100-25	100-10
<i>phenthoat</i>	-	-	100-70	100-70
<i>phorate</i>	100->20	20->2	2-0.5	2->0
<i>phosalone</i>	-	-	100-60	100-24
<i>phosfolan</i>	-	100->15	15-4	15-1
<i>phosmet (phthalophos)</i>	-	-	100-45	100-18
<i>phosphamidon</i>	-	100->34	34-8	34-3
<i>pirimiphos-ethyl</i>	-	-	100-70	100-28
<i>propaphos</i>	-	100->75	75-15	75-15
<i>prothoate</i>	-	100->15	15-4	15-1
<i>pyrazophos</i>	-	-	-	100-45
<i>pyrazoxon</i>	100->80	80->8	8-2	8-0.5
<i>quinalphos</i>	-	100-52	52-13	52-5
<i>salithion</i>	-	-	100-60	100-25
<i>schradan</i>	-	100->18	18-9	18-3.6

	(a)	(b)	(c)	
	%	%	solid %	liquid %
<b>71. (cont.)</b>				
<i>sulfotep</i>	—	100- > 10	10-2	10-1
<i>sulprofos</i>	—	—	100-45	100-18
<i>tenepfos</i>	—	—	100-90	100-90
<i>TEPP</i>	100- > 10	10- > 0	—	—
<i>terbufos</i>	100- > 15	15- > 3	3-0.74	3-0.74
<i>thiometon</i>	—	100- > 50	50-10	50-5
<i>thionazin</i>	100- > 70	70- > 5	5-1	5-0.5
<i>triamiphos</i>	—	100- > 20	20-5	20-1
<i>triazophos</i>	—	—	100-33	100-13
<i>trichlorfon</i>	—	—	100-70	100-23
<i>trichloronat</i>	—	100- > 30	30-8	30-3
<i>vamidotion</i>	—	—	100-30	100-10
<b>72. Chlorinated hydrocarbons, such as:</b>				
<i>aldrin</i>	—	100- > 75	75-19	75-7
<i>campechlor</i>	—	—	100-40	100-15
<i>chlordane</i>	—	—	—	100-55
<i>chlordimeform</i>	—	—	—	100-50
<i>chlordimeform hydrochloride</i>	—	—	—	100-70
<i>DDT</i>	—	—	100-55	100-20
<i>1,2-dibromo-3-chloropropane</i>	—	—	100-85	100-34
<i>dieldrin</i>	—	100- > 75	75-19	75-7
<i>endosulfan</i>	—	100- > 80	80-20	80-8
<i>endrin</i>	100- > 60	60- > 6	6-1	6-0.5
<i>heptachlor</i>	—	100- > 80	80-20	80-8
<i>isodrin</i>	—	100- > 14	14-3	14-1
<i>lindane (γ BHC)</i>	—	—	100-44	100-15
<i>pentachlorophenol</i>	—	100- > 54	54-13	54-5
<b>73. Chloro-phenoxyacetic derivatives, such as:</b>				
<i>2,4-D</i>	—	—	—	100-75
<i>2,4-DB</i>	—	—	—	100-40
<i>2,4,5-T</i>	—	—	—	100-60
<i>triadimefon</i>	—	—	—	100-70
<b>74. Halogenated organic compounds which cannot be classified under items 72 or 73, such as:</b>				
<i>allidochlor</i>	—	—	100-35	100-35
<i>bromoxynil</i>	—	—	100-95	100-38
<i>ioxynil</i>	—	—	100-20	100-20
<i>isobenzan</i>	100- > 10	10- > 2	2-0.4	4-0.4
<i>mirex</i>	—	—	—	100-60
<b>75. Nitrogenated organic compounds which cannot be classified under other item numbers, such as:</b>				
<i>benquinox</i>	—	—	100-50	100-20
<i>binapacryl</i>	—	—	100-65	100-25

	(a)	(b)	(c)	
	%	%	solid %	liquid %
75. (cont.)				
<i>chinomethionate</i>	-	-	100-50	100-50
<i>cyanazine</i>	-	-	100-90	100-35
<i>cycloheximide</i>	100->40	40->4	4-1	4->0
<i>dinobuton</i>	-	-	100-25	100-10
<i>dinoseb</i>	-	100->40	40-8	40-8
<i>dinoseb acetate</i>	-	-	100-30	100-10
<i>dinoterb</i>	-	100->50	50-10	50-5
<i>dinoterb acetate</i>	-	-	100-30	100-12
<i>DNOC</i>	-	100->50	50-12	50-5
<i>drazoxolon</i>	-	-	100-63	100-25
<i>medinoterb</i>	-	100->80	80-20	80-8
<i>terbumeton</i>	-	-	-	100-95
76. Carbamates and thiocarbamates, such as:				
<i>aldicarb</i>	100->15	15->1	1->0	1->0
<i>aminocarb</i>	-	100->60	60-15	60-6
<i>bendiocarb</i>	-	100->65	65-15	65-5
<i>benfuracarb</i>	-	-	100-55	100-20
<i>butocarboxim</i>	-	-	100-75	100-30
<i>carbaryl</i>	-	-	100-30	100-10
<i>carbofuran</i>	-	100->10	10-2	10-1
<i>cartap HCl</i>	-	-	100-40	100-40
<i>di-allate</i>	-	-	-	100-75
<i>dimetan</i>	-	-	100-60	100-24
<i>dimetilan</i>	-	100->50	50-12	50-5
<i>dioxacarb</i>	-	-	100-30	100-10
<i>formetanate</i>	-	100->40	40-10	40-4
<i>isolan</i>	-	100->20	20-5	20-2
<i>isoprocarb</i>	-	-	100-85	100-35
<i>mercaptodimethur</i>	-	100->70	70-17	70-7
<i>metam-sodium</i>	-	-	100-85	100-35
<i>metasulfocarb</i>	-	-	100-55	100-20
<i>methomyl</i>	-	100->34	34-8	34-3
<i>mexacarbate</i>	-	100->28	28-7	28-2
<i>mobam</i>	-	-	100-35	100-14
<i>nabam</i>	-	-	-	100-75
<i>oxamyl</i>	-	100->10	10-2.5	10-1
<i>pirimicarb</i>	-	-	100-73	100-29
<i>promecarb</i>	-	-	100-35	100-14
<i>promurit (muritan)</i>	100->5.6	5.6->0.56	0.56-0.14	0.56->0
<i>propoxur</i>	-	-	100-45	100-18
77. Alkaloids, such as:				
<i>nicotine preparations</i>	-	100->25	25-5	25-5
<i>strychnine</i>	100->20	20->0	-	-

	(a)	(b)	(c)	
	%	%	solid %	liquid %
78. Organic compounds of mercury, such as: <i>phenylmercuric acetate (PMA)</i> <i>chloro-methoxyethyl mercury</i> <i>phenylmercury pyrocatechin (PMB)</i>	- - -	100->60 100->40 100->60	60-15 40-10 60-15	60-6 40-4 60-6
79. Organic compounds of tin, such as: <i>fentin acetate</i> <i>cyhexatin</i> <i>fentin hydroxide</i>	- - -	- - -	100-62 100-95 100-54	100-25 100-35 100-20
80. Other organo-metallic compounds which cannot be classified under items 78 and 79, such as: ...	...	...	...	...
81. Rodenticides, such as: <i>brodifacoum</i> <i>chlorophacinone</i> <i>coumachlor</i> <i>coumafuryl</i> <i>coumaphos</i> <i>coumatetralyl (racumin)</i> <i>crimidine</i> <i>dicoumarol</i> <i>difenacoum</i> <i>diphacinone</i> <i>warfarin (and salts of)</i>	100->5 100->40 - - - - 100->25 - 100->35 100->25 100->60	5->0.5 40->4 - - 100->30 100->34 25->2 - 35-3.5 25->3 60->6	0.5-0.13 4-1 100-25 - 30-8 34-8.5 2-0.5 100-25 3.5-0.9 3-0.7 6-1.5	0.5-0.05 4-0.4 100-10 100-80 30-3 34-3.4 2->0 100-10 3.5-0.35 3-0.2 6-0.6
82. Derivatives of bipyridyl, such as: <i>diquat</i> <i>paraquat</i>	- -	- 100->40	- 40-8	100-45 40-8
83. Organic compounds which cannot be classified under a collective heading of items 71 to 81, such as: <i>ANTU</i> <i>blasticidin-S-3</i> <i>cypermethrin</i> <i>dazomet</i> <i>difenzoquat</i> <i>dimexano</i> <i>endothal-sodium</i> <i>fenaminosulph</i> <i>fenpropathrin</i> <i>fluoracetamide</i> <i>imazalil</i> <i>kelevan</i> <i>norbormide</i> <i>pindone (and salts of)</i> <i>rotenone</i> <i>tricamba</i>	100->40 - - - - - - - - - - - 100->88 - - -	40->4 - - - - - 100->75 100->50 - 100->25 - - - 88->8.8 - - -	4-1 100-25 100-80 - - - 75-19 50-10 100-30 25-6.7 - - 8.8-2.2 - 100-65 -	4-0.8 100-10 100-32 100-60 100-90 100-48 75-7 50-10 100-10 25-2.5 100-64 100-48 8.8-0.8 100-55 100-25 100-60

	(a)	(b)	(c)	
	%	%	solid %	liquid %
84. Inorganic compounds of arsenic, such as: <i>arsenic trioxide</i> <i>calcium arsenate</i> <i>sodium arsenite</i>	— — —	100- > 40 100- > 40 100- > 20	40-10 40-10 20-5	40-4 40-4 20-2
85. Inorganic compounds of fluorine, such as: <i>barium silicofluoride</i> <i>sodium silicofluoride</i>	— —	— —	100-88 100-62	100-35 100-25
86. Inorganic compounds of mercury, such as: <i>mercuric chloride</i> <i>mercury oxide</i>	— —	100- > 70 100- > 35	70-17 35-8	70-7 35-3
87. Inorganic compounds of copper, such as: <i>copper sulphate</i>	—	—	100-50	100-20
88. Inorganic compounds of thallium, such as: <i>thallium sulphate</i>	—	100- > 30	30-8	30-3

89. (c) *Cereal grains, dressed seed and other substances of vegetable origin, impregnated with one or more of the pesticides or other substances of Class 6.1.*

G. ACTIVE SUBSTANCES INTENDED FOR LABORATORIES AND EXPERIMENTS AND FOR THE MANUFACTURE OF PHARMACEUTICAL PRODUCTS, IF NOT LISTED IN OTHER ITEMS OF THIS CLASS

90. (a) Active substances which are highly toxic, such as: *colchicine, digitoxin*;

(b) Active substances which are toxic, such as: *adrenalin*;

(c) Active substances which are harmful, such as: *phenobarbitol*.

NOTE. 1. The active substances and triturations or mixtures of substances of item 90 with other substances are to be classified according to their toxicity [see foot-note 1 to marg. 600 (1)].

2. Pharmaceutical products ready for use (tablets, pills, ampoules, etc.) containing substances of item 90 are not subject to the requirements of RID.

H. EMPTY PACKAGINGS

NOTE. Empty packagings with residues from their previous contents adhering to the outside are not to be accepted for carriage.

91. *Empty packagings including empty intermediate bulk containers (IBCs), empty tank wagons and empty tank-containers, uncleaned, which have contained substances of Class 6.1.*

601a Substances classified under (b) and (c) of items 11 to 24, 32 to 36, 41 to 44, 51 to 68, 71 to 88 and 90 carried in conformity with the following provisions are not subject to the requirements of Section 2, "Conditions of Carriage":

(a) Substances classified under (b) of each item:

- Liquids: not more than 500 ml per inner packaging and not more than 2 litres per package;
- Solids: not more than 1 kg per inner packaging and not more than 4 kg per package.

(b) Substances classified under (c) of each item:

- Liquids: not more than 3 litres per inner packaging and not more than 12 litres per package.
- Solids: not more than 6 kg per inner packaging and not more than 24 kg per package.

These quantities of substances shall be carried in combination packagings which at least meet the conditions of marg. 1538.

The "General conditions of packing" of marg. 1500 (1), (2) and (5) to (7) shall be observed.

## 2. Conditions of carriage

(The conditions of carriage for empty packagings are included under F.)

### A. PACKAGES

#### 1. General conditions of packing

602 (1) Packagings shall satisfy the conditions of Appendix V, unless special conditions for the packing of certain substances are prescribed in section A.2.

(2) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI.

(3) In accordance with the provisions of marg. 600 (1) and 1511 (2) or 1600 (3), the following shall be used:

- Packagings of packing group I, marked with the letter "X", for the highly toxic substances classified under (a) of each item;
- Packagings of packing groups II or I, marked with the letter "Y" or "X", or IBCs of packing group II, marked with the letter "Y", for the toxic substances classified under (b) of each item;
- Packagings of packing groups III, II or I, marked with the letter "Z", "Y" or "X", or IBCs of packing group III or II, marked with the letter "Z" or "Y", for the harmful substances classified under (c) of each item.

(4) For the carriage of substances of Class 6.1 in tank wagons, see Appendix XI, in tank containers, see Appendix X. For the carriage in bulk of solid wastes classified under letter (c) of the various items, see marg. 617 (1) and 618 (3).

#### 2. Packing of individual substances

603 (1) Hydrocyanic acid of item 1 shall be packed:

(a) When completely absorbed by an inert porous material: in strong metal receptacles of a capacity of not more than 7.5 litres, placed in wooden boxes in such a manner that they cannot come into contact with one another. Such a combination packaging shall comply with the following conditions:

1. The receptacles shall be tested at a pressure of not less than 0.6 MPa (6 bar) (gauge pressure);

2. The receptacles shall be entirely filled with the porous material, which must not shake down or form dangerous spaces even after prolonged use or under impact, even at temperatures of up to 50°C. The date of filling shall be durably marked on the lid of each receptacle;
  3. The combination packaging shall be tested and approved, in accordance with Appendix V, for packing group I. The package shall not weigh more than 120 kg.
- (b) When liquid, but not absorbed by a porous material: in carbon-steel pressure-resistant cylinders which shall satisfy the following conditions:
1. Before being used for the first time, the pressure-resistant cylinders shall undergo a hydraulic pressure test at a pressure of not less than 10 MPa (100 bar) (gauge pressure). The pressure test shall be repeated every two years and shall include a meticulous inspection of the inside of the receptacle and a check of its tare;
  2. The cylinders must comply with the relevant provisions of Class 2 [see marg. 211, 212 (1) (a), 213, 215 and 218].
  3. In addition to the markings prescribed in marg. 218 (1) (a), (b), (d), (e) and (g), the date of the most recent filling (month/year) shall be shown;
  4. The maximum mass of the contents must not exceed 0.55 kg per litre of capacity.

(2) Solutions of hydrocyanic acid of item 2 shall be packed in flame-sealed glass ampoules, containing not more than 50 g, or in glass bottles so closed as to be leakproof and containing not more than 250 g.

The ampoules or bottles shall be carried in combination packagings which must meet the following conditions:

- (a) The ampoules and bottles shall be secured by absorbent cushioning materials in leakproof steel or aluminium outer packagings; a package shall not weigh more than 15 kg; or
- (b) The ampoules and bottles shall be secured by absorbent cushioning materials in wooden cases with a leakproof tinplate lining; a package shall not weigh more than 75 kg.

The combination packagings referred to in (a) and (b) shall be tested and approved, in accordance with Appendix V, for packing group I.

604

Metal carbonyls of item 3 shall be packed:

- (1) In seamless moulded bottles made of pure aluminium of a capacity not exceeding 1 litre and a wall thickness not less than 1 mm, which shall be tested at a pressure of not less than 1 MPa (10 bar) (gauge pressure). The bottles shall be closed by means of a metal screw-threaded plug with an inert gasket, the screw-threaded plug being screwed firmly into the neck of the bottle and so secured that it cannot work loose under normal conditions of carriage.

A maximum of four aluminium bottles of this type may be secured in an outer packaging of wood or fibreboard by non-inflammable absorbent cushioning materials. Such a combination packaging shall conform to a design type which has been tested and approved for packing group I in accordance with Appendix V.

A package shall not weigh more than 10 kg.

- (2) In metal receptacles fitted with completely leakproof closing devices which shall if necessary be secured against mechanical damage by protective caps.



Steel receptacles of a capacity not exceeding 150 litres shall have a minimum wall thickness of 3 mm. and larger steel receptacles and receptacles made of other materials shall have a minimum wall thickness which guarantees equivalent mechanical strength. The maximum permitted capacity of receptacles shall be 250 litres. The maximum mass of the contents shall not exceed 1 kg per litre of capacity.

Before being used for the first time, the receptacles shall undergo a hydraulic pressure test at a pressure of not less than 1 MPa (10 bar) (gauge pressure). The pressure test shall be repeated every five years and shall include a meticulous inspection of the inside of the receptacle and a check of the tare. Metal receptacles shall bear the following particulars in clearly legible and durable characters:

- (a) The name of the substance in full (the names of both substances may also be shown side by side in the event of alternative use);
- (b) The name of the owner of the receptacle;
- (c) The tare of the receptacle, including such fittings and accessories as valves, protective caps, etc.;
- (d) The date (month, year) of the initial test and of the most recent test, and the stamp of the expert carrying out the test;
- (e) The maximum permissible mass of the contents of the receptacle in kg;
- (f) The internal pressure (test pressure) to be applied in the hydraulic pressure test.

605 (1) Substances classified under (a) of the various items of marg. 601 shall be packed:

- (a) In non-removable head steel drums conforming to marg. 1520, or
- (b) In non-removable head aluminium drums conforming to marg. 1521, or
- (c) In non-removable head steel jerricans conforming to marg. 1522, or
- (d) In non-removable head plastics drums of a capacity not exceeding 60 litres or non-removable head plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings with inner receptacles of glass, plastics material or metal conforming to marg. 1538.

(2) Solid substances within the meaning of marg. 600 (2) may also be packed:

- (a) In removable-head drums conforming to marg. 1520 for steel, 1521 for aluminium, 1523 for plywood, 1525 for fibreboard, or 1526 for plastics material, or in removable-head jerricans conforming to marg. 1522 for steel or 1526 for plastics material, if necessary with one or more sift-proof inner bags; or
- (b) In combination packagings conforming to marg. 1538, with one or more sift-proof inner bags.

606 (1) Substances classified under (b) of the various items of marg. 601 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or plastics jerricans conforming to marg. 1526, or

- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538.

NOTE to (a), (b), (c) and (d). Simplified conditions are applicable to removable-head drums and jerricans for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C and for solids (see marg. 1512, 1553, 1554 and 1560).

(2) Substances classified under (b) of the various items of marg. 601 which have a vapour pressure at 50°C of not more than 110 kPa (1.10 bar) may also be packed in metallic IBCs conforming to marg. 1611.

(3) Substances classified under item 15 (b) may also be packed in composite packagings (glass, porcelain or stoneware) conforming to marg. 1539.

(4) Solid substances within the meaning of marg. 600 (2) may also be packed:

- (a) In drums conforming to marg. 1523 for plywood or 1525 for fibreboard, if necessary with one or more sift-proof inner bags; or
- (b) In waterproof bags made of textile material in conformity with marg. 1533, woven plastics material in conformity with marg. 1534, plastics film in conformity with marg. 1535, and in water-resistant paper bags in conformity with marg. 1536, provided the goods are dispatched as a full wagon load or the bags secured on pallets; or
- (c) In flexible IBCs conforming to marg. 1621, with the exception of IBCs of types 13H1, 13L1 and 13M1, provided that transport is limited to full wagon loads.

607 (1) Substances classified under (c) of the various items of marg. 601 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538, or
- (g) In composite packagings (glass, porcelain or stoneware) conforming to marg. 1539, or
- (h) In light gauge metal packagings conforming to marg. 1540.

NOTE to (a), (b), (c), (d) and (h). Simplified conditions are applicable to removable-head drums, jerricans and light gauge metal packagings for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C and for solids (see marg. 1512, 1552 to 1554 and 1560).

(2) Substances classified under (c) of the various items of marg. 601 which have a vapour pressure at 50°C of not more than 110 kPa (1.10 bar) may also be packed in metallic IBCs conforming to marg. 1611.

(3) Solid substances within the meaning of marg. 600 (2) may also be packed:

- (a) In drums conforming to marg. 1523 for plywood, or 1525 for fibreboard, if necessary with one or more sift-proof inner bags; or
- (b) In waterproof bags made of textile material in conformity with marg. 1533, woven plastics material in conformity with marg. 1534, plastics film in conformity with marg. 1535, and in water-resistant paper bags in conformity with marg. 1536; or

(c) In flexible IBCs conforming to marg. 1621, with the exception of IBCs of types 13H1, 13L1 and 13M1.

608 The openings of receptacles — other than glass ampoules and cylinders under pressure — for the carriage of liquids having a viscosity below 200 mm<sup>2</sup>/s at 23°C shall be capable of being so closed as to be leakproof by means of two devices placed in series, one of which shall be screw-threaded or secured in an equivalent manner.

609 Receptacles or IBCs containing dimethylaminoborane of item 12 (b) shall be fitted with a vent in accordance with marg. 1500 (8) or 1607 (4) respectively.

610

### 3. *Mixed packing*

611 (1) Substances covered by the same item number may be packed together in a combination packaging conforming to marg. 1538.

(2) Substances of different items of Class 6.1 in quantities not exceeding, per receptacle, 3 litres for liquids and/or 5 kg for solids, may be packed together and/or with goods not subject to the requirements of RID, in a combination packaging conforming to marg. 1538, if they do not react dangerously with one another.

(3) Except as otherwise specially provided below, substances of Class 6.1, in quantities not exceeding, per receptacle, 3 litres for liquids and/or 5 kg for solids, may be packed together in a combination packaging conforming to marg. 1538, with substances or articles of other classes — provided that mixed packing is also permitted for the substances and articles of these classes — and/or with goods which are not subject to the requirements of RID, if they do not react dangerously with one another.

(4) The following are considered dangerous reactions:

- (a) Combustion and/or giving off considerable heat;
- (b) Emission of inflammable and/or toxic gases;
- (c) Formation of corrosive liquids;
- (d) Formation of unstable substances.

(5) The mixed packing of acid substances with basic substances in a package shall not be permitted if the two substances are packed in fragile receptacles.

(6) The requirements of marg. 4 (7), 8 and 602 shall be complied with.

(7) If wooden or fibreboard boxes are used, a package shall not weigh more than 100 kg.

### *Special conditions*

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
1	Hydrocyanic acid	Mixed packing not permitted		
3	Iron pentacarbonyl and nickel tetracarbonyl			
2	Hydrocyanic acid in solutions	0.5 litre	1 litre	Shall not be packed together with substances of Classes 1, 5.2 or 7
	Liquid substances classified under (a) of each item			

#### 4. Marking and danger labels on packages (See Appendix IX)

- 612 (1) Packages containing substances of items 1 to 3 or substances classified under (a) or (b) of other items shall bear a label conforming to model No. 6.1. If substances of item 15 (b) are packed in composite packagings (glass, porcelain or stoneware) conforming to marg. 1539, of a capacity exceeding 5 litres, the packages shall nevertheless bear two labels conforming to model No. 6.1 (see marg. 10).
- (2) Packages containing substances classified under (c) of each item shall bear a label conforming to model No. 6.1A. However, if liquids are packed in composite packagings (glass, porcelain or stoneware) conforming to marg. 1539 of a capacity exceeding 5 litres, the packages shall bear two labels conforming to model No. 6.1A (see marg. 10).
- (3) Packages containing substances having a flashpoint of 55°C or below shall in addition bear a label conforming to model No. 3, and packages containing chloroformates of items 16 or 17 shall in addition bear a label conforming to model No. 8.
- (4) Packages containing fragile receptacles not visible from the outside shall bear on two opposite sides a label conforming to model No. 12.
- (5) Packages containing liquids in receptacles the closures of which are not visible from the outside, as well as packages containing receptacles with vents or receptacles with vents without outer packaging, shall bear on two opposite sides a label conforming to model No. 11.

#### B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

- 613 (1) With the exception of substances of items 1 to 3 and substances classified under (a) of each item, packages containing other substances of this class may be sent by express parcel, if they contain:
- Substances classified under (b) of each item, up to 2 litres per package for liquids and up to 4 kg per package for solids;
  - Substances classified under (c) of each item, up to 12 litres per package for liquids and up to 24 kg per package for solids.
- (2) Substances and preparations used as pesticides of items 71 to 89, contained in non-fragile receptacles and in commercial packagings ready for use, may be sent by express parcel. A package must not weigh more than 25 kg.

#### C. PARTICULARS IN THE CONSIGNMENT NOTE

- 614 (1) The description of the goods in the consignment note shall conform to one of the names printed *in italics* in marg. 601. If the substance is not mentioned by name, the chemical name<sup>(1)</sup> shall be entered. The description of the goods shall be followed by *particulars of the class, the item number (together with the letter, if any), and the initials "RID" e.g. 6.1, item 11 (a), RID*. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: "Waste, containing. . .", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "Waste, containing cadmium compounds, 6.1, item 61 (c), RID". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

<sup>(1)</sup> In the case of pesticides, the name to be entered should be that given in ISO Standard R.1750 if listed.

(2) For hydrocyanic acid of item 1, the sender shall certify in the consignment note: "*The nature of the goods and the packaging are in conformity with the requirements of RID*".

(3) For substances of item 44, the sender shall certify in the consignment note: "*Stored in an open and dry place for not less than three days*".

(4) For consignments of chemically unstable substances, the sender shall certify in the consignment note: "*Measures taken in accordance with marg. 600 (3)*".

#### D. TRANSPORT EQUIPMENT

##### 1. Conditions relating to wagons and loading

###### a. For packages

615 (1) For the use of wagons fitted with electrical equipment for the carriage of inflammable liquid substances of Class 6.1 with a flash-point of 55°C or below in packages of more than 50 kg, see Appendix IV.

(2) Wagons which have contained substances of Class 6.1 as full wagon loads shall be checked, after unloading, for any residues of the load (see also marg. 624).

616 (1) Packages containing substances of Class 6.1 shall be kept apart, in wagons, from foodstuffs, other articles of consumption and animal feedstuffs.

(2) Packages shall be so loaded in wagons that they cannot shift dangerously, overturn or fall.

Packages bearing two labels conforming to model No. 6.1 in accordance with marg. 612 (1) or two labels conforming to model No. 6.1A in accordance with marg. 612 (2) or labels conforming to model No. 12 in accordance with marg. 612 (4) shall be protected against any damage that might be caused by other packages.

###### b. For carriage in bulk

617 (1) Substances of items 44 (b), 60 (c) and 63 (c) and solid wastes classified under letter (c) of the various items may be carried in bulk in sheeted open wagons or in movable-roof wagons.

(2) Wagons in which substances of item 44 (b), 60 (c) and 63 (c) and solid wastes classified under letter (c) of the various items have been carried in bulk shall be swilled out after unloading.

###### c. Carriage in small containers

618 (1) Packages containing substances of this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 620 shall also be applied in small containers.

(3) Substances of items 44 (b), 60 (c) and 63 (c) and solid wastes classified under letter (c) of the various items may also be carried in bulk in small containers of the closed type with complete walls; the containers shall be swilled out after unloading.

(4) The requirements of marg. 615 and 624 are also applicable, by analogy, to carriage in small containers.

##### 2. Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)

619 (1) Wagons, tank wagons and tank-containers containing substances of items 1 to 3 or substances classified under (a) or (b) of other items, as well as

wagons carrying such tank-containers, shall bear on both their sides a label conforming to model No. 6.1.

(2) Wagons, tank wagons and tank-containers carrying substances classified under (c) of each item, as well as wagons carrying such tank-containers, shall bear on both sides a label conforming to model No. 6.1A.

(3) Wagons, tank wagons and tank-containers containing substances having a flash-point of 55°C or below, as well as wagons carrying such tank-containers, shall in addition bear on both sides a label conforming to model No. 3; those carrying chloroformates of items 16 or 17 shall in addition bear on both sides a label conforming to model No. 8.

(4) Small containers shall be labelled in accordance with marg. 612 (1), (2) and (3). Small containers containing packages bearing labels conforming to model No. 12 shall themselves also bear that label.

#### E. PROHIBITIONS ON MIXED LOADING

620 (1) Substances of Class 6.1 contained in packages bearing one or two labels conforming to model No. 6.1 or 6.1A shall not be loaded in the same wagon together with substances and articles of Classes 1 or 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

(2) Liquid substances of Class 6.1 contained in packages bearing two labels conforming to model No. 6.1 or 6.1A shall not be loaded in the same wagon together with:

(a) Substances of Class 3, 4.1 or 4.2 contained in packages bearing two labels conforming to models Nos. 3, 4.1 or 4.2;

(b) Substances of Class 5.1 or 5.2 contained in packages bearing two labels conforming to model No. 5;

(c) Substances of Class 8 contained in packages bearing two labels conforming to model No. 8.

621 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

#### F. EMPTY PACKAGINGS

622 (1) If the empty packagings, uncleaned, of item 91 are bags or flexible IBCs, these shall be placed in boxes or waterproofed bags to prevent any leakage of substances.

(2) Other uncleaned empty packagings including IBCs, tank wagons and tank-containers of item 91 shall be closed in the same manner and with the same degree of leakproofness as if they were full.

(3) Empty packagings including IBCs, tank wagons and tank-containers, uncleaned, of item 91 shall bear the same danger labels as if they were full. Packagings containing bags or flexible IBCs in accordance with (1) above shall bear the same danger labels as if these bags or flexible IBCs were full.

(4) Empty packagings including empty IBCs, uncleaned, of item 91 shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in wagons and in warehouses.

(5) The description in the consignment note shall conform to one of the names printed *in italics* in item 91 e.g.: "*Empty packaging, 6.1, item 91 RID*". A cross shall be inserted in the appropriate box on the consignment note. In the case of empty tank wagons or tank-containers, uncleaned, this description shall be completed by adding the words "last load" together with the name and item number of the goods last loaded, e.g.: "*Last load: Phenol, item 13 (b)*." For carriage in tank wagons or tank-containers, when a marking in accordance with

Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. “*Last load 68 2312 phenol, item 13 (b)*”.

G. OTHER REQUIREMENTS

623 Packages containing substances of Class 6.1 shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in warehouses.

624 If a leakage of substances of this class occurs and they have been spilled in a wagon, the wagon may not be used again until it has been thoroughly cleaned and, if necessary, decontaminated. Any other goods and articles carried in the same wagon shall be inspected for possible contamination.

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CLASS 6.2. INFECTIOUS AND REPUGNANT SUBSTANCES

1. *List of substances*

650 Among the substances and articles covered by the heading of Class 6.2 only those listed in marg. 651 are to be accepted for carriage and then only under the conditions set out in marg. 651 to 675. These substances and articles to be accepted for carriage under certain conditions are to be considered as substances of RID.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes) containing one or more components listed in marg. 651, see also marg. 3 (3).

651 1. (a) *Fresh tendons, clippings of fresh skins which are not limed or salted, trimmings of fresh tendons or clippings of fresh skins:*

NOTE. Wet and fresh skin clippings which are limed or salted are not subject to the requirements of RID.

(b) *Fresh horns, claws or hoofs not cleansed of bone and soft adhering parts, fresh bones not cleansed of flesh or other soft adhering parts;*

(c) *Undressed pig's bristles and hair.*

2. *Fresh skins, salted or not salted, from which offensive quantities of blood or brine drip.*

NOTE. Suitably salted skins containing only a small quantity of moisture are not subject to the requirements of RID.

3. *Cleansed or dried bones, cleansed or dried horns, claws or hoofs.*

NOTE. Dry bones divested of fat, not giving off any putrid odour, are not subject to the requirements of RID.

4. *Fresh calf rennets, cleansed of all traces of eaten matter.*

NOTE. Dried calf rennets not giving off a bad odour are not subject to the requirements of RID.

5. *Compressed residues, arising from the manufacture of skin glue (calcareous residues, residues from the liming of skin clippings or residues used as fertilisers).*

6. *Non-compressed residues arising from the manufacture of skin glue.*

7. *Non-infected urine protected against decomposition.*

8. *Anatomical pieces, entrails and glands:*

(a) *Non-infected,*

*(b) Infected.*9. *Manure.*10. *Excrements.*

11. Other *animal substances* repugnant or liable to cause infection which are not listed specifically under Items 1 to 10.

12. *Empty packagings* and *empty bags* which have contained substances of items 1 to 8, 10 and 11, as well as *sheets* which have been used to cover over substances of Class 6.2.

NOTE. If uncleaned, these packagings, bags and sheets are not to be accepted for carriage.

2. *Conditions of carriage*

(The requirements relating to empty packagings and to sheets are included under F.)

## A. PACKAGES

1. *General conditions of packing*

652 (1) Packagings shall be so closed and leakproof as to prevent any loss of the contents.

(2) Packagings, including their closures, shall be sufficiently rigid and strong in all their parts to prevent any loosening during the journey and to meet the normal requirements of carriage. In particular, where the substances are in the liquid state or liable to ferment, and unless the section headed "Packing of individual substances" provides otherwise, receptacles and their closures shall be able to withstand any pressure which may arise inside the receptacles, taking into account also the presence of air, in normal conditions of carriage. For this purpose a free space shall be left, taking into account the difference between the temperature of the substances at the moment of filling and the highest mean temperature which they are likely to reach during carriage.

(3) No trace of the contents shall adhere to the outside of the packages.

2. *Packing of individual substances*

653 (1) Substances of item 1 shall be packed:

*(a) For less than full wagon loads:*

1. In metal receptacles fitted with a safety closure capable of yielding to internal pressure or in casks, small vats or cases;
2. Dry substances of item 1 (c), also in bags on condition that the bad odour can be suppressed by disinfection. For substances which are not dry, packing in bags is permitted only from 1st November to 15th April;

*(b) For consignments in full wagon loads:*

1. In the packagings indicated under (a) 1, above; or
2. On condition that the bad odour can be suppressed by disinfection, in bags impregnated with suitable disinfectants.

(2) For carriage in bulk, see marg. 667.

654 (1) Substances of item 2 shall be packed:

*(a) For consignments other than full wagon loads:*

1. In casks, small vats or cases; or



2. During the months of November to February, in bags impregnated with suitable disinfectants, on condition that the bad odour can be suppressed by disinfection:
  - (b) For consignments in full wagon loads:
    1. In the packagings indicated under (a) 1. above; or
    2. On condition that the bad odour can be suppressed by disinfection, in bags impregnated with suitable disinfectants.
  - (2) For carriage in bulk, see marg. 667.
- 655 (1) Substances of item 3 shall be packed in casks, small vats, cases, in metal receptacles or in bags.
  - (2) For carriage in bulk, see marg. 667.
- 656 Substances of item 4 shall be packed:
  - (a) For consignments other than full wagon loads: in casks, small vats, cases, in metal receptacles or in bags;
  - (b) For consignments in full wagon loads: in any suitable packagings.
- 657 (1) Substances of items 5 and 6 shall be packed in casks, small vats, cases, or in metal receptacles.
  - (2) For carriage in bulk of substances of item 5, see marg. 667.
- 658 Substances of item 7 shall be packed in hermetically closed galvanised sheet steel receptacles.
- 659 (1) Substances of item 8 shall be packed in metal receptacles fitted with a safety closure capable of yielding to internal pressure, or in casks, or small vats; substances of item 8 (a) may also be packed in cases.
  - (2) For consignments as express parcels:
    - (a) Substances of item 8 (a) shall be packed in receptacles made of glass, porcelain, stoneware, metal or of suitable plastics material. These receptacles shall be placed, either individually or in groups, in a strong wooden case, with absorbent cushioning material if the receptacles are fragile. If the substances in question are immersed in a preserving fluid, the absorbent material shall be in sufficient quantity to absorb all the fluid. The preserving fluid shall not be inflammable;
    - (b) Substances of item 8 (b) shall be packed in suitable receptacles which are placed with cushioning material in a strong wooden case fitted with a metal lining made leakproof, for example by soldering.
- 660 Substances of item 9 shall only be despatched in bulk.
- 661 Substances of item 10 shall be packed in sheet metal receptacles.
- 662 Substances of item 11 shall be packed in metal receptacles fitted with a safety closure capable of yielding to internal pressure or in casks, small vats, or cases.
3. *Mixed packing*
- 663 Substances listed under an item of marg. 651 can only be packed together in the same package with a substance listed under the same item and on condition that the packagings prescribed in sections A.1 and 2 are used.
4. *Marking and danger labels on packages* (see Appendix IX)
- 664 Packages containing fragile receptacles not visible from the outside shall bear a label conforming to model No. 12. If these fragile receptacles contain liquids the packages shall, in addition, except in the case of sealed ampoules, bear labels

conforming to model No. 11: these labels shall be affixed high up on two opposite sides of cases or in an equivalent manner when other packagings are used.

B. METHOD OF DESPATCH AND RESTRICTIONS ON FORWARDING

- 665 (1) Substances of items 9 and 10 may only be forwarded in full wagon loads.  
(2) Substances of items 7 and 8 may be forwarded as express parcels on condition that the mass of a package does not exceed 40 kg and their packaging conforms with the requirements of marg. 659 (2).

C. PARTICULARS IN THE CONSIGNMENT NOTE

- 666 The description of the goods in the consignment note shall conform to one of the names printed *in italics* in marg. 651. If the name of the substance is not indicated, the commercial name shall be entered. The description of the goods shall be followed by *particulars of the class, the item number (adding the letter where given), and the initials "RID"* e.g. 6.2, item 1 (a), *RID*. A cross shall be inserted in the appropriate box on the consignment note.

D. TRANSPORT EQUIPMENT

1. *Conditions relating to wagons and loading*

a. *For carriage in bulk*

- 667 (1) The following may be carried in bulk in open wagons:  
(a) Substances of items 1 (a) and (c) and 2, but only during the months of November to February; substances of item 1 (b) all the year round on condition that they are sprinkled with suitable disinfectants. If, however, the bad odour cannot be suppressed, these substances shall be packed in casks or small vats;  
(b) Substances of item 3;  
(c) Substances of item 5 if they are sprinkled with lime wash so that no putrid odour is noticeable. If the bad odour cannot be suppressed, they shall be packed in casks, small vats or cases;  
(d) Substances of item 9.  
(2) The following shall be covered over:  
(a) Substances of items 1 (a) and (c) and 2 with a sheet impregnated with suitable disinfectants and covered over with a second sheet;  
(b) Horns, claws or hoofs or fresh bones [item 1 (b)] with a sheet or with fibreboard impregnated with tar or bitumen, and sprinkled with suitable disinfectants;  
(c) Substances of item 3 with a sheet, unless these substances are sprinkled with suitable disinfectants so as to prevent a bad odour;  
(d) Substances of item 9 with a sheet.

(3) Substances of items 1 (a) and (c) and 2 may also be loaded in covered wagons specially fitted and ventilated.

(4) Wagons which have carried substances of Class 6.2 shall, after unloading, be thoroughly washed out and treated with suitable disinfectants.

b. *For small containers*

- 668 (1) Packages containing substances set out in this class may be carried in small containers.  
(2) The prohibitions on mixed loading laid down in marg. 670 shall be applied to the contents of a small container.  
(3) Substances, with the exception of those of item 9, whose carriage in bulk is permitted, may be enclosed in small containers with complete walls; these shall, after unloading, be thoroughly washed out and treated with suitable disinfectants.

2. *Marking and danger labels on wagons and on small containers* (see Appendix IX)

669 Small containers enclosing packages bearing a label conforming to model No. 12 shall also bear this label.

E. PROHIBITIONS ON MIXED LOADING

670 With the exception of substances of items 7 and 8 forwarded as express parcels, substances of Class 6.2 shall not be loaded together in the same wagon with foodstuffs or other articles for consumption.

671 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

F. EMPTY PACKAGINGS

672 (1) Articles of item 12 shall be cleansed and treated with suitable disinfectants.

(2) Articles of item 12 shall not be loaded in the same wagon together with foodstuffs or other articles for consumption.

(3) The description in the consignment note shall be: "*Empty packaging (or empty bag or sheet), 6.2, item 12, RID.*" A cross shall be inserted in the appropriate box on the consignment note.

673 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

G. OTHER REQUIREMENTS

674 (1) The railway may restrict the carriage of substances and articles of Class 6.2 to certain trains and make special arrangements regarding the time and duration of loading and unloading, and of carting on departure or arrival.

(2) If a bad odour is noticeable, the railway may have the substances treated at any time with suitable disinfectants to get rid of the odour.

675 With the exception of substances of item 7 and those of item 8 forwarded as express parcels, substances of Class 6.2 shall be kept apart from foodstuffs or other articles for consumption in the goods depots.

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## CLASS 7. RADIOACTIVE MATERIAL

### *Introduction*

700 (1) Scope

(a) Among the materials with a specific activity of more than 70 kBq/kg (2 nCi/g) and articles containing such materials, only those listed in marg. 1701 are to be accepted for carriage and then only under the conditions set out in the appropriate schedules of marg. 704 and in marg. 1700 to 1771.<sup>(1)</sup>

<sup>(1)</sup> The requirements of Class 7 are based on the following principles and provisions of the International Atomic Energy Agency (IAEA):

Regulations for the Safe Transport of Radioactive Material, Safety Series No. 6, 1985 Edition, which also includes the general principles for Radiation Protection.

Regulations for the Safe Transport of Radioactive Material, Safety Series No. 6, Supplement 1988.

Explanations and further information about these regulations can be found in the following documents:

1. IAEA "Advisory Material for the Application of the IAEA Transport Regulations" Safety Series No. 37, 1987 Edition.
2. IAEA "Explanatory Material for the Application of the IAEA Transport Regulations" Safety Series No. 7, 1987 Edition.
3. IAEA "Basis Safety Standards for Radiation Protection" Safety Series No. 9, 1982 Edition.
4. IAEA "Emergency Response Planning and Preparedness for Transport Accidents Involving Radioactive Materials" Safety Series No. 87, 1988 Edition.

(b) The materials and articles referred to in (a) are materials and articles of RID.

NOTE. Cardiac pacemakers containing radioactive material, when they have been surgically implanted in medical patients, or radio-pharmaceuticals administered to a patient in the course of medical treatment, are not subject to the requirements of RID.

(2) Definitions and Explanations

*A<sub>1</sub> and A<sub>2</sub>*

1. A<sub>1</sub> shall mean the maximum activity of special form radioactive material permitted in a Type A package. A<sub>2</sub> shall mean the maximum activity of radioactive material, other than special form radioactive material, permitted in a Type A package. (See marg. 1700, Table I).

*Alpha Emitters of Low Toxicity*

2. Low toxicity alpha emitters shall mean natural uranium; depleted uranium; natural thorium; uranium-235 or uranium-238, thorium-232, thorium-228 and thorium-230 when contained in ores and physical or chemical concentrates; radionuclides with a half life of less than ten days.

*Approval*

3. Multilateral approval shall mean approval by the relevant competent authority both of the country of origin of the design or shipment and of each country through or into which the consignment is to be carried.

4. Unilateral approval shall mean an approval of a design which is required to be given by the competent authority of the country of origin of the design only.

If the country of origin is not a party to COTIF, the approval shall require validation by the competent authority of the first COTIF country reached by the consignment.

*Container*

5. A container for the carriage of material of this class shall be of a permanent enclosed character, rigid and strong enough for repeated use. It may be used as a packaging if the applicable requirements are met, and it may also be used to perform the functions of an overpack.

*Containment system*

6. Containment system shall mean the assembly of components of the packaging specified by the designer as intended to retain the radioactive material during carriage.

*Contamination*

7. Contamination shall mean the presence of a radioactive substance on a surface in quantities in excess of 0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup> µCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm<sup>2</sup> (10<sup>-6</sup> µCi/cm<sup>2</sup>) for all other alpha emitters.

Fixed contamination shall mean contamination other than non-fixed contamination.

Non-fixed contamination shall mean contamination that can be removed from a surface during normal carriage and handling.

*Design*

8. Design shall mean the description of special form radioactive material, package, or packaging which enables such an item to be fully identified. The description may include specifications, engineering drawings, reports demonstrating compliance with regulatory provisions, and other relevant documentation.

*Exclusive use*

9. Exclusive use shall mean the sole use, by a single consignor, of a wagon or of a container with a minimum length of 6 m. in respect of which all initial, intermediate, and final loading and unloading is carried out in accordance with the directions of the consignor or consignee.

*Fissile material*

10. Fissile material shall mean uranium-233, uranium-235, plutonium-238, plutonium-239, plutonium-241, or any combination of these radionuclides. Unirradiated natural uranium and depleted uranium, and natural uranium or depleted uranium which has been irradiated in thermal reactors only, are not included in this definition.

*Low specific activity material*

11. Low specific activity (LSA) material shall mean radioactive material which by its nature has a limited specific activity, or radioactive material for which limits of estimated average specific activity apply. External shielding materials surrounding the LSA material shall not be considered in determining the estimated average specific activity. LSA material shall be in one of three groups:

*(a) LSA-I*

- (i) Ores containing naturally occurring radionuclides (e.g. uranium, thorium), and uranium or thorium concentrates of such ores;
- (ii) Solid unirradiated natural uranium or unirradiated depleted uranium or unirradiated natural thorium or their solid or liquid compounds or mixtures; or
- (iii) Radioactive material, other than fissile material, for which the  $A_2$  value is unlimited.

*(b) LSA-II*

- (i) Water with tritium concentration up to 0.8 TBq/l (20 Ci/l); or
- (ii) Other material in which the activity is distributed throughout and the estimated average specific activity does not exceed  $10^{-4} A_2/g$  for solids and gases, and  $10^{-3} A_2/g$  for liquids.

*(c) LSA-III*

Solids (e.g. consolidated wastes, activated material) in which:

- (i) The radioactive material is distributed throughout a solid or a collection of solid objects, or is essentially uniformly distributed in a solid compact binding agent (such as concrete, bitumen, ceramic, etc.);
- (ii) The radioactive material is relatively insoluble, or it is intrinsically contained in a relatively insoluble matrix, so that, even under loss of packaging, the loss of radioactive material per package by leaching when placed in water for seven days would not exceed  $0.1 A_2$ ; and
- (iii) The estimated average specific activity of the solid, excluding any shielding material, does not exceed  $2 \times 10^{-3} A_2/g$ .

*Maximum normal operating pressure*

12. Maximum normal operating pressure shall mean the maximum pressure above atmospheric pressure at mean sea-level that would develop in the containment system in a period of one year under the conditions of temperature and solar radiation corresponding to environmental conditions of carriage in the absence of venting, external cooling by an ancillary system, or operational controls during carriage.

*Overpack*

13. Overpack shall mean an enclosure, such as a box or bag, which need not meet the requirements for a container and which is used by a single consignor to consolidate into one handling unit a consignment of two or more packages for convenience of handling, stowage, and carriage. Overpack is not identical to outer packaging as defined in marg. 1510.

*Package*

14. Performance standards applied to packages are graded to take into account conditions of carriage characterized by the following severity levels:

- Conditions likely to be encountered in routine carriage (in incident-free conditions).
- Conditions of carriage taking minor mishaps into account and
- Accident conditions of carriage.

The performance standards include design requirements and tests. Each package shall be classified as follows:

- (a) *Excepted package* is a packaging containing radioactive material (see marg. 1713, Table V) that is designed to meet the general requirements for all packagings and packages (see marg. 1732).
- (b) (I) *Industrial Package Type 1 (IP-1)* is a packaging, tank wagon, tank-container or container containing LSA material or SCO (see definitions 11 and 22) that is designed to meet the general requirements for all packagings and packages (see marg. 1732).
  - (II) *Industrial Package Type 2 (IP-2)* is a packaging, tank wagon, tank-container or container containing LSA material or SCO (see definitions 11 and 22) that is designed to meet the general requirements for all packagings and packages (see marg. 1732) and, in addition, the following specific requirements:
    - (i) For a package, see marg. 1734,
    - (ii) For a tank wagon or tank-container, see marg. 1736 and Appendices X and XI.
    - (iii) For a container, see marg. 1736.
  - (III) *Industrial Package Type 3 (IP-3)* is a packaging, tank wagon, tank-container or container containing LSA material or SCO (see definitions 11 and 22) that is designed to meet the general requirements for all packagings and packages (see marg. 1732) and, in addition, the following specific requirements:
    - (i) For a package, see marg. 1735.
    - (ii) For a tank wagon or tank-container, see marg. 1736 and Appendices X and XI.
    - (iii) For a container, see marg. 1736.
- (c) *Type A Package* is a packaging, tank wagon, tank-container or container containing an activity up to  $A_1$  if Special Form Radioactive Material, or up to  $A_2$  if not Special Form Radioactive Material, that is designed to meet the general requirements for all packagings and packages (see marg. 1732) and the specific requirements in marg. 1737 as appropriate.
- (d) *Type B Package* is a packaging, tank wagon, tank-container or container containing an activity that may be in excess of  $A_1$ , if Special Form Radioactive Material, or in excess of  $A_2$  if not Special Form Radioactive

Material that is designed to meet the general requirements for all packagings and packages (see marg. 1732) and the specific requirements in marg. 1737 and, as appropriate, marg. 1738-1740.

*Packaging*

15. Packaging shall mean the assembly of components necessary to enclose the radioactive contents completely. It may, in particular, consist of one or more receptacles, absorbent materials, spacing structures, radiation shielding, service equipment for filling, emptying, venting and pressure relief, and devices for cooling, for absorbing mechanical shocks, for providing handling and tiedown capability, for thermal insulation, and service devices integral to the package. The packaging may be a box, drum or similar receptacle, or may also be a container, tank wagon or tank-container consistent with definition 14.

*Quality assurance*

16. Quality assurance shall mean a systematic programme of controls and inspections applied by any organisation or body involved in the carriage of radioactive material which is aimed at providing adequate confidence that the standard of safety prescribed in Appendix VII is achieved in practice.

*Radiation level*

17. Radiation level shall mean the corresponding dose equivalent rate expressed in millisievert per hour<sup>(1)</sup>.

*Radioactive contents*

18. Radioactive contents shall mean the radioactive material together with any contaminated solids, liquids and gases within the packaging.

*Special arrangement*

19. Special arrangement shall mean those provisions, approved by the competent authority, under which a consignment which does not satisfy all the applicable requirements of Schedules 5-12 of marg. 704 may be carried. Consignments of this type require multilateral approval.

*Special form radioactive material*

20. Special form radioactive material shall mean either an indispersible solid radioactive material or a sealed capsule containing radioactive material (see marg. 1731).

*Specific activity*

21. Specific activity shall mean the activity of a radionuclide per unit mass of that nuclide. The specific activity of a material in which the radionuclide is essentially uniformly distributed is the activity per unit mass of the material.

*Surface contaminated object*

22. Surface contaminated object (SCO) shall mean a solid object which is not itself radioactive but which has radioactive material distributed on its surfaces. SCO shall be in one of two groups:

(a) SCO-I: A solid object on which:

- (i) The non-fixed contamination on the accessible surface averaged over 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>) does not exceed 4 Bq/cm<sup>2</sup> (10<sup>-4</sup> μCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or 0.4 Bq/cm<sup>2</sup> (10<sup>-3</sup> μCi/cm<sup>2</sup>) for all other alpha emitters; and

<sup>(1)</sup> For the sake of clarity, the radiation level may also be indicated, in parentheses, in millirem per hour. It is recognized that millisievert or millirem are not the correct units that should apply to radiation exposure in all cases, nevertheless, these units are used exclusively for convenience.

- (ii) The fixed contamination on the accessible surface averaged over 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>) does not exceed  $4 \times 10^4$  Bq/cm<sup>2</sup> (1 μCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or  $4 \times 10^3$  Bq/cm<sup>2</sup> (0.1 μCi/cm<sup>2</sup>) for all other alpha emitters; and
  - (iii) The non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>) does not exceed  $4 \times 10^4$  Bq/cm<sup>2</sup> (1 μCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or  $4 \times 10^3$  Bq/cm<sup>2</sup> (0.1 μCi/cm<sup>2</sup>) for all other alpha emitters.
- (b) SCO-II: A solid object on which either the fixed or non-fixed contamination on the surface exceeds the applicable limits specified for SCO-I in (a) above and on which:
- (i) The non-fixed contamination on the accessible surface averaged over 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>) does not exceed 400 Bq/cm<sup>2</sup> ( $10^{-2}$  μCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or 40 Bq/cm<sup>2</sup> ( $10^{-3}$  μCi/cm<sup>2</sup>) for all other alpha emitters; and
  - (ii) The fixed contamination on the accessible surface averaged over 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>) does not exceed  $8 \times 10^5$  Bq/cm<sup>2</sup> (20 μCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or  $8 \times 10^4$  Bq/cm<sup>2</sup> (2 μCi/cm<sup>2</sup>) for all other alpha emitters; and
  - (iii) The non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>) does not exceed  $8 \times 10^5$  Bq/cm<sup>2</sup> (20 μCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or  $8 \times 10^4$  Bq/cm<sup>2</sup> (2 μCi/cm<sup>2</sup>) for all other alpha emitters.

*Transport index*

23. Transport index (TI) shall mean a single number assigned to a package, overpack, tank wagon, tank-container or container, or to unpackaged LSA-I or SCO-I, which is used to provide control over both nuclear criticality safety and radiation exposure (see marg. 1715). It is also used to establish contents limits on certain packages, overpacks, tank wagons, tank-containers and containers; to establish categories for labelling; to determine whether transport under exclusive use shall be required; to establish spacing requirements during storage in transit; to establish mixed loading restrictions during transport under special arrangement and during storage in transit; and to define the number of packages allowed in a container or aboard a wagon (see Section II of Appendix VII.)

*Unirradiated thorium*

24. Unirradiated thorium shall mean thorium containing not more than  $10^{-7}$  g of uranium-233 per gram of thorium-232.

*Unirradiated uranium*

25. Unirradiated uranium shall mean uranium containing not more than  $10^{-6}$  g of plutonium per gram of uranium-235 and not more than 9 MBq (0.20 mCi) of fission products per gram of uranium-235.

*Uranium-natural, depleted, enriched*

26. Natural uranium shall mean chemically separated uranium containing the naturally occurring distribution of uranium isotopes (approximately 99.28% uranium-238, and 0.72% uranium-235). Depleted uranium shall mean uranium containing a lesser mass percentage of uranium-235 than in natural uranium. Enriched uranium shall mean uranium containing a greater mass percentage of uranium-235 than in natural uranium. In all cases, a very small mass percentage of uranium-234 is present.



701

## (1) List of Substances

Identification number <sup>(1)</sup> and name of the substance or object	Schedule
2910 Radioactive material, excepted package	
– Instruments or articles	2
– Limited quantity of material	1
– Articles manufactured from natural or depleted uranium or natural thorium	3
– Empty packaging	4
2912 Radioactive material, low specific activity (LSA), n.o.s. <sup>(2)</sup>	
– LSA-I	5
– LSA-II	6
– LSA-III	7
– Under special arrangement	13
2913 Radioactive material, surface contaminated objects (SCO)	
– SCO-I and SCO-II	8
– Under special arrangement	13
2918 Radioactive material, fissile, n.s.o. <sup>(2)</sup>	
– In Type 1F, Type AF, Type B(U)F or Type B(M)F packages	12
– Under special arrangement	13
2974 Radioactive material, special form n.o.s. <sup>(2)</sup>	
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13
2975 Thorium metal, pyrophoric	
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13
2976 Thorium nitrate, solid	
– LSA-I	5
– LSA-II	6
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13
2977 Uranium hexafluoride, fissile containing more than 1% uranium-235	
– In approved packages	12
– Under special arrangement	13
2978 Uranium hexafluoride, fissile excepted or non-fissile	
– LSA-I	5
– LSA-II	6
– Under special arrangement	13
2979 Uranium metal, pyrophoric	
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13

Identification number <sup>(1)</sup> and name of the substance or object	Schedule
2980 Uranyl nitrate hexahydrate solution	
– LSA-I	5
– LSA-II	6
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13
2981 Uranyl nitrate, solid	
– LSA-I	5
– LSA-II	6
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13
2982 Radioactive material n.o.s. <sup>(2)</sup>	
– In Type A packages	9
– In Type B(U) packages	10
– In Type B(M) packages	11
– Under special arrangement	13

<sup>(1)</sup> These numbers are taken from the United Nations Recommendations.

<sup>(2)</sup> n.o.s.: not otherwise specified in this list.

(2) The materials and articles of this Class contain one or more of the radionuclides referred to in marg. 1700 and 1701.

(3) The list hereunder sets out the schedules of marginal 704:

1. Limited Quantities of Radioactive Material in Excepted Packages.
2. Instruments or Articles in Excepted Packages.
3. Articles Manufactured from Natural Uranium, Depleted Uranium or Natural Thorium as Excepted Packages.
4. Empty Packagings as Excepted Packages.
5. Low Specific Activity Material (LSA-I).
6. Low Specific Activity Material LSA-II).
7. Low Specific Activity Material (LSA-III).
8. Surface Contaminated Objects (SCO-I and SCO-II).
9. Radioactive Material in Type A Packages.
10. Radioactive Material in Type B(U) Packages.
11. Radioactive Material in Type B(M) Packages.
12. Fissile Material.
13. Radioactive Material Transported under Special Arrangement.

(4) Radioactive material may also be carried as express parcels. In such cases the sum of the transport indexes indicated on the labels is however limited to 10 per luggage van or compartment. For packages of Category III-YELLOW, the railway may determine the time of handing over for carriage. A package shall not weigh more than 50 kg.

(5) The provisions for the various types of consignment are contained in 13 headings in accordance with marg. 2 (1):

- (i) Common provisions for Schedules 1 to 4 are summarised in marg. 702;
- (ii) Common provisions for Schedules 5 to 13 are summarised in marg. 703.

702 *Common Provisions for Schedules 1 to 4 of marg. 704*

1. Materials

See appropriate schedule.

2. Packaging/package

See appropriate schedule.

3. Package maximum radiation level

5  $\mu\text{Sv/h}$  (0.5 mrem/h) at the external surface of the package.

4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks

Non-fixed contamination on all external surfaces and in addition on the internal surfaces of wagons and overpacks used for carrying excepted packages shall be kept as low as practicable and shall not exceed the following limits:

(a) Beta/gamma/low-toxicity alpha emitters

0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup>  $\mu\text{Ci/cm}^2$ );

(b) All other alpha emitters

0.04 Bq/cm<sup>2</sup> (10<sup>-6</sup>  $\mu\text{Ci/cm}^2$ ).

5. Decontamination and use of wagons, equipment or parts thereof

Wagons, equipment or parts thereof which have become contaminated shall be decontaminated as soon as possible, and in any case before re-use, to levels not exceeding:

(a) For non-fixed contamination,

0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup>  $\mu\text{Ci/cm}^2$ ) for beta and gamma emitters and low toxicity alpha emitters; and

0.04 Bq/cm<sup>2</sup> (10<sup>-6</sup>  $\mu\text{Ci/cm}^2$ ) for all other alpha emitters.

(b) A radiation level of 5  $\mu\text{Sv/h}$  (0.5 mrem/h) at the surface due to fixed contamination.

6. Mixed packing

No requirements.

7. Mixed loading

No requirements.

8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks

See appropriate schedule.

9. Danger labels on wagons other than tank wagons

See appropriate schedule.

10. Transport documents

See appropriate schedule.

11. Storage and despatch  
No requirements.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks  
No requirements.
13. Other provisions
  - (a) Accident provisions: see marg. 710 and 712.
  - (b) Damaged or leaking packages: see marg. 1712.
  - (c) Contamination surveys: see marg. 1712 (3).
  - (d) Quality assurance: see marg. 1766.
  - (e) Undeliverable consignments: see marg. 715.

703 *Common Provisions for Schedules 5 to 13 of marg. 704*

1. Materials  
See appropriate schedule.
2. Packaging/package  
See appropriate schedule.
3. Package maximum radiation level
  - (a) The radiation levels for packages or overpacks not carried under exclusive use shall not exceed:
    - (i) 2 mSv/h (200 mrem/h) at the surface of the package, and
    - (ii) 0.1 mSv/h (10 mrem/h) at 1 metre from that surface.
  - (b) The surface radiation levels for packages or overpacks carried under exclusive use may exceed 2 mSv/h but under no circumstances shall exceed 10 mSv/h (1,000 mrem/h), provided that:
    - (i) There is an enclosure which prevents unauthorized access to the load during carriage; and
    - (ii) The package or overpack is secured to retain its position within the enclosure during routine carriage; and
    - (iii) There are no loading or unloading operations between the beginning and end of the shipment.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
Non-fixed contamination on all external surfaces and in addition on the internal surfaces of wagons and overpacks used for carrying packages shall be kept as low as practicable and shall not exceed the following limits:
  - (a) Beta/gamma/low-toxicity alpha emitters:
    - 0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup> μCi/cm<sup>2</sup>) for consignments which include excepted packages and/or non-radioactive goods;
    - 4 Bq/cm<sup>2</sup> (10<sup>-4</sup> μCi/cm<sup>2</sup>) for all other consignments.
  - (b) All other alpha emitters:
    - 0.04 Bq/cm<sup>2</sup> (10<sup>-6</sup> μCi/cm<sup>2</sup>) for consignments which include excepted packages and/or non-radioactive goods;
    - 0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup> μCi/cm<sup>2</sup>) for all other consignments.

5. Decontamination and use of wagons, equipment or parts thereof  
Wagons, equipment or parts thereof which have become contaminated shall be decontaminated as soon as possible, and in any case before re-use, to levels not exceeding:
- (a) For non-fixed contamination, see provisions under 4.
  - (b) A radiation level of 5  $\mu\text{Sv/h}$  (0.5 mrem/h) at the surface due to fixed contamination.
6. Mixed packing  
See marg. 1711 (1).
7. Mixed loading
- (a) Material of Class 7 contained in packages bearing a label conforming to models Nos. 7A, 7B or 7C shall not be loaded together in the same wagon with substances or articles of Class 1 or Class 5.2 contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.
  - (b) In all other cases mixed loading is permitted. However, mixed loading in a consignment under exclusive use shall only be arranged by the consignor.
  - (c) Separate consignment notes shall be prepared for consignments which cannot be loaded together in the same wagon.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks  
The following provisions apply to packages, containers, tank wagons, tank-containers and overpacks with non-fissile material.  
For packages containing fissile material and for containers and overpacks which contain packages with fissile material, see in addition Schedule 12.
- (a) Packages and overpacks, other than containers, tank wagons and tank-containers.
    - (i) Such packages and overpacks shall, depending on the category (see marg. 1718), bear labels conforming to models Nos. 7A, 7B or 7C, completed in accordance with marg. 706 (3). The labels shall be affixed to two opposite sides of the packages and overpacks.
    - (ii) Each label shall be marked with the maximum activity of the radioactive contents during carriage.
    - (iii) Each yellow label shall be marked with the transport index for the package or overpack.
    - (iv) In the case of substances of the following identification numbers listed in marg. 701 (1), the following additional labels shall also be affixed:
 

2975	Thorium metal, pyrophoric	}	model No. 4.2
2979	Uranium metal, pyrophoric		
2976	Thorium nitrate, solid	}	model No. 5
2981	Uranyl nitrate, solid		
2977	Uranium hexafluoride fissile, containing more than 1% uranium 235	}	model No. 8
2978	Uranium hexafluoride, fissile excepted or non-fissile		
2980	Uranyl nitrate hexahydrate solution		

- (v) Packages with a gross mass exceeding 50 kg shall be plainly and durably marked with their permissible gross mass on the outside.
  - (vi) Any labels which do not relate to the contents shall be removed or covered.
- (b) Containers, also when used as overpacks, tank wagons and tank-containers.

- (i) Such containers, tank wagons and tank-containers shall, depending on the category (see marg. 1718), bear labels conforming to models Nos. 7A, 7B or 7C, completed in accordance with marg. 706 (3).

Tank wagons and tank-containers, as well as large containers containing packages other than excepted packages, shall in addition bear labels conforming to model No. 7D.

Instead of using labels conforming to models Nos. 7A, 7B or 7C, and in addition labels conforming to model No. 7D, enlarged labels conforming to models Nos. 7A, 7B or 7C with the dimensions of model No. 7D may alternatively be used.

The labels shall be affixed to all four sides of containers and tank-containers, and to both sides of tank wagons.

- (ii) In the case of substances of the following identification numbers listed in marg. 701 (1), the following additional labels shall also be affixed:

2975	Thorium metal, pyrophoric	}	model No. 4.2
2979	Uranium metal, pyrophoric		
2976	Thorium nitrate, solid	}	model No. 5
2981	Uranyl nitrate, solid		
2977	Uranium hexafluoride fissile, containing more than 1% uranium 235	}	model No. 8
2978	Uranium hexafluoride, fissile excepted or non-fissile		
2980	Uranyl nitrate hexahydrate solution		

- (iii) For tank wagons and tank-containers with a capacity of more than 3 m<sup>3</sup>/3000 l. the orange marking in accordance with marg. 13 and Appendix VIII shall be affixed next to the labels.
- (iv) Except for mixed loads, each label shall be marked with the maximum activity of the radioactive contents of the container or overpack during carriage, totalled for the entire contents. For mixed loads, see marg. 706 (3).
- (v) Each yellow label shall be marked with the transport index for the container or overpack.
- (iv) Containers, tank wagons and tank-containers shall be plainly and durably marked on the outside with their permissible gross mass.
- (vii) Any marking or danger label which does not relate to the contents shall be removed or covered.

#### 9. Danger labels on wagons other than tank wagons

- (a) (i) For consignments of packaged or unpackaged radioactive material, labels conforming to model No. 7D shall be affixed in a vertical orientation to the two side walls of the wagon.

- (ii) In the case of substances of the following identification numbers listed in marg.701 (1), the following additional labels shall also be affixed:

2975	Thorium metal, pyrophoric	}	model No. 4.2
2979	Uranium metal, pyrophoric		
2976	Thorium nitrate, solid	}	model No. 5
2981	Uranyl nitrate, solid		
2977	Uranium hexafluoride, fissile, containing more than 1% uranium 235	}	model No. 8
2978	Uranium hexafluoride fissile excepted or non-fissile		
2980	Uranyl nitrate hexahydrate solution		

- (b) Any danger label which does not relate to the contents shall be removed or covered.

10. Transport documents

See appropriate schedule.

11. Storage and despatch

- (a) Segregation during storage is required from other dangerous goods, and from persons and undeveloped photographic plates and films:

- (i) For segregation from other dangerous goods — see the provisions under heading 7.  
(ii) For segregation from persons, from packages marked “FOTO” and from mailbags — see marg. 711 (1) for segregation tables.

- (b) Total transport index limitation for storage except LSA-I:

- (i) The number of category II-yellow and category III-yellow packages, overpacks, tank wagons, tank-containers and containers stored in any one place shall be so limited that the total sum of the transport indexes in any individual group of such packages, overpacks, tank wagons, tank-containers or containers does not exceed 50. Such groups shall be stored so as to maintain a spacing of at least 6 m from each other.  
(ii) Where the transport index of a single package, overpack, tank wagon, tank-container or container exceeds 50 or the total transport index on a wagon exceeds 50, storage shall be such as to maintain a spacing of at least 6 m from other packages, overpacks, tank wagons, tank-containers, containers or other wagons carrying radioactive material.

12. Carriage of packages, containers, tank wagons, tank-containers and overpacks

- (1) See appropriate schedule.

- (2) (a) Segregation during transport is required from other dangerous goods and from persons and undeveloped photographic films and plates:

- (i) For segregation from other dangerous goods — see the provisions under heading 7.  
(ii) For segregation from persons, from packages marked “FOTO” and from mailbags — see marg. 771 (1) for segregation tables.

- (b) Total transport index limitation for carriage except LSA-I:  
The total number of packages, overpacks, tank-containers and containers on a single wagon shall be so limited, that the sum of the transport indexes does not exceed 50. For consignments under exclusive use this limit does not apply — see marg. 1711 (3).
- (c) Any package or overpack having a transport index greater than 10 shall be transported only under exclusive use.
- (d) Maximum radiation levels for wagons:  
(i) 2 mSv/h (200 mrem/h) at surface of wagons.  
(ii) 0.1 mSv/h (10 mrem/h) at 2 metres from surface of wagons.

13. Other provisions

- (a) Determination of transport index: see marg. 1715.  
(b) Accident provisions: see marg. 710 and 1712.  
(c) Damaged or leaking packages: see marg. 1712.  
(d) Contamination surveys: see marg. 1712 (3).  
(e) Quality Assurance: see marg. 1766.  
(f) Undeliverable consignments: see marg. 715.

*Schedule 1*

704 *Limited quantities of radioactive material in excepted packages*

NOTE. 1. Radioactive material in quantities which offer a very limited radiation risk, may be carried in excepted packages.

2. For other dangerous properties, see the requirements in marg. 3 (5) and (6) and 1770.

I. Materials:

2910 *Radioactive material, excepted package, limited quantity of material*

- (a) Non-fissile radioactive material in amounts which do not exceed the limits specified in Table 1.  
(b) Fissile material with an activity which does not exceed the limits specified in Table 1, and in addition, satisfying with regard to amounts, form and packaging the provisions given in marg. 1741 allowing them to be regulated as non-fissile radioactive material packages.

Table 1. *Activity limits, in terms of  $A_1$  or  $A_2$  values for excepted packages containing radioactive material<sup>(1)</sup>, <sup>(2)</sup>*

Nature of contents	Package limits
Solids:	
Special form	$10^{-3} A_1$
Other forms	$10^{-3} A_2$
Liquids	$10^{-4} A_2$
Gases:	
Tritium	$2 \times 10^{-2} A_2$
Special form	$10^{-3} A_1$
Other forms	$10^{-3} A_2$

<sup>(1)</sup> For specific values of  $A_1$  and  $A_2$ , see Table I of marg. 1700.

<sup>(2)</sup> For mixtures of radionuclides, the methods for determining  $A_1$  and  $A_2$  are provided in marg. 1701 (3).



2. Packaging/package  
Radioactive material in limited quantities may be carried in packagings, tank wagons, tank-containers and containers.
  - (a) The packaging shall be in accordance with the general provisions for all packagings and packages given in marg. 1732 and in addition, for tank wagons and tank-containers, the provisions of Appendices X and XI.
  - (b) Packages containing fissile material shall meet at least one of the provisions specified in marg. 1741.
  - (c) In particular, the package shall be designed so that during routine transport there shall be no leakage of radioactive contents.
  - (d) Radioactive material shall not be carried in bulk.
3. Package maximum radiation level  
See marg. 702.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
See marg. 702.
5. Decontamination and use of wagons, equipment or parts thereof  
See marg. 702.
6. Mixed packing  
No requirements.
7. Mixed loading  
No requirements.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
  - (a) Packages
    - (i) No labelling required.
    - (ii) The packaging shall be marked "radioactive" on an internal surface as a warning of the presence of radioactive material on opening the package.
  - (b) Containers  
No requirements.
  - (c) Tank-containers and tank wagons  
See marg. 13 and Appendix VIII, as well as Appendix X/XI, paragraph 7.6.
  - (d) Overpacks  
No requirements.
9. Danger labels on wagons other than tank wagons  
No requirements.
10. Transport documents  
The consignment note shall include the description "2910 Radioactive material, excepted package, limited quantity of material, 7, Schedule 1, RID". For carriage in tank wagons or tank-containers, if a marking in accordance with Appendix VIII is prescribed, the *hazard identification number* in accordance with marg. 1801 (3) shall also be entered before the

description of the material. A cross shall be inserted in the appropriate box on the consignment note.

11. Storage and despatch  
No requirements.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks  
No requirements.
13. Other provisions  
See marg. 702.

### *Schedule 2*

#### *Instruments or articles in excepted packages*

NOTE. 1. Specified quantities of radioactive material, which are enclosed in or form a component part of an instrument or other manufactured article, and which offer a very limited radiation risk, may be transported in excepted packages.

2. For other dangerous properties, see also the requirements in marg. 1770.

#### 1. Materials:

##### *2910 Radioactive material, excepted package, instruments or articles*

- (a) Instruments and manufactured articles such as clocks, electronic tubes or apparatus having as a component part radioactive material in amounts which do not exceed the item and package limits specified in columns 2 and 3 of Table 2, provided the radiation level at 10 cm from the external surface of any unpackaged instrument or article does not exceed 0.1 mSv/h (10 mrem/h).
- (b) Instruments and manufactured articles having fissile material in amounts not exceeding the limits specified in Table 2, and in addition, satisfying with regard to amounts, form and packaging the provisions given in marg. 1741 allowing them to be regulated as non-fissile radioactive material packages, provided the radiation level at 10 cm from the external surface of any unpackaged instrument or article does not exceed 0.1 mSv/h (10 mrem/h).

Table 2. *Activity limits, in terms of A<sub>1</sub> or A<sub>2</sub> values for excepted packages containing instruments and articles*<sup>(1), (2)</sup>

Nature of contents	Item limits	Package limits
Solids:		
Special form	10 <sup>-2</sup> A <sub>1</sub>	A <sub>1</sub>
Other forms	10 <sup>-2</sup> A <sub>2</sub>	A <sub>2</sub>
Liquids	10 <sup>-3</sup> A <sub>2</sub>	10 <sup>-1</sup> A <sub>2</sub>
Gases:		
Tritium	2 × 10 <sup>-2</sup> A <sub>2</sub>	2 × 10 <sup>-1</sup> A <sub>2</sub>
Special form	10 <sup>-3</sup> A <sub>1</sub>	10 <sup>-2</sup> A <sub>1</sub>
Other forms	10 <sup>-3</sup> A <sub>2</sub>	10 <sup>-2</sup> A <sub>2</sub>

<sup>(1)</sup> For specific values of A<sub>1</sub> and A<sub>2</sub>, see Table I of marg. 1700.

<sup>(2)</sup> For mixtures of radionuclides, the methods for determining A<sub>1</sub> and A<sub>2</sub> are provided in marg. 1701 (3).

2. Packaging/package
  - (a) The packaging shall be in accordance with the general provisions for all packagings and packages given in marg. 1732.
  - (b) Packages containing fissile material shall meet at least one of the provisions specified in marg. 1741.
  - (c) The instruments and articles shall be securely packed.
  - (d) Transport of unpackaged radioactive material is not allowed.
3. Package maximum radiation level  
See marg. 702.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
See marg. 702.
5. Decontamination and use of wagons, equipment or parts thereof  
See marg. 702.
6. Mixed packing  
No requirements.
7. Mixed loading  
No requirements.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
  - (a) Instruments or articles  
Each instrument or article (except radio-luminescent time-pieces or devices) shall bear the marking "Radioactive".
  - (b) Packages  
No requirements.
  - (c) Containers  
No requirements.
  - (d) Tanks-containers and tank wagons  
Not applicable.
  - (e) Overpacks  
No requirements.
9. Danger labels on wagons other than tank wagons  
No requirements.
10. Transport documents  
The consignment note shall include the description "*2910 Radioactive material, excepted package, instruments or articles, 7, Schedule 2, RID*". A cross shall be inserted in the appropriate box on the consignment note.
11. Storage and despatch  
No requirements.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks  
No requirements.

## 13. Other provisions

See marg. 702.

*Schedule 3**Articles manufactured from natural uranium, depleted uranium or natural thorium as excepted packages*

NOTE. 1. Articles manufactured from unirradiated natural uranium, unirradiated depleted uranium or unirradiated natural thorium which offer a very limited radiation risk may be carried as excepted packages.

2. For other dangerous properties, see also the requirements in marg. 1770.

## 1. Materials:

*2910 Radioactive material, excepted package, articles manufactured from natural uranium or depleted uranium or natural thorium*

Manufactured articles in which the sole radioactive material is unirradiated natural uranium, unirradiated depleted uranium or unirradiated natural thorium, provided that the outer surface of the uranium or thorium is enclosed in an inactive sheath made of metal or some other substantial material.

NOTE. Such articles may for example be unused packagings intended for the carriage of radioactive material.

## 2. Packaging/package

The article serving as a packaging shall be in accordance with the general provisions for all packagings and packages given in marg. 1732.

## 3. Package maximum radiation level

See marg. 702.

## 4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks.

See marg. 702.

## 5. Decontamination and use of wagons, equipment or parts thereof

See marg. 702.

## 6. Mixed packing

No requirements.

## 7. Mixed loading

No requirements.

## 8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks

## (a) Packages

No requirements.

## (b) Containers

No requirements.

## (c) Tank-containers and tank wagons

Not applicable.

## (d) Overpacks

No requirements.

9. Danger labels on wagons other than tank wagons  
No requirements.
10. Transport documents  
The consignment note shall include the description “*2910 Radioactive material, excepted package, articles manufactured from natural uranium or depleted uranium or natural thorium, 7, Schedule 3, RID*”. A cross shall be inserted in the appropriate box on the consignment note.
11. Storage and despatch  
No requirements.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks  
No requirements.
13. Other provisions  
See marg. 702.

#### *Schedule 4*

##### *Empty packagings and excepted packages*

NOTE. 1. Empty uncleaned packagings which have been used for the carriage of radioactive material, and which offer a very limited radiation risk, may be carried as excepted packages.

2. For other dangerous properties, see also the requirements in marg. 1770.

##### 1. Materials:

###### *2910 Radioactive material, excepted package, empty packaging*

- (a) Empty uncleaned packagings include empty uncleaned containers, tank wagons and tank-containers which have been used for the transport of radioactive material.
- (b) If the packaging contains any uranium or thorium in its structure, the provision specified in paragraph 2 (c) below shall apply.
- (c) The internal non-fixed contamination levels (activity of the residual contents) shall not exceed:
  - (i) For beta/gamma/low-toxicity alpha emitters,  
400 Bq/cm<sup>2</sup> (10<sup>-2</sup> μCi/cm<sup>2</sup>);
  - (ii) For all other alpha emitters,  
40 Bq/cm<sup>2</sup> (10<sup>-3</sup> μCi/cm<sup>2</sup>).

##### 2. Packaging/package

- (a) The packaging shall be in accordance with the general provisions for all packagings and packages given in marg. 1732.
- (b) The packaging shall be in a well-maintained condition and securely closed.
- (c) If the empty packaging includes natural uranium or depleted uranium or natural thorium in its structure, the outer surface of the uranium or thorium shall be covered with an inactive sheath made of metal or some other substantial material.
- (d) Any labels displayed to meet marg. 706 shall no longer be visible.

3. Package maximum radiation level  
See marg. 702.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
See marg. 702.
5. Decontamination and use of wagons, equipment or parts thereof  
See marg. 702
6. Mixed packing  
No requirements.
7. Mixed loading  
No requirements.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
  - (a) Packages
    - (i) No marking or labelling required.
    - (ii) Packages permanently marked in accordance with marg. 705 need not have these markings removed.
  - (b) Containers  
No requirements
  - (c) Tank-containers and tank wagons  
See marg. 13 and Appendix VIII as well as Appendix X/XI, paragraph 7.6.
  - (d) Overpacks  
No requirements.
9. Danger labels on wagons other than tank wagons  
No requirements.
10. Transport documents  
The consignment note shall include the description “*2910 Radioactive material, excepted package, empty packaging, 7, Schedule 4, RID*”. A cross shall be inserted in the appropriate box on the consignment note. For empty tank wagons or tank-containers, uncleaned, this description shall be completed by adding the words “last load” together with the name and schedule number of the goods last loaded. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the description of the material shall also be preceded by the *hazard identification number* in accordance with marg. 1801 (3), e.g. “*Last load 78 2980 Uranyl nitrate hexahydrate solution, Schedule 5*”.
11. Storage and despatch  
No requirements.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks  
No requirements.
13. Other provisions  
See marg. 702.

## Schedule 5

*Low specific activity material (LSA-I)*

NOTE. 1. LSA-I is the first of three groups of radioactive material which by its nature has a limited specific activity or for which limits of estimated average specific activity apply.

2. Fissile material is not permitted to be carried as LSA-I material.
3. For other dangerous properties, see also the requirements in marg. 1770.

## 1. Materials:

2912 *Radioactive material, low specific activity (LSA-I), n.o.s.*

2976 *Thorium nitrate, solid.*

2978 *Uranium hexafluoride, fissile excepted or non-fissile.*

2980 *Uranyl nitrate hexahydrate solution.*

2981 *Uranyl nitrate, solid.*

Low specific activity material (LSA-I): radioactive material for which the radiation level at 3 m from the unshielded contents of a single package or in a single load of unpackaged material shall not exceed 10 mSv/h (1000 mrem/h) and meeting also one of the following descriptions:

- (a) Ores containing naturally occurring radionuclides (e.g. uranium, thorium), or
- (b) Uranium and thorium concentrates of ores containing naturally occurring radionuclides, or
- (c) Solid unirradiated natural uranium or depleted uranium or natural thorium, or
- (d) Solid or liquid compounds or mixtures of unirradiated natural uranium or depleted uranium or natural thorium, or
- (e) Non-fissile radioactive material for which the  $A_2$  value is unlimited.

## 2. Packaging/package

(a) LSA-I material may be carried in packagings, tank wagons, tank-containers and containers, provided that:

- (i) The packaging, which may be a tank wagon, tank-container or container, meets the design provisions for industrial packages IP-1 or IP2 (see marg. 1733 or 1734 and in addition, for tank wagons and tank-containers, marg. 1736 and Appendices X and XI) as appropriate for the form of the LSA-I material as specified in Table 3, and
- (ii) The material is loaded into the packaging so that, in routine transport, there will be no escape of contents and no loss of shielding.

Table 3. *Industrial package requirements for LSA-I material*

Contents	Exclusive use	Not under exclusive use
Solids	IP-1	IP-1
Liquids	IP-1	IP-2

- (b) LSA-I material may be carried in bulk if:
- (i) For other than natural ores, it is carried so that, in routine transport, there will be no escape of contents from the wagon and no loss of shielding, and it is carried under exclusive use, or
  - (ii) For natural ores, it is carried in a wagon under exclusive use.
3. Package maximum radiation level  
See marg. 703.
  4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks
    - (a) See marg. 703.
    - (b) Overpacks or containers dedicated to the transport of LSA-I material under exclusive use shall be excepted from (a) above with regard to internal contamination only for as long as they remain under that exclusive use.
  5. Decontamination and use of wagons, equipment or parts thereof
    - (a) See marg. 703.
    - (b) A wagon dedicated to the carriage of LSA-I material under exclusive use shall be excepted from (a) above with regard to internal contamination only for as long as it remains in that exclusive use.
  6. Mixed packing  
See marg. 703.
  7. Mixed loading  
See marg. 703.
  8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
    - (a) See marg. 703.
    - (b) For tank-containers and tank wagons, see also Appendix X/XI, paragraph 7.6.
  9. Danger labels on wagons other than tank wagons  
See marg. 703.
  10. Transport documents
    - (a) For a summary of the approval and notification provisions see marg. 716.
    - (b) The consignment note shall include:
      - (i) The identification number and the name as per heading 1, together with the words "Radioactive material, low specific activity (LSA-I), 7, Schedule 5, RID", e.g. "2976 Thorium nitrate, solid, radioactive material, low specific activity (LSA-I), 7, Schedule 5, RID" or
      - (ii) In the case of material not otherwise specified, "2912 Radioactive material, low specific activity (LSA-I), n.o.s., 7, Schedule 5, RID".  
For carriage in tank wagons or tank-containers, if a marking in accordance with Appendix VIII is prescribed, the *hazard identification number* in accordance with marg. 1801 (3) shall also be entered before the description of the material.  
A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.



11. Storage and despatch
  - (a) See marg. 703.
  - (b) Total transport index limitation for storage: none.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703 12. (2), (a) to (d).
  - (b) Total activity in a single wagon: no limit.
13. Other provisions
 

See marg. 703.

### *Schedule 6*

#### *Low specific activity material (LSA-II)*

NOTE. 1. LSA-II is the second of three groups of radioactive material which, by its nature, has a limited specific activity or for which limits of estimated average specific activity apply.

2. If fissile material is present, the requirements of Schedule 12 shall be met in addition to the requirements of this Schedule.

3. For other dangerous properties, see also the requirements in marg. 1770.

#### 1. Materials:

2912 *Radioactive material, low specific activity (LSA-II), n.o.s.*

2976 *Thorium nitrate, solid.*

2978 *Uranium hexafluoride, fissile excepted or non-fissile.*

2980 *Uranyl nitrate hexahydrate solution.*

2981 *Uranyl nitrate, solid.*

Low Specific Activity Material (LSA-II): radioactive material for which the radiation level at 3 m from the unshielded contents of a single package shall not exceed 10 mSv/h (1000 mrem/h) and meeting one of the following descriptions:

- (a) Water with tritium concentration up to 0.8 TBq/l (20 Ci/l); or
  - (b) Solids and gases with activity distributed throughout of not more than  $10^{-4}$  A<sub>2</sub>/g; or
  - (c) Liquids with activity distributed throughout of not more than  $10^{-5}$  A<sub>2</sub>/g.
- #### 2. Packaging/package
- (a) LSA-II material shall be carried in packagings, which may be tank wagons, tank-containers or containers.
  - (b) The packaging, tank wagon, tank-container or container shall meet the design requirements for industrial packages IP-2 or IP-3 (see marg. 1734 or 1735 and in addition, for tank wagons and tank-containers, marg. 1736 and Appendices X and XI), as appropriate for the form of the LSA-II material as specified in Table 4.
  - (c) The material shall be loaded into the packaging, tank wagon, tank-container or container so that, in routine transport, there will be no escape of contents and no loss of shielding.

Table 4. *Industrial package requirements for LSA-II material*

Contents	Exclusive use	Not under exclusive use
Solids	IP-2	IP-2
Liquids and gases	IP-2	IP-3

3. Package maximum radiation level  
See marg. 703.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703.
  - (b) Overpacks or containers dedicated to the carriage of LSA-II material under exclusive use may be excepted from (a) above with regard to internal contamination only for as long as they remain under that exclusive use.
5. Decontamination and use of wagons, equipment or parts thereof
  - (a) See marg. 703.
  - (b) A wagon dedicated to the carriage of LSA-II material under exclusive use shall be excepted from (a) above with regard to internal contamination only for as long as it remains in that exclusive use.
6. Mixed packing  
See marg. 703.
7. Mixed loading  
See marg. 703.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703.
  - (b) For tank-containers and tank wagons, see also Appendix X/XI, paragraph 7.6.
9. Danger labels on wagons other than tank wagons  
See marg. 703.
10. Transport documents
  - (a) For a summary of the approval and notification requirements see marg. 716.
  - (b) The consignment note shall include:
    - (i) The identification number and the name as per heading 1, together with the words "Radioactive material, low specific activity (LSA-II), 7, Schedule 6, RID" e.g. "2976 Thorium nitrate, solid, radioactive material, low specific activity (LSA-II), 7, Schedule 6, RID" or
    - (ii) In the case of material not otherwise specified, "2912 Radioactive material, low specific activity (LSA-II), n.o.s., 7, Schedule 6, RID".  
For carriage in tank wagons or tank-containers, if a marking in accordance with Appendix VIII is prescribed, the *hazard identifica-*

*tion number* in accordance with marg. 1801 (3) shall also be entered before the description of the material.

A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.

11. Storage and despatch

See marg. 703.

12. Carriage of packages, containers, tank wagons, tank-containers and overpacks

(a) See marg. 703 12. (2), (a) to (d).

(b) Total activity in a single wagon shall not exceed the values specified in Table 5.

Table 5. *Wagon activity limits for LSA-II material*

Nature of contents	Wagon limit
Non-combustible solids	No limit
Combustible solids, and all liquids and gases	$100 \times A_2$

13. Other provisions

See marg. 703.

*Schedule 7*

*Low specific activity material (LSA-III)*

NOTE. 1. LSA-III is the third of three groups of radioactive material which, by its nature, has a limited specific activity or for which limits of estimated average specific activity apply.

2. If fissile material is present, the requirements of Schedule 12 shall be met in addition to the requirements of this Schedule.

3. For other dangerous properties, see also the requirements in marg. 1770.

1. Materials:

*2912 Radioactive material, low specific activity (LSA-III), n.o.s.*

Low Specific Activity Material (LSA-III): solid radioactive material for which the radiation level at 3 m from the unshielded contents of a single package shall not exceed 10 mSv/h (1000 mrem/h) and meeting the following conditions:

(a) The radioactive material is distributed throughout a solid or collection of solid objects or is essentially uniformly distributed in a solid compact binding agent, (e.g. concrete, bitumen, ceramic); and

(b) The radioactive material is relatively insoluble, or is intrinsically contained in a relatively insoluble matrix; and

(c) The estimated average specific activity does not exceed  $2 \times 10^{-3} A_2/g$ .

2. Packaging/package

(a) LSA-III material shall be carried in packagings which may be containers. Carriage in tank wagons and tank-containers is not applicable.

- (b) The packaging or container shall meet the design requirements for industrial packages IP-2 (see marg. 1734) if transported in exclusive use, or IP-3 (see marg. 1735) if not transported in exclusive use.
  - (c) The material shall be loaded into the packaging or container so that, in routine transport, there will be no escape of contents and no loss of shielding.
- 3. Package maximum radiation level  
See marg. 703.
- 4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703.
  - (b) Overpacks or containers dedicated to the carriage of LSA-III material under exclusive use may be excepted from (a) above with regard to internal contamination only for as long as they remain under that exclusive use.
- 5. Decontamination and use of wagons, equipment or parts thereof
  - (a) See marg. 703.
  - (b) A wagon dedicated to the transport of LSA-III material under exclusive use shall be excepted from (a) above with regard to internal contamination only for as long as it remains in that exclusive use.
- 6. Mixed packing  
See marg. 703.
- 7. Mixed loading  
See marg. 703.
- 8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks  
See marg. 703.
- 9. Danger labels on wagons other than tank wagons  
See marg. 703.
- 10. Transport documents
  - (a) For a summary of the approval and notification requirements see marg. 716.
  - (b) The consignment note shall include the description “2912, *Radioactive material, low specific activity (LSA-III) n.o.s., 7, Schedule 7, RID*”. A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.
- 11. Storage and despatch  
See marg. 703.
- 12. Carriage of packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703 12. (2), (a) to (d).
  - (b) Total activity in a single wagon shall not exceed the values specified in Table 6.

Table 6. *Wagon activity limits for LSA-III material*

Nature of contents	Wagon limit
Non-combustible solids	No limit
Combustible solids	$100 \times A_2$

## 13. Other provisions

See marg. 703

*Schedule 8**Surface contaminated objects (SCO-I and SCO-II)*

NOTE. 1. A surface contaminated object (SCO) is a solid object which is not itself radioactive but which has radioactive material distributed on its surfaces. Surface contaminated objects shall be in one of two groups, either SCO-I or SCO-II, depending on the maximum allowable contamination level (see Table 7).

2. If fissile material is present the requirements of Schedule 12 shall be met in addition to the requirements of this Schedule.

3. For other dangerous properties, see also the requirements in marg. 1770.

## 1. Materials:

*2913 Radioactive material, surface contaminated objects (SCO-I) or (SCO-II)*

(a) Solid, non-radioactive objects contaminated on the surface to a level not exceeding the contamination levels specified in Table 7 when the contamination is averaged over an area of 300 cm<sup>2</sup> (or the area of the surface if less than 300 cm<sup>2</sup>).

Table 7. *Allowable surface contamination for SCO*

Type of contamination	Non-fixed on accessible surface	Fixed on accessible surface	Sum of fixed and non-fixed on the inaccessible surface
<b>SCO-I</b>			
Beta/gamma/low toxicity alpha emitters	4 Bq/cm <sup>2</sup> (10 <sup>-4</sup> µCi/cm <sup>2</sup> )	4 × 10 <sup>4</sup> Bq/cm <sup>2</sup> (1 µCi/cm <sup>2</sup> )	4 × 10 <sup>4</sup> Bq/cm <sup>2</sup> (1 µCi/cm <sup>2</sup> )
All other alpha emitters	0.4 Bq/cm <sup>2</sup> (10 <sup>-5</sup> µCi/cm <sup>2</sup> )	4 × 10 <sup>3</sup> Bq/cm <sup>2</sup> (0.1 µCi/cm <sup>2</sup> )	4 × 10 <sup>3</sup> Bq/cm <sup>2</sup> (0.1 µCi/cm <sup>2</sup> )
<b>SCO-II</b>			
Beta/gamma/low toxicity alpha emitters	400 Bq/cm <sup>2</sup> (10 <sup>-2</sup> µCi/cm <sup>2</sup> )	8 × 10 <sup>5</sup> Bq/cm <sup>2</sup> (20 µCi/cm <sup>2</sup> )	8 × 10 <sup>5</sup> Bq/cm <sup>2</sup> (20 µCi/cm <sup>2</sup> )
All other alpha emitters	40 Bq/cm <sup>2</sup> (10 <sup>-3</sup> µCi/cm <sup>2</sup> )	8 × 10 <sup>4</sup> Bq/cm <sup>2</sup> (2 µCi/cm <sup>2</sup> )	8 × 10 <sup>4</sup> Bq/cm <sup>2</sup> (2 µCi/cm <sup>2</sup> )

- (b) The radiation level at 3 m from the unshielded content of a single package or from a single object or collection of objects, if unpackaged, shall not exceed 10 mSv/h (1000 mrem/h).
2. Packaging/package
- (a) SCO-I and SCO-II may be carried in packagings provided that:
- (i) The packaging, which may be a container, meets the design requirements for industrial packages IP-1 (see marg. 1733) for SCO-I, or IP-2 (see marg. 1734) for SCO-II; and
  - (ii) The objects are loaded into the packaging so that, in routine transport, there will be no escape of contents and no loss of shielding.
- (b) SCO-I may be carried unpackaged, provided that:
- (i) It is carried in a wagon or container so that, in routine transport, there will be no escape of contents and no loss of shielding; and
  - (ii) It shall be transported under exclusive use if the contamination on the accessible and the inaccessible surfaces is greater than 4 Bq/cm<sup>2</sup> (10<sup>-4</sup> µCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters or 0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup> µCi/cm<sup>2</sup>) for all other alpha emitters; and
  - (iii) Measures shall be taken to ensure that radioactive material is not released into the wagon if it is expected that non-fixed contamination exists on inaccessible surfaces in excess of 4 Bq/cm<sup>2</sup> (10<sup>-4</sup> µCi/cm<sup>2</sup>) for beta and gamma emitters and low toxicity alpha emitters, or 0.4 Bq/cm<sup>2</sup> (10<sup>-5</sup> µCi/cm<sup>2</sup>) for all other alpha emitters.
- (c) SCO-II shall not be transported unpackaged.
3. Package maximum radiation level  
See marg. 703.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks
- (a) See marg. 703.
- (b) Overpacks or containers dedicated to the transport of SCO under exclusive use may be excepted from (a) above with regard to internal contamination only for as long as they remain under that exclusive use.
5. Decontamination and use of wagons, equipment or parts thereof
- (a) See marg. 703.
- (b) A wagon dedicated to the transport of SCO under exclusive use shall be excepted from (a) above with regard to internal contamination only for as long as it remains in that specific exclusive use.
6. Mixed packing  
See marg. 703.
7. Mixed loading  
See marg. 703.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks  
See marg. 703.

9. Danger labels on wagons other than tank wagons  
See marg.703.
10. Transport documents
  - (a) For a summary of the approval and notification requirements see marg. 716.
  - (b) The consignment note shall include the description “2913 *Radioactive material, surface contaminated object (SCO-I) or (SCO-II), 7, Schedule 8, RID*”. A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.
11. Storage and despatch  
See marg.703.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703 12. (2), (a) to (d).
  - (b) Total activity in a single wagon shall not exceed  $100 \times A_2$ .
13. Other provisions  
See marg. 703.

#### *Schedule 9*

##### *Radioactive material in Type A packages*

NOTE. 1. Radioactive material in quantities which offer a limited radiological risk [see marg. 700 (2) 1.] may be carried in Type A packages, which shall be designed to withstand conditions of transport including minor mishaps.

2. If fissile material is present the requirements of Schedule 12 shall be met in addition to the requirements of this Schedule.

3. For other dangerous properties, see also the requirements in marg. 1770.

##### 1. Materials:

2974 *Radioactive material, special form, n.o.s.*

2975 *Thorium metal, pyrophoric.*

2976 *Thorium nitrate, solid.*

2979 *Uranium metal, pyrophoric.*

2980 *Uranyl nitrate hexahydrate solution.*

2981 *Uranyl nitrate, solid.*

2982 *Radioactive material, n.o.s.*

The contents of a Type A package shall be restricted to radioactive material:

- (a) With an activity not exceeding  $A_1$  (see marg. 1700 and 1701) if in special form, or
  - (b) With an activity not exceeding  $A_2$  (see marg. 1700 and 1701) if other than in special form.
2. Packaging/package
- (a) The packaging, which may also be a tank wagon, tank-container or container, shall meet the requirements for Type A packages specified in

marg. 1737 and in addition, for tank wagons and tank-containers, Appendices X and XI.

- (b) In particular, the Type A package shall be designed so that, under conditions of transport including minor mishaps, it will prevent loss or dispersal of the radioactive contents, and loss of shielding which would result in more than a 20% increase in the external radiation level at any point.
  - (c) If the radioactive contents are special form radioactive material, competent authority approval of the design for the special form radioactive material is required.
  - (d) The outside of the Type A package shall incorporate a feature such as a seal, which is not readily breakable and which, while intact, will be evidence that it has not been opened.
3. Package maximum radiation level  
See marg. 703.
  4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
See marg. 703.
  5. Decontamination and use of wagons, equipment or parts thereof  
See marg. 703.
  6. Mixed packing  
See marg. 703.
  7. Mixed loading  
See marg. 703.
  8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
    - (a) See marg.703.
    - (b) Each Type A package shall be legibly and durably marked on the outside with the words "Type A".
  9. Danger labels on wagons other than tank wagons  
See marg.703.
  10. Transport documents
    - (a) For a summary of the approval and notification requirements see marg. 716.
    - (b) The consignment note shall include:
      - (i) The identification number and the name as per heading 1, together with the words "Radioactive material in Type A package, 7, Schedule 9, RID", e.g. "2976 Thorium nitrate, solid, radioactive material in Type A package, 7, Schedule 9, RID"; or
      - (ii) In the case of material not otherwise specified, "2974 Radioactive material, special form, n.o.s., in Type A package, 7, Schedule 9, RID", or "2982 Radioactive material, n.o.s., in Type A package, 7, Schedule 9, RID", as the case may be.

For carriage in tank wagons or tank-containers, if a marking in accordance with Appendix VIII is prescribed, the *hazard identification*



*number* in accordance with marg. 1801 (3) shall also be entered before the description of the material.

A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.

11. Storage and despatch  
See marg. 703.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks  
See marg. 703 12. (2).
13. Other provisions  
See marg. 703.

#### *Schedule 10*

##### *Radioactive material in Type B(U) packages*

NOTE. 1. Radioactive material which exceeds in quantity the Type A package limits may be carried in a type B(U) package which shall be designed so that it is unlikely to release its radioactive contents or lose its shielding in accident conditions of transport.

2. If fissile material is present the requirements of Schedule 12 shall be met in addition to the requirements of this Schedule.

3. For other dangerous properties, see also the requirements in marg. 1770.

1. Materials:

2974 *Radioactive material, special form, n.o.s.*

2975 *Thorium metal, pyrophoric.*

2976 *Thorium nitrate, solid.*

2979 *Uranium metal, pyrophoric.*

2980 *Uranyl nitrate hexahydrate solution.*

2981 *Uranyl nitrate, solid.*

2982 *Radioactive material, n.o.s.*

The limit on the total activity in a Type B(U) package shall be as is prescribed in the design approval certificate for that package.

2. Packaging/package

(a) The packaging, which may also be a tank-wagon, tank-container or container, shall meet the requirements for Type B packages specified in marg. 1738, as well as those for Type B(U) packages specified in marg. 1739 and in addition, for tank wagons and tank-containers, Appendices X and XI.

(b) In particular, the Type B(U) package shall be designed so that:

(i) Under conditions of transport including minor mishaps, it will restrict the loss or dispersal of the radioactive contents to no more than  $A_2 \times 10^{-6}$  per hour, and prevent loss of shielding which would result in more than a 20% increase in the external radiation level at any point, and

(ii) It will be capable of withstanding the damaging effects of a transport accident as demonstrated by retaining containment integrity and shielding to the extent required by marg. 1738 and 1739.

- (c) Approval of the design of Type B(U) packages in accordance with marg. 1752 by the competent authority of the country of origin of the design is required (unilateral approval).
  - (d) If the radioactive contents are special form radioactive material, competent authority approval of the design for the special form radioactive material is required.
  - (e) The outside of the Type B(U) package shall incorporate a feature such as a seal, which is not readily breakable and which, while intact, will be evidence that it has not been opened.
3. Package maximum radiation level  
See marg. 703.
  4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
See marg. 703.
  5. Decontamination and use of wagons, equipment or parts thereof  
See marg. 703.
  6. Mixed packing  
See marg. 703.
  7. Mixed loading  
See marg. 703.
  8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
    - (a) See marg. 703.
    - (b) Each Type B(U) package shall be legibly and durably marked on the outside with:
      - (i) The identification mark allocated to that design by the competent authority,
      - (ii) A serial number to uniquely identify each packaging which conforms to that design,
      - (iii) The wording "TYPE B(U)", and
      - (iv) The trefoil symbol embossed or stamped on the outermost fire and water-resistant receptacle.
  9. Danger labels on wagons other than tank wagons  
See marg. 703.
  10. Transport documents
    - (a) For a summary of the approval and notification requirements see marg. 716.
    - (b) The consignment note shall include:
      - (i) The identification number and the name as per heading 1, together with the words "Radioactive material in Type B(U) package, 7, Schedule 10, RID", e.g. "2976 Thorium nitrate, solid, radioactive material in Type B(U) package, 7, Schedule 10, RID" or
      - (ii) In the case of material not otherwise specified, "2974 Radioactive material, special form, n.o.s., in Type B(U) package, 7, Schedule 10,

*RID*”, or “2982 Radioactive material, *n.o.s.*, in Type B(U) package, 7, Schedule 10, *RID*”, as the case may be.

For carriage in tank wagons or tank-containers, if a marking in accordance with Appendix VIII is prescribed, the *hazard identification number* in accordance with marg. 1801 (3) shall be entered before the description of the material.

A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.

- (c) The unilateral approval certificate for the package design is required.
  - (d) Before each shipment of any Type B(U) package, the consignor shall be in possession of all the relevant competent authority approval certificates and shall ensure that copies of them have been submitted, before the first shipment, to the competent authority of each country through or into which the package is to be carried.
  - (e) Before each shipment where the activity is greater than  $3 \times 10^3$  A<sub>2</sub> or  $3 \times 10^3$  A<sub>1</sub>, as appropriate, or 1,000 TBq (20 kCi), whichever is the lower, the consignor shall notify the competent authorities of all countries affected by the movement, preferably at least seven days in advance.
11. Storage and despatch
- (a) See marg. 703.
  - (b) The consignor shall have complied with the relevant pre-use and pre-shipment requirements of marg. 1710.
  - (c) Any requirements in the competent authority approval certificates shall be observed.
12. Carriage of packages, containers, tank wagons, tank-containers and over-packs
- (a) See marg. 703 12. (2), (a) to (d).
  - (b) If the average heat flux from a Type B(U) package could exceed 15 W/m<sup>2</sup>, any special stowage provisions specified in the competent authority package approval certificate shall be observed.
  - (c) If the temperature of the accessible surface of the Type B(U) package could exceed 50°C in the shade, carriage is permitted only under exclusive use, for which the surface temperature is limited to 85°C. Account may be taken of barriers or screens intended to give protection to transport workers without the barriers or screens being subject to any test.
13. Other provisions
- See marg. 703.

### *Schedule II*

#### *Radioactive material in Type B(M) packages*

NOTE. 1. Radioactive material which exceeds in quantity the Type A package limits may be carried in a Type B(M) package which shall be designed so that it is unlikely to release its radioactive contents or lose its shielding in accident conditions of transport.

2. If fissile material is present the requirements of Schedule 12 shall be met in addition to the requirements of this Schedule.

3. For other dangerous properties, see also the requirements in marg. 1770.

## 1. Materials:

2974 *Radioactive material, special form, n.o.s.*

2975 *Thorium metal, pyrophoric.*

2976 *Thorium nitrate, solid.*

2979 *Uranium metal, pyrophoric.*

2980 *Uranyl nitrate hexahydrate solution.*

2981 *Uranyl nitrate, solid.*

2982 *Radioactive material, n.o.s.*

The limit on the total activity in a Type B(M) package shall be as is prescribed in the design approval certificate for that package.

## 2. Packaging/package

(a) The packaging, which may also be a tank wagon, tank-container or container, shall meet the requirements for Type B packages specified in marg. 1738, as well as those for Type B(M) packages specified in marg. 1740 and in addition, for tank wagons and tank-containers, Appendices X and XI.

(b) In particular, the Type B(M) package shall be designed so that:

(i) Under conditions of transport including minor mishaps, it will restrict the loss or dispersal of the radioactive contents to no more than  $A_2 \times 10^{-6}$  per hour, and prevent loss of shielding which would result in more than a 20% increase in the external radiation level at any point, and

(ii) It will be capable of withstanding the damaging effects of a transport accident as demonstrated by retaining containment integrity and shielding to the extent required by marg. 1738 and 1739.

(c) Intermittent venting during carriage may be permitted if compensating operational controls are approved by all the competent authorities involved.

(d) Supplementary operational controls necessary to ensure safety of the Type B(M) package during transport or to compensate for the deficiencies from the Type B(U) requirements and any restrictions on mode or conditions of transport shall be approved by all the competent authorities involved.

(e) Approval of the design of Type B(M) packages in accordance with marg. 1753 is required both by the competent authority of the country of origin of the design and of each country through or into which the packages are transported (multilateral approval).

(f) If the radioactive contents are special form radioactive material, competent authority approval of the design for the special form radioactive material is required.

(g) The outside of the Type B(M) package shall incorporate a feature such as a seal, which is not readily breakable and which, while intact, will be evidence that it has not been opened.

## 3. Package maximum radiation level

See marg. 703.

## 4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks

See marg. 703.

5. Decontamination and use of wagons, equipment or parts thereof  
See marg. 703.
6. Mixed packing  
See marg. 703.
7. Mixed loading  
See marg. 703.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703.
  - (b) Each Type B(M) package shall be legibly and durably marked on the outside with:
    - (i) The identification mark allocated to that design by the competent authority,
    - (ii) A serial number to uniquely identify each packaging which conforms to that design,
    - (iii) The wording "TYPE B(M)", and
    - (iv) The trefoil symbol embossed or stamped on the outermost fire and water-resistant receptacle.
9. Danger labels on wagons other than tank wagons  
See marg. 703.
10. Transport documents
  - (a) For a summary of the approval and notification requirements see marg. 716.
  - (b) The consignment note shall include:
    - (i) The identification number and the name as per heading 1, together with the words "Radioactive material in Type B(M) package, 7, Schedule 11, RID, e.g. "2976 Thorium nitrate, solid, radioactive material in Type B(M) package, 7, Schedule 11, RID" or
    - (ii) In the case of material not otherwise specified, "2974 Radioactive material, special form, n.o.s., in Type B(M) package, 7, Schedule 11, RID", or "2982 Radioactive material, n.o.s., in Type B(M) package, 7, Schedule 11, RID", as the case may be.

For carriage in tank wagons or tank-containers, if a marking in accordance with Appendix VIII is prescribed, the *hazard identification number* in accordance with marg. 1801(3) shall also be entered before the description of the material.

A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.
  - (c) The multilateral approval certificates for the package design are required.
  - (d) If the package is designed to allow for controlled intermittent venting or if the total contents exceed  $3 \times 10^3 A_2$  or  $3 \times 10^3 A_1$ , as appropriate, or 1,000 TBq (20 kCi), whichever is the lower, certificates of multilateral approval of shipment are required unless the competent authorities involved authorize transport by a specific provision in the certificates for approval of the package design.

- (e) Before each shipment of any Type B(M) package, the consignor shall be in possession of all relevant approval certificates.
  - (f) Before each shipment, the consignor shall notify the competent authorities of all countries affected by the movement, preferably at least seven days in advance.
11. Storage and despatch
- (a) See marg. 703.
  - (b) The consignor shall have complied with the relevant pre-use and pre-shipment requirements of marg. 1710.
  - (c) Any provisions in the certificates of approval of the design or the shipment issued by the competent authorities involved shall be observed.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks
- (a) See marg. 703 12. (2), (a) to (d).
  - (b) If the average surface heat flux from a Type B(M) package could exceed 15 W/m<sup>2</sup>, any special stowage provisions specified in the competent authority package design approval certificate shall be observed.
  - (c) If the temperature of the accessible surface of the Type B(M) package could exceed 50°C in the shade, carriage is permitted only under exclusive use, and as far as practicable the surface temperature is limited to 85°C. Account may be taken of barriers or screens intended to give protection to transport workers without the barriers or screens being subject to any test.
13. Other provisions
- See marg. 703.

#### *Schedule 12*

##### *Fissile material*

NOTE. 1. Radioactive material which is also fissile material shall be packaged, transported and stored so as to meet the requirements for nuclear criticality safety, as stated in this Schedule, and the requirements appropriate to its radioactivity, as stated in Schedules 6 to 11, as appropriate.

2. For other dangerous properties, see also the requirements in marg. 1770.

1. Materials:

2918 *Radioactive material, fissile, n.o.s.*

2977 *Uranium hexafluoride, fissile, containing more than 1.0% uranium-235.*

Fissile material is uranium-233, uranium-235, plutonium-238, plutonium-239, plutonium-241, or any combination of the foregoing, except for unirradiated natural or depleted uranium and natural or depleted uranium which has been irradiated in thermal reactors only.

Consignments of fissile material shall also be in full compliance with the requirements of one of the other Schedules, as appropriate to the radioactivity of the consignment.

2. Packaging/package

(a) The following materials are excepted from the special packaging requirements stated in this Schedule, but shall meet the requirements of

one of the other Schedules appropriate to the radioactivity of the material:

- (i) Fissile material in quantity not exceeding 15 g per package under conditions fully described in marg. 1741.
  - (ii) Hydrogenous solutions in concentrations and quantities limited in accordance with Table III of marg. 1703.
  - (iii) Enriched uranium distributed homogeneously with not more than 1% of uranium-235, and with a total plutonium and uranium-233 content not exceeding 1% of the mass of uranium-235, provided that if the uranium-235 is present in metallic, oxide or carbide forms, it shall not form a lattice arrangement.
  - (iv) Material containing not more than 5 g of fissile material in any 10 litre volume.
  - (v) Packages containing not more than 1 kg of plutonium in which not more than 20% by mass consists of plutonium-239, plutonium-241 or any combination of those radionuclides.
  - (vi) Solutions of uranyl nitrate enriched in uranium-235 to a maximum of 2% by mass with total plutonium and uranium-233 content not exceeding 0.1% of the mass of uranium-235, and a minimum nitrogen to uranium atomic ratio of 2.
- (b) Otherwise packages for fissile material shall meet the design provisions for the type of package necessary for the radioactivity of the fissile material and, in addition, shall meet the additional requirements for packages containing fissile material stated in marg. 1741.
- (c) Each design of package for fissile material shall be approved by the competent authority of the country of origin of the design and by the competent authorities of each of the countries through or into which the package is to be transported, i.e. multilateral approval is required.
- (d) The outside of packages for fissile material shall incorporate a feature such as a seal, which is not readily breakable and which, while intact, will be evidence that it has not been opened.
3. Package maximum radiation level  
See appropriate Schedule.
  4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks  
See appropriate Schedule.
  5. Decontamination and use of wagons, equipment or parts thereof  
See appropriate Schedule.
  6. Mixed packing  
Only articles or documents which are necessary for the use of the radioactive contents are permitted in the package, provided that there is no interaction between them and the packaging or its contents that would reduce the safety (including nuclear criticality safety) of the package.
  7. Mixed loading  
See marg. 703.
  8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
    - (a) See appropriate Schedule.

- (b) Packages shall be plainly and durably marked externally with:
  - (i) "Type A", "Type B(U)", "Type B(M)" as appropriate.
  - (ii) Competent authority identification mark.
- 9. Danger labels on wagons other than tank wagons  
See marg. 703.
- 10. Transport documents
  - (a) For a summary of the approval and notification requirements see marg. 716.
  - (b) The consignment note shall include the description "*2918 Radioactive material, fissile, n.o.s., in Type IF or Type AF or Type B(U)F or Type B(M)F package, 7, Schedule 12, RID*"; or "*2977 Uranium hexafluoride, fissile, containing more than 1.0% uranium-235, radioactive material in approved package, 7, Schedule 12, RID*", as the case may be. A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.
  - (c) The multilateral approval certificates for the fissile material package design are required.
  - (d) Before each shipment of any fissile material package, the consignor shall be in possession of all relevant approval certificates.
  - (e) Certificates of multilateral shipment approval are required for packages containing fissile material if the sum of the transport indexes of the packages in the consignment exceeds 50.
  - (f) For additional documentation requirements, see appropriate Schedule.
- 11. Storage and despatch  
See marg. 703.
- 12. Carriage of packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703 12. (2), (a) to (d).
  - (b) For consignments under exclusive use the total transport index limit shall be 100.
  - (c) Packages of fissile material for which the transport index for nuclear criticality control exceeds 0 shall not be carried in an overpack.
- 13. Other provisions  
See marg. 703.

### *Schedule 13*

#### *Radioactive material transported under special arrangement*

NOTE. Consignments of radioactive material which do not satisfy all of the applicable requirements of the Schedules 5-12 may be transported under special arrangement<sup>(1)</sup> subject to the implementation of special requirements approved by the competent authorities. These requirements shall ensure that the overall level of safety in transport and in-transit storage is at least equivalent to that which would be provided if all the applicable requirements had been met.

<sup>(1)</sup> The special arrangement should not be confused with the special agreement as covered by Article 5 (2) of the CIM Uniform Rules.



1. Materials:

Materials with substance identification numbers 2912, 2913, 2918, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981 and 2982, see marg. 701.

Radioactive materials which may be shipped under special arrangement include any of those materials covered by Schedules 5-11 and, if applicable, Schedule 12.
2. Packaging/package
  - (a) As authorised by the competent authority approval certificate for special arrangement.
  - (b) Multilateral approval is required.
3. Package maximum radiation level

As authorised by the competent authority approval certificate for special arrangement.
4. Contamination on packages, wagons, containers, tank wagons, tank-containers and overpacks

As authorised by the competent authority approval certificate for special arrangement.
5. Decontamination and use of wagons, equipment or parts thereof

See marg. 703.
6. Mixed packing

As authorised by the competent authority approval certificate for special arrangement.
7. Mixed loading

Mixed loading is only permitted if specially authorized by the competent authorities.
8. Marking and danger labels on packages, containers, tank wagons, tank-containers and overpacks
  - (a) See marg. 703. However consignments under special arrangement shall always bear III-YELLOW labels conforming to model No. 7C.
  - (b) In addition, other labelling and marking provisions approved by the competent authorities shall be fulfilled.
9. Danger labels on wagons other than tank wagons
  - (a) See marg. 703.
  - (b) In addition, other requirements approved by the competent authorities shall be fulfilled.
10. Transport documents
  - (a) For a summary of the approval and notification requirements see marg. 716.
  - (b) The consignment note shall include:
    - (i) The identification number as per heading 1 and the name as per marg. 701, together with the words "Radioactive material, under special arrangement, 7, Schedule 13, RID", e.g. "2976 Thorium nitrate, solid, radioactive material, under special arrangement, 7, Schedule 13, RID" or

- (ii) In the case of material not otherwise specified, the identification number as per heading 1 and the name as per marg. 701, together with the words “under special arrangement, 7, Schedule 13, RID”, e.g. “2918 Radioactive material, fissile, n.o.s., under special arrangement, 7, Schedule 13, RID”.

A cross shall be inserted in the appropriate box on the consignment note. Further details specified in marg. 709 and 710 shall also be included.

- (c) Each consignment shall require multilateral approval.
- (d) Before each shipment, the consignor shall be in possession of all relevant approval certificates.
- (e) Before each shipment the consignor shall notify the competent authorities of all countries affected by the movement, preferably at least seven days in advance.
11. Storage and despatch
- (a) See marg. 703
- (b) Specific storage and despatch provisions approved by the competent authorities shall be fulfilled.
- (c) Unless specifically excepted by the competent authority approval certificates, the consignor shall have complied with the relevant pre-use and pre-shipment provisions of marg. 1710.
12. Carriage of packages, containers, tank wagons, tank-containers and overpacks
- (a) See marg. 703.
- (b) Specific carriage provisions approved by the competent authorities shall be fulfilled.
13. Other provisions
- See marg. 703.

#### *Marking and labelling*

NOTE. For radioactive material having other dangerous properties, the labelling shall also be in accordance with the requirements for the other dangerous properties [see marg. 1770 (3)].

#### *Marking of packages, including tank wagons, tank-containers and containers*

705

- (1) Each package of gross mass exceeding 50 kg shall have its permissible gross mass legibly and durably marked on the outside of the packaging.
- (2) Each package which conforms to a Type A package design shall be legibly and durably marked on the outside of the packaging with “Type A”.
- (3) Each package which conforms to a design approved under marg. 1752-1755 shall be legibly and durably marked on the outside of the packaging with:
- (a) The identification mark allocated to that design by the competent authority;
- (b) A serial number to identify uniquely each packaging which conforms to that design; and
- (c) In the case of a Type B(U) or Type B(M) package design, with “Type B(U)” or “Type B(M)”.
- (4) Each package which conforms to a Type B(U) or Type B(M) package design shall have the outside of the outermost receptacle which is resistant to the effects of fire and water plainly marked by embossing, stamping, or other means

resistant to the effects of fire and water with the trefoil symbol shown in models Nos. 7A to 7D.

*Labelling of packages, including tank wagons, tank-containers and containers, and of overpacks*

706

(1) Each package, overpack, tank wagon, tank-container and container shall bear the labels which conform to models Nos. 7A, 7B or 7C according to the appropriate category. Any labels which do not relate to the contents shall be removed or covered. For radioactive material having other dangerous properties see marg. 1770.

(2) The labels shall be affixed to two opposite sides of the outside of a package, tank wagon or overpack, or on the outside of all four sides of a container or tank-container.

(3) Each label shall be completed with the following information in a clear and indelible manner:

(a) Contents:

(i) Except for LSA-I material, the name of the radionuclide as taken from Table I of Appendix VII, using the symbols prescribed therein. For mixtures of radionuclides, the most restrictive nuclides shall be listed to the extent the space on the line permits. The group of LSA or SCO shall be shown following the name of the radionuclide. The terms "LSA-II", "LSA-III", "SCO-I" and "SCO-II" shall be used for this purpose.

(ii) For LSA-I material, the term "LSA-I" is all that is necessary: the name of the radionuclide is not necessary.

(b) Activity:

The maximum activity of the radioactive contents during transport expressed in units of becquerel (Bq) [and, if desired, curie (Ci)] with the appropriate SI prefix. [See marg. 4 (1)]. For fissile material, the total mass in units of gram (g) or multiples thereof, may be used in place of activity.

(c) For overpacks, tank wagons, tank-containers and containers, the "contents" and "activity" entries on the label shall bear the information required in (a) and (b) of this paragraph respectively, totalled together for the entire contents of the overpack, tank wagon, tank-container or container except that on labels for overpacks or containers containing mixed loads of packages with different radionuclides, such entries may read "see consignment note".

(d) Transport index:

See marg. 1715 (3) (no transport index entry required for category I-WHITE).

*Orange marking of tank wagons and tank-containers*

707

See marg. 13 and Appendix VIII.

*Additional labelling of containers, tank wagons, tank-containers and wagons*

708

(1) Tank wagons, tank-containers and large containers carrying packages other than excepted packages shall bear labels conforming to model No. 7D. However, instead of using a label conforming to models Nos. 7A, 7B or 7C together with a label conforming to model No. 7D, it is permitted as an alternative to use enlarged labels conforming to models Nos. 7A, 7B or 7C with the dimensions of model No. 7D.

Every label shall be affixed in a vertical orientation on all four sides of a container or of a tank-container or on both sides of a tank wagon.

(2) Wagons carrying packages, overpacks, tank-containers or containers bearing any of the labels conforming to models Nos. 7A, 7B or 7C shall display the label conforming to model No. 7D on both sides. In addition wagons carrying

consignments under exclusive use shall display the label conforming to model No. 7D on both sides.

(3) Any labels which do not relate to the contents shall no longer be visible.

*Additional particulars of consignment*

709

In addition to the description of the goods given in the relevant schedule, the consignor shall include in the consignment note for each consignment of radioactive material the following information:

- (a) The words "The nature of the goods and the packaging are in conformity with the requirements of RID.";
- (b) The name or symbol of each radionuclide; or the most significant radionuclide;
- (c) A description of the physical and chemical form of the material, or a statement that the material is special form radioactive material. A generic description is acceptable for chemical form;
- (d) The maximum activity of the radioactive contents during transport expressed in units of becquerel (Bq) [and, if desired, curie (Ci)] with the appropriate SI prefix [see marg. 4 (1)]. For fissile material, the total mass of fissile material in units of gram (g), or appropriate multiples thereof, may be used in place of activity;
- (e) The category of the package, i.e. I-WHITE, II-YELLOW or III-YELLOW;
- (f) The transport index (for categories II-YELLOW and III-YELLOW only);
- (g) For a consignment of fissile material, where all of the packages in the consignment are excepted under marg. 1703, the words "fissile excepted";
- (h) The identification mark for each competent authority approval certificate (special form radioactive material, special arrangement, package design, or shipment) applicable to the consignment;
- (i) For consignments of packages in an overpack or container, a detailed statement of the contents of each package within the overpack or container and, where appropriate, of each overpack or container in the consignment. If packages are to be removed from the overpack or container at a point of intermediate unloading, appropriate transport documentation shall be made available; and
- (j) When a consignment is required to be shipped under exclusive use, the statement "exclusive use shipment".

*Information given to the railway*

710

(1) The consignor shall provide with the consignment note information regarding actions, if any, that are required to be taken by the railway.

The information shall include at least the following points:

- (a) Supplementary operational provisions for loading, stowage, transport, handling and unloading of the package, overpack, container, tank wagon or tank-container including any special stowage requirements for the safe dissipation of heat [see marg. 712 (2)] or a statement that no such requirements are necessary;
- (b) Any necessary routeing instructions;
- (c) Written instructions appropriate to the consignment.

(2) In all cases where approval of the shipment or prior notification to the competent authority is required, all the railway administrations shall be informed, if possible, at least 15 days in advance and in any case at least 5 days in advance, in order that they may take in good time any measures required for the transport.

(3) The consignor shall be in a position to provide the certificates of the competent authorities to the railway before loading, unloading, and any transshipment.

*Transport**Segregation during transport*

711

(1) Packages, overpacks, containers, tank wagons and tank-containers shall be segregated during transport:

(a) For radiation control purposes, from places occupied by persons in accordance with Table 8 and from undeveloped photographic film and mailbags, in accordance with Table 9;

NOTE. Mailbags shall be assumed to contain undeveloped film and plates and therefore be separated from radioactive material in the same way.

and

(b) From other dangerous goods in accordance with marg. 703, heading 7.

Table 8. *Minimum distances between packages of category II-Yellow or of category III-Yellow and persons*

Sum of transport indexes not more than	Minimum distances in metres, no shielding material intervening, from living accommodations or regularly occupied working space in the case of exposure time not exceeding 250 hours per annum
2	1.0
4	1.5
8	2.5
12	3.0
20	4.0
30	5.0
40	5.5
50	6.5

NOTE. The above table is based upon a dose limit of 5 mSv (500 mrem) in any 12 month period.

Table 9. *Minimum distances between packages of category II-Yellow or of category III-Yellow and consignments bearing the word "Foto", or mailbags*

NOTE: Mailbags shall be assumed to contain undeveloped film and plates and therefore be separated from radioactive material in the same way.

Total number of packages not more than		Sum of transport indexes not more than	Journey or storage duration, in hours							
CATEGORY YELLOW			1	2	4	10	24	48	120	240
III	II	Minimum distances in metres								
		0.2	0.5	0.5	0.5	0.5	1	1	2	3
		0.5	0.5	0.5	0.5	1	1	2	3	5
	1	1	0.5	0.5	1	1	2	3	5	7
	2	2	0.5	1	1	1.5	3	4	7	9
	4	4	1	1	1.5	3	4	6	9	13
	8	8	1	1.5	2	4	6	8	13	18
1	10	10	1	2	3	4	7	9	14	20
2	20	20	1.5	3	4	6	9	13	20	30
3	30	30	2	3	5	7	11	16	25	35
4	40	40	3	4	5	8	13	18	30	40
5	50	50	3	4	6	9	14	20	32	45

(2) Category II-YELLOW or category III-YELLOW packages or overpacks shall not be carried in compartments of passenger coaches occupied by persons, except compartments reserved for persons authorized to accompany such packages or overpacks.

*Stowage for transport*

712 (1) Packages shall be so loaded in wagons that they cannot shift dangerously, upset or fall.

(2) Provided that its average surface heat flux does not exceed 15 W/m<sup>2</sup> and that immediately surrounding cargo is not in bags, a package or overpack may be carried among packaged general cargo without any special stowage provisions except as may be specifically required by the competent authority in an applicable approval certificate.

(3) Except in the case of shipment under special arrangement, mixing of packages of different kinds of radioactive material, including fissile material, and mixing of different kinds of packages with different transport indexes is permitted without specific competent authority approval. In the case of shipments under special arrangement, mixing shall not be permitted except as specifically authorized under the special arrangement.

(4) The following provisions shall apply to the loading of tank wagons and the loading of packages, overpacks, tank-containers and containers on to wagons:

(a) The transport index of a tank wagon shall not exceed the limits in Table 10. The total number of packages, overpacks, tank-containers and containers in a single wagon shall be so limited that the total sum of the transport indexes in the wagon does not exceed the values shown in Table 10.

For consignments of LSA-I material there shall be no limit on the sum of the transport indexes.

(b) The radiation level under conditions likely to be encountered in routine transport shall not exceed 2 mSv/h (200 mrem/h) at any point on, and 0.1 mSv/h (10 mrem/h) at 2 m from, the external surface of the wagon.

(5) Any package or overpack having a transport index greater than 10 shall be transported only under exclusive use.

Table 10. *Transport index limits for containers and wagons*

Type of container or wagon	Limit on total sum of transport indexes in a single container or on a wagon			
	Not under exclusive use		Under exclusive use	
	Non-fissile material	Fissile material	Non-fissile material	Fissile <sup>(1)</sup> material
Small container	50	50	not applicable	not applicable
Large container	50	50	no limit	100 <sup>(2)</sup>
Wagon	50	50	no limit	100 <sup>(2)</sup>

<sup>(1)</sup> Provided that transport is direct from the consignor to the consignee without any intermediate in-transit storage if the TI exceeds 50.

<sup>(2)</sup> If the total transport index is greater than 50, the consignment shall be so handled and stowed that it is always separated from any other package, overpack, tank wagon, tank-container or container carrying radioactive material by at least 6 m. The intervening space may be occupied by other goods in accordance with marg. 1711 (3).

*Additional provisions*

713 (1) For consignments under exclusive use, the radiation level shall not exceed:

- (a) 10 mSv/h (1,000 mrem/h) at any point on the external surface of any package or overpack, and may only exceed 2 mSv/h (200 mrem/h) provided that:
  - (i) There is an enclosure which prevents unauthorized access to the load during transport, and
  - (ii) Provisions are made to secure the package or overpack so that its position within the wagon remains fixed during routine transport, and
  - (iii) There are no loading or unloading operations between the beginning and end of the shipment;
- (b) 2 mSv/h (200 mrem/h) at any point on the outer surfaces of the wagon including the upper and lower surfaces, or, in the case of an open wagon at any point on the vertical planes projected from the outer edges of the wagon, on the upper surface of the load, and on the lower external surface of the wagon; and
- (c) 0.1 mSv/h (10 mrem/h) at any point 2 m from the vertical planes represented by the outer lateral surfaces of the wagon or, if the load is transported in an open wagon, at any point 2 m from the vertical planes projected from the outer edges of the wagon.

If the exclusive use conditions and the special additional requirements specified in sub-paragraph (a) above do not apply, the radiation level at any point on any external surface of a package or overpack shall not exceed 2 mSv/h (200 mrem/h) and the transport index shall not exceed 10.

(2) The radiation level at any normally occupied position of the wagon shall not exceed 0.02 mSv/h (2 mrem/h) unless the persons occupying such positions are provided with personal monitoring devices.

*Storage in transit*

714 (1) Packages, overpacks, containers, tank wagons and tank-containers shall be segregated during storage in transit:

- (a) For radiation exposure control purposes, from places occupied by persons, in accordance with Table 8 of marg. 711 (1) and from undeveloped photographic film and mailbags, in accordance with Table 9 of marg. 711 (1);

NOTE. Mailbags shall be assumed to contain undeveloped film and plates and therefore be separated from radioactive material in the same way.

and

- (b) From other dangerous goods in accordance with marg. 703, heading 7.

(2) The number of category II-YELLOW and category III-YELLOW packages, overpacks, tank wagons, tank-containers and containers stored in any one place shall be so limited that the total sum of the transport indexes in any individual group of such packages, overpacks, tank wagons, tank-containers or containers does not exceed 50. Groups of such packages, overpacks, tank wagons, tank-containers and containers shall be stored so as to maintain a spacing of at least 6 m from other groups of such packages, overpacks, tank wagons, tank-containers or containers.

(3) If the transport index of a single package, overpack, tank wagon, tank-container or container exceeds 50 or the total transport index of a wagon exceeds 50, as permitted in Table 10, storage shall be such as to maintain a spacing of at

least 6 m from other groups of such packages, overpacks, tank wagons, tank-containers or containers or from other wagons carrying radioactive material.

(4) Consignments in which the only radioactive contents are LSA-I materials shall be excepted from the provisions of paragraphs (2) and (3) above.

(5) Except in the case of shipment under special arrangement, mixed loading of packages of different kinds of radioactive material, including fissile material, and mixed loading of different kinds of packages with different transport indexes is permitted without specific competent authority approval. In the case of shipment under special arrangement, mixed loading shall not be permitted except as specifically authorized under the special arrangement.

*Undeliverable consignments*

715 If neither the consignor nor the consignee can be identified, or if the consignment cannot be delivered to the consignee and the carrier has no instructions from the consignor, the consignment shall be placed in a safe location and the competent authority shall be informed as soon as possible, and a request made for instructions on further action.

716

*Summary of approval and prior notification provisions*

Subject	Schedule number	Competent authority approval required		Consignor required to notify the competent authorities of the country of origin and of the countries en route <sup>(a)</sup> before each shipment	Marg.
		Country of origin	Countries en route <sup>(a)</sup>		
Calculation of unlisted A <sub>1</sub> and A <sub>2</sub> values	—	yes	yes	no	1750(f)
Excepted packages					
– package design		no	no	no	
– shipment	1 to 4	no	no	no	1713
LSA material <sup>(b)</sup> and SCO <sup>(b)</sup> / Industrial packages types 1, 2 or 3					
– package design		no	no	no	
– shipment	5 to 8	no	no	no	700(2), 1714, 1733, 1734, 1735, 1736
Type A packages <sup>(b)</sup>					
– package design		no	no	no	
– shipment	9	no	no	no	700(2), 1737
Type B(U) packages <sup>(b)</sup>					
– package design		yes	no	See Note 1	
– shipment	10	no	no	See Note 2	700(2), 1719, 1739, 1752



Subject	Schedule number	Competent authority approval required		Consignor required to notify the competent authorities of the country of origin and of the countries en route <sup>(a)</sup> before each shipment	Marg.
		Country of origin	Countries en route <sup>(a)</sup>		
Type B(M) packages <sup>(b)</sup> – package design – shipment	11	yes See Note 3	yes See Note 3	no yes	700(2), 1719, 1740, 1753, 1757
Packages for fissile material – package design – shipment: sum of transport indexes not more than 50 sum of transport indexes greater than 50	12	yes <sup>(c)</sup>  no <sup>(d)</sup>  yes	yes <sup>(c)</sup>  no <sup>(d)</sup>  yes	no  See Note 2  See Note 2	1741, 1754, 1757
Special form radioactive material – design – shipment	– See Note 4	yes See Note 4	no See Note 4	no See Note 4	1731, 1751, 1761
Special Arrangement – shipment	13	yes	yes	yes	1719, 1758, 1762
Packages meeting the requirements of RID applicable on 31 December 1989 – Type B(U)  – All others		yes  yes	No, until 31 December 1995 Yes, as from 1 January 1996  yes	See Note 1  See Note 1	1755

(a) Countries from, through or into which the consignment is transported.

(b) If the radioactive contents are fissile material which is not excepted from the requirements for packages containing fissile material, then the requirements for fissile material packages apply, see marg. 1741.

(c) Designs of packages for fissile material may also require approval in respect of one of the other items in the table.

(d) Shipments may, however, require approval in respect of one of the other items in the table.

#### NOTES

1. Before first shipment of any package requiring competent authority approval of the design, the consignor shall ensure that a copy of the approval certificate for that design has been submitted to the competent authority of each country en route: see marg. 1719 (1).

2. Notification required if contents exceed  $3 \times 10^3$  A<sub>1</sub>, or  $3 \times 10^3$  A<sub>2</sub>, or 1,000 TBq (20 kCi); see marg. 1719 (2).

3. Multilateral approval of shipment required if contents exceed  $3 \times 10^3$  A<sub>1</sub>, or  $3 \times 10^3$  A<sub>2</sub>, or 1,000 TBq (20 kCi); or if controlled intermittent venting is allowed, see marg. 1757.

4. See approval and prior notification requirements for the applicable package.

717-  
799

### CLASS 8. CORROSIVE SUBSTANCES

#### 1. *List of substances*

800 (1) Among the substances and articles covered by the heading of Class 8,<sup>(1)</sup> those which are listed in marg. 801 or are covered by a collective heading of that marginal are subject to the conditions set out in marg. 800 (2) to 822 and consequently are substances and articles of RID.<sup>(2)</sup>

Substances of Class 8 other than the substance of items 6, 24 and 25, which are classified under the various items of marg. 801 shall be assigned to one of the following groups according to their degree of corrosiveness:

(a) Highly corrosive

(b) Corrosive

(c) Slightly corrosive.

When, as a result of additions, substances of Class 8 pass into categories of corrosiveness other than those to which the substances specified in marg. 801 belong, such mixtures or solutions shall be classified under the items or letters to which they belong on the basis of their actual degree of corrosiveness.

[When, as a result of additions, substances of Class 8 pass into categories of flash-point below 21°C, such mixtures or solutions shall be classified under the corresponding items or letters of Class 3, taking into account their corrosiveness.]

<sup>1</sup> The heading of Class 8 covers substances which by their chemical action attack epithelial tissue of the skin, the mucous membranes or the eyes with which they are in contact, or in the event of leakage are capable of damaging or destroying other goods, or means of transport, and may also cause other hazards. The heading of this class also covers substances which form a corrosive liquid only in the presence of water, or which produce corrosive vapour or mist in the presence of the natural moisture of the air.

In the absence of other tests, corrosive action may be determined by experiments on animals.

Substances that cause visible necrosis of the skin tissue at the site of contact when tested on the intact skin of an animal for a period of up to four hours are substances of group (c).

Substances which, while not dangerous to epithelial tissue, corrode steel or aluminium are likewise substances of group (c).

Substances that cause visible necrosis of the skin tissue at the site of contact when tested on the intact skin of an animal for a period of more than three minutes and up to 60 minutes are substances of group (b).

Other substances covered by the heading of Class 8 which are more corrosive than the substances of group (b) are substances of group (a).

<sup>2</sup> For the quantities of substances listed in marg. 801 which are not subject to the requirements of the section "Conditions of Carriage", see marg. 801a.

When, as a result of additions of substances of Class 6.1, substances of Class 8 acquire a preponderance of toxic properties, such mixtures or solutions shall be classified under the corresponding items and letters of Class 6.1.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes), see also marg. 3 (3).

(2) For the packaging requirements of marg. 805 (2), 806 (3) and 807 (3), substances or mixtures of substances having a melting point above 45°C are considered to be solids.

(3) Corrosive inflammable liquids having a flash-point below 21°C, other than certain acid halides of item 36 (b), are substances of Class 3 (see marg. 301, items 21 to 26).

(4) Corrosive substances which have a very high inhalation toxicity, as defined in foot-note 1 to marg. 600 (1), are substances of Class 6.1 (see marg. 601).

(5) Chemically unstable substances of Class 8 are to be handed over for carriage only if the necessary steps have been taken to prevent their dangerous decomposition or polymerization during carriage. To this end it should in particular be ensured that receptacles do not contain any substance which might promote these reactions.

(6) The flash-point referred to below shall be determined in the manner described in Appendix III A.

NOTE. Even if no substance is listed under letters (a), (b) or (c) of the various items of this marginal, substances, solutions, mixtures and preparations may be assimilated under these letters in accordance with the criteria set out in marg. 800.

## 801 A. ACID SUBSTANCES

### *Inorganic acids*

#### 1. Sulphuric acid and similar substances, such as:

- (a) *Chromosulphuric acid, sulphur trioxide, oleum (fuming sulphuric acid);*
- (b) *Alkyl sulphononic and aryl sulphononic acids containing more than 5% free sulphuric acid (H<sub>2</sub>SO<sub>4</sub>), sulphuric acid, waste sulphuric acid, aqueous solutions of bisulphates, nitrosylsulphuric acid, lead sludge containing sulphuric acid;*
- (c) . . .

NOTE. 1. Lead sludge containing sulphuric acid with less than 3% free acid is a substance of Class 6.1 [see marg. 601, item 63 (c)].

2. Alkyl sulphononic and aryl sulphononic acids, containing not more than 5% free sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) are substances of item 34.

#### 2. Nitric acids, such as:

- (a) *Nitric acid containing more than 70% pure acid (HNO<sub>3</sub>), red fuming nitric acid;*
- (b) *Nitric acid containing not more than 70% pure acid (HNO<sub>3</sub>);*
- (c) . . .

3. Mixtures of inorganic acids, with the exception of hydrofluoric acid, such as:

- (a) *Mixtures of sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) with more than 30% pure nitric acid;*
- (b) *Mixtures of sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) with not more than 30% pure nitric acid (HNO<sub>3</sub>), mixtures of sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) with hydrochloric acid (HCl), mixtures of nitric acid (containing not more than 30% HNO<sub>3</sub>) with acetic acid and phosphoric acid;*

(c) . . .

NOTE. 1. Mixtures of nitric acid with hydrochloric acid are not to be accepted for carriage.

2. Mixtures of residual sulphuric and nitric acids, not denitrated, are not to be accepted for carriage.

4. Solutions of perchloric acid:

(b) Aqueous solutions of *perchloric acid* containing not more than 50% pure acid ( $\text{HClO}_4$ );

(c) . . .

NOTE. Aqueous solutions of perchloric acid containing more than 50% but not more than 72.5% pure acid ( $\text{HClO}_4$ ) are substances of Class 5.1 (see marg. 501, item 3). Solutions containing more than 72.5% pure acid are not to be accepted for carriage; the same applies to mixtures of perchloric acid with any liquid other than water.

5. Solutions of hydrogen halides (with the exception of hydrofluoric acid), such as:

(b) *Solutions of hydrobromic acid, solutions of hydrochloric acid, solutions of hydriodic acid*, aqueous solutions of substances of items 21 and 22 (b), with the exception of aqueous solutions of aluminium chloride and of aqueous solutions of aluminium bromide;

(c) Aqueous solutions of substances of item 22 (c), *aqueous solutions of aluminium bromide, aqueous solutions of aluminium chloride*.

NOTE. Hydrogen bromide and hydrogen chloride are substances of Class 2 [see marg. 201, items 3 (at) and 5 (at)].

6. *Anhydrous hydrofluoric acid* (hydrogen fluoride), *aqueous solutions of hydrofluoric acid* containing more than 85% anhydrous hydrofluoric acid.

NOTE. Special packing conditions are applicable to these substances (see marg. 803).

7. (a) *Aqueous solutions of hydrofluoric acid* containing more than 60% but not more than 85% anhydrous hydrofluoric acid, mixtures of inorganic acids with aqueous solutions of hydrofluoric acid;

(b) *Aqueous solutions of hydrofluoric acid* containing not more than 60% anhydrous hydrofluoric acid;

(c) . . .

8. Solutions of fluoboric acid:

(b) Aqueous solutions of *fluoboric acid* containing not more than 78% pure acid ( $\text{HBF}_4$ );

(c) . . .

NOTE. Solutions of fluoboric acid containing more than 78% pure acid ( $\text{HBF}_4$ ) are not to be accepted for carriage.

9. Solutions of fluosilicic acid:

(b) Aqueous solutions of *fluosilicic acid (hydrofluosilicic acid)* ( $\text{H}_2\text{SiF}_6$ );

(c) . . .

10. Other fluoro-acids, such as:

(a) *Fluorosulphonic acid*;

(b) *Difluorophosphoric acid* (anhydrous), *fluorophosphoric acid* (anhydrous), *hexafluorophosphoric acid*;

(c) . . .

## 11. Other inorganic acids, such as:

- (a) *Selenic acid*;  
 (b) *Solutions of chromic acid*;

NOTE. Chromium trioxide, anhydrous, is a substance of Class 5.1 (see marg. 501, item 10).

- (c) *Chloroplatinic acid, phosphoric acid.*

*Inorganic halides, acid salts and other halogenated substances*

21. Liquid halides and other liquid halogenated substances (except fluorine compounds) which, in contact with moist air or water, give off acid fumes, such as:

- (a) *Chlorosulphonic acid* ( $\text{SO}_2(\text{OH})\text{Cl}$ ), *chromyl chloride (chromium oxychloride)* ( $\text{CrO}_2\text{Cl}_2$ ), *disulphur dichloride* ( $\text{S}_2\text{Cl}_2$ ), *sulphuryl chloride* ( $\text{SO}_2\text{Cl}_2$ ), *thionyl chloride* ( $\text{SOCl}_2$ ), *sulphur dichloride* ( $\text{SCl}_2$ ), *vanadium tetrachloride* ( $\text{VCl}_4$ ), *boron tribromide (boron bromide)* ( $\text{BBr}_3$ );
- (b) *Pyrosulphuryl chloride* ( $\text{S}_2\text{O}_5\text{Cl}_2$ ), *anhydrous stannic chloride* ( $\text{SnCl}_4$ ), *thio-phosphoryl chloride* ( $\text{PSCl}_3$ ), *phosphorus oxychloride (phosphoryl chloride)* ( $\text{POCl}_3$ ), *vanadium oxytrichloride* ( $\text{VOCl}_3$ ), *antimony pentachloride* ( $\text{SbCl}_5$ ) and *non-aqueous solutions of antimony pentachloride, iodine monochloride* ( $\text{ICl}$ ), *silicon tetrachloride* ( $\text{SiCl}_4$ ), *titanium tetrachloride* ( $\text{TiCl}_4$ ), *phosphorus tribromide* ( $\text{PBr}_3$ ), *butyltin trichloride* ( $\text{C}_4\text{H}_9\text{SnCl}_3$ ), *phosphorus trichloride* ( $\text{PCl}_3$ );
- (c) . . .

NOTE. 1. Stannic chloride pentahydrate ( $\text{SnCl}_4 \cdot 5\text{H}_2\text{O}$ ) is a substance of item 22 (c).

2. Aqueous solutions of substances of item 21 are substances of item 5 (b).

22. Solid halides and other solid halogenated substances (except fluorine compounds), which, in contact with moist air or water, give off acid fumes, such as:

- (b) *Aluminium bromide (anhydrous)* ( $\text{AlBr}_3$ ), *aluminium chloride (anhydrous)* ( $\text{AlCl}_3$ ), *phosphorus oxybromide* ( $\text{POBr}_3$ ), *phosphorus pentachloride* ( $\text{PCl}_5$ ), *antimony trichloride* ( $\text{SbCl}_3$ ), mixtures of *titanium trichloride* ( $\text{TiCl}_3$ ), non-pyrophoric;

NOTE. Aluminium bromide hexahydrate ( $\text{AlBr}_3 \cdot 6\text{H}_2\text{O}$ ), aluminium chloride hexahydrate ( $\text{AlCl}_3 \cdot 6\text{H}_2\text{O}$ ) and aluminium chloride monohydrate ( $\text{AlCl}_3 \cdot \text{H}_2\text{O}$ ) are not subject to the requirements of RID.

- (c) *Ferric chloride (iron trichloride) (anhydrous)* ( $\text{FeCl}_3$ ), *stannic chloride pentahydrate* ( $\text{SnCl}_4 \cdot 5\text{H}_2\text{O}$ ), *zinc chloride* ( $\text{ZnCl}_2$ ), *molybdenum pentachloride* ( $\text{MoCl}_5$ ), *zirconium tetrachloride* ( $\text{ZrCl}_4$ ), *vanadium trichloride* ( $\text{VCl}_3$ )

NOTE. 1. Ferric chloride hexahydrate ( $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ ) is not subject to the requirements of RID.

2. Aqueous solutions of substances of item 22 are substances of item 5.

## 23. Sulphates containing sulphuric acid and bisulphates, such as:

- (b) *Ammonium bisulphate, potassium bisulphate, sodium bisulphate and lead sulphate*, all containing 3% or more free sulphuric acid ( $\text{H}_2\text{SO}_4$ );
- (c) *Ammonium bisulphate, potassium bisulphate, and sodium bisulphate*, all containing less than 3% free sulphuric acid ( $\text{H}_2\text{SO}_4$ ).

NOTE. 1. Aqueous solutions of bisulphates are substances of item 1 (b).

2. Lead sulphate containing less than 3% free sulphuric acid is a substance of Class 6.1 [see marg. 601, item 63 (c)]

24. *Bromine*

NOTE. Special packing conditions are applicable to this substance (see marg. 804).

25. *Molybdenum hexafluoride*

NOTE. Special packing conditions are applicable to this substance (see marg. 803).

26. Other compounds of fluorine, such as:

- (a) *Bromine pentafluoride, bromine trifluoride;*
- (b) *Ammonium bifluoride, potassium bifluoride, sodium bifluoride, chromic fluoride, antimony pentafluoride;*
- (c) . . .

NOTE. Ammonium fluoride, potassium fluoride, sodium fluoride and the silico-fluorides are substances of Class 6.1 [see marg. 601, items 65 (c) and 66 (c)].

27. Inorganic acid substances and solutions and mixtures of inorganic acid substances (such as preparations and wastes) which cannot be classified under other collective headings, such as:

- (a) . . .
- (b) *Phosphorus pentoxide (phosphoric acid, anhydrous);*
- (c) *Cyanuric chloride, hydroxylamine sulphate.*

*Organic substances*

31. Solid carboxylic and dicarboxylic acids and solid halogenated carboxylic acids and their solid anhydrides, such as:

- (b) *Bromoacetic acid, chloroacetic acid (monochloroacetic acid), trichloroacetic acid, trichloroacetic anhydride;*
- (c) *Maleic anhydride, phthalic anhydride, tetrahydrophthalic anhydride.*

NOTE. Phthalic anhydride and tetrahydrophthalic anhydride containing 0.05% or less of maleic anhydride are not subject to the requirements of RID.

32. Liquid carboxylic acids and liquid halogenated carboxylic acids and their liquid anhydrides, such as:

- (a) *Trifluoroacetic acid;*
- (b) *Glacial acetic acid and aqueous solutions of acetic acid containing more than 80% pure acid, acrylic acid, solutions of bromoacetic acid, solutions of chloroacetic acid (monochloroacetic acid), mixtures of chloroacetic acids, dichloroacetic acid, formic acid containing more than 70% pure acid, thioglycolic acid, solutions of trichloroacetic acid, acetic anhydride;*
- (c) *Acetic acid containing from 50 to 80% pure acid, 2-chloropropionic acid, 5-chlorovaleric acid, formic acid containing from 50 to 70% pure acid, heptafluorobutyric acid, methacrylic acid, propionic acid containing not less than 50% pure acid, butyric anhydride, propionic anhydride.*

NOTE. Formic acid, acetic acid and propionic acid containing less than 50% pure acid are not subject to the requirements of RID.

33. Complex compounds of boron trifluoride, such as:

- (a) . . .
- (b) *Boron trifluoride acetic acid complex, boron trifluoride propionic acid complex, boron trifluoride ether complex, boron trifluoride phenol complex;*
- (c) . . .

34. Alkyl sulphonic and aryl sulphonic acids, such as:

- (b) *Nitrobenzenesulphonic acid, phenolsulphonic acid;*
- (c) *3-benzidinesulphonic acid, methanesulphonic acid, toluene sulphonic acids and their solutions.*

NOTE. Alkyl sulphonic and aryl sulphonic acids containing more than 5% free sulphuric acid ( $H_2SO_4$ ) are substances of item 1 (b).

35. Solid organic acid halides, such as:

- (b) *Dichloroquinoxaline-carbonyl chloride, anisoyl chloride, 2,4-dichlorobenzoyl chloride, nitrobenzenesulphonyl chloride, p-nitrobenzoyl chloride, isophthaloyl chloride;*
- (c) . . .

36. Liquid organic acid halides, such as:

- (a) . . .
- (b) *Acetyl bromide, bromoacetyl bromide, benzoyl chloride, chloroacetyl chloride, diethyl thiophosphoryl chloride, fumaryl chloride, pivaloyl chloride (trimethyl acetyl chloride), trichloroacetyl chloride, valeryl chloride, acetyl iodide;*
- (c) *Benzenesulphonyl chloride, o-chlorobenzoyl chloride, p-chlorobenzoyl chloride, dimethyl thiophosphoryl chloride.*

37. Alkyl chlorosilanes and aryl chlorosilanes having a flash-point of 21°C or above, such as:

- (a) . . .
- (b) *Allyltrichlorosilane, amyltrichlorosilane, butyltrichlorosilane, chlorophenyltrichlorosilane, cyclohexenyltrichlorosilane, cyclohexyltrichlorosilane, dichlorophenyltrichlorosilane, diethyldichlorosilane, diphenyldichlorosilane, dodecyltrichlorosilane, ethylphenyldichlorosilane, hexadecyltrichlorosilane, hexyltrichlorosilane, methylphenyldichlorosilane, nonyltrichlorosilane, octadecyltrichlorosilane, phenyltrichlorosilane, propyltrichlorosilane;*
- (c) . . .

NOTE. Chlorosilanes which give off inflammable gases on contact with water or moist air are substances of Class 4.3 and are not to be accepted for carriage unless specifically listed thereunder.

38. Acid phosphoric esters, such as:

- (b) . . .
- (c) *Dibutyl acid phosphate, dipropyl acid phosphate, butyl acid phosphate, isoocetyl acid phosphate, isopropyl acid phosphate.*

39. Organic acid substances and solutions and mixtures of organic acid substances (such as preparations and wastes) which cannot be classified under other collective headings, such as:

- (a) . . .
- (b) *Acetopolysilanes, acetoxysilanes, ethyltriacetoxysilane;*
- (c) . . .

## B. BASIC SUBSTANCES

### *Inorganic substances*

41. Basic solid compounds of alkali metals, such as:

- (b) *Caesium hydroxide, lithium hydroxide, potassium hydroxide (caustic potash), sodium hydroxide (caustic soda), potassium oxide, sodium oxide;*

- (c) *Soda lime* (mixtures of caustic soda and quicklime).
42. Solutions of alkaline substances, such as:
- (b) *Solutions of sodium aluminate, solutions of potassium hydroxide (potash lye) and of sodium hydroxide (soda lye), alkaline solutions of cresols, of phenol and of xyenols, alkaline residues* (e.g. from oil refining);
- (c) . . .
43. Ammonia solutions:
- (c) *Ammonia solutions* containing not less than 10% and not more than 35% ammonia (NH<sub>3</sub>).
- NOTE. 1. Ammonia solutions containing more than 35% ammonia (NH<sub>3</sub>) are substances of Class 2 [see marg. 201, item 9 (at)].
2. Ammonia solutions containing less than 10% ammonia (NH<sub>3</sub>) are not subject to the requirements of RID.
44. Hydrazine and its aqueous solutions.
- (a) *Anhydrous hydrazine, aqueous solutions of hydrazine containing more than 64% hydrazine (N<sub>2</sub>H<sub>4</sub>)*;
- (b) *Aqueous solutions of hydrazine containing not more than 64% hydrazine (N<sub>2</sub>H<sub>4</sub>)*;
- (c) . . .
45. Sulphides and hydrogensulphides, such as:
- (b) *Solutions of ammonium sulphide and solutions of ammonium polysulphide; potassium sulphide and sodium sulphide containing not less than 30% water of crystallization and sodium hydrogensulphide containing not less than 25% water of crystallization*;
- NOTE. Anhydrous potassium sulphide and anhydrous sodium sulphide and their hydrates containing less than 30% water of crystallization, and sodium hydrogensulphide containing less than 25% water of crystallization, are substances of Class 4.2 [see marg. 431, item 6 (c)]
- (c) *Aqueous solutions of sulphides and of hydrogensulphides, with the exception of ammonium sulphide in solution and ammonium polysulphide in solution.*
46. Inorganic basic substances and solutions and mixtures of inorganic basic substances (such as preparations and wastes) which cannot be classified under other collective headings, such as:
- (a) . . .
- (b) . . .
- (c) . . .

*Organic substances*

51. Tetra-alkylammonium hydroxides, such as:
- (b) *Tetramethylammonium hydroxide*;
- (c) . . .
52. Solid alkylamines, arylamines and polyamines, such as:
- (c) *Diethylenediamine (piperazine), hexamethylenediamine.*
53. Liquid alkylamines, arylamines and polyamines, such as:
- (b) *Benzyl dimethylamine, cyclohexylamine, solutions of cupriethylenediamine, di-n-butylamine, diethylenetriamine, N,N-diethylethylenediamine, N,N-di-*



*methylcyclohexylamine, ethylenediamine, solutions of hexamethylenediamine, triethylenetetramine;*

- (c) *Benzylamine, bisaminopropylamine (dipropylenetriamine, 3,3'-iminobispropylamine), dicyclohexylamine, diethylaminopropylamine, 2-ethylhexylamine, isophoronediamine, pentaethylenehexamine, tetraethylenepentamine, tributylamine, trimethylcyclohexylamine, trimethylhexamethylenediamines.*

54. Amino-alcohols, such as:

- (c) *Ethanolamine* and its solutions.

55. Organic basic substances and solutions and mixtures of organic basic substances (such as preparations and wastes) which cannot be classified under other collective headings, such as:

- (a) . . .  
(b) . . .  
(c) . . .

C. OTHER CORROSIVE SUBSTANCES

61. Hypochlorite solutions, such as:

- (b) *Solutions of potassium hypochlorite and solutions of sodium hypochlorite containing not less than 16% available chlorine.*  
(c) *Solutions of potassium hypochlorite and solutions of sodium hypochlorite containing more than 5% but less than 16% available chlorine.*

NOTE. Solutions of hypochlorite containing not more than 5% available chlorine are not subject to the requirements of RID.

62. Solutions of hydrogen peroxide:

- (b) *Aqueous solutions of hydrogen peroxide containing not less than 20% and not more than 60% hydrogen peroxide;*  
(c) *Aqueous solutions of hydrogen peroxide containing 8% or more but less than 20% hydrogen peroxide.*

NOTE. 1. Solutions containing more than 60% hydrogen peroxide are substances of Class 5.1 (see marg. 501, item 1).

2. Solutions containing less than 8% hydrogen peroxide are not subject to the requirements of RID.

63. Formaldehyde solutions:

- (c) *Aqueous solutions of formaldehyde (e.g. formalin) with not less than 5% formaldehyde, also with not more than 35% methanol.*

NOTE. Aqueous solutions of formaldehyde with less than 5% formaldehyde are not subject to the requirements of RID.

64. Esters of organic and inorganic acids whose properties are predominantly corrosive, such as:

- (a) Chloroformic esters, such as: *allyl chloroformate, benzyl chloroformate;*  
(b) . . .  
(c) . . .

NOTE. Esters of organic and inorganic acids whose properties are predominantly toxic are substances of Class 6.1 (see marg. 601, items 16 and 17).

65. Solid corrosive substances and mixtures (such as preparations and wastes) which cannot be classified under other collective headings, such as:

- (a) . . .

(b) *Diphenylmethyl bromide*;

(c) . . .

66. Liquid corrosive substances, solutions and mixtures (such as preparations and wastes) which cannot be classified under other collective headings, such as:

(a) . . .

(b) *Benzotrichloride (trichloromethylbenzene), 1-pentol (3-methyl-2-pentene-4-yne-1-ol)*;

(c) . . .

#### D. EMPTY PACKAGINGS

71. *Empty packagings* including *empty intermediate bulk containers (IBCs), empty tank wagons, empty tank-containers and empty small bulk containers*, uncleaned, which have contained substances of Class 8.

801a Substances of items 1 to 5, 7 to 11, 21 to 23, 26, 27, 31 to 39, 41 to 46, 51 to 55 and 61 to 66, carried in conformity with the following provisions, are not subject to the requirements of Section 2, "Conditions of Carriage";

(1) (a) Substances classified under (a) of each item:

— Liquids: not more than 100 ml per inner packaging and not more than 400 ml per package;

— Solids: not more than 500 g per inner packaging and not more than 2 kg per package.

(b) Substances classified under (b) of each item:

— Liquids: not more than 1 litre per inner packaging and not more than 4 litres per package;

— Solids: not more than 3 kg per inner packaging and not more than 12 kg per package.

(c) Substances classified under (c) of each item:

— Liquids: not more than 3 litres per inner packaging and not more than 12 litres per package;

— Solids: not more than 6 kg per inner packaging and not more than 24 kg per package.

These quantities of substances shall be carried in combination packagings which at least meet the conditions of marg. 1538.

The "General conditions of packing" of marg. 1500 (1), (2) and (5) to (7) shall be observed.

(2) Alkaline solutions or acids in storage batteries with metal or plastics casings. Batteries shall be so secured as to prevent short circuiting, sliding, falling or damage; they shall be fitted with means of handling. Means of handling are not, however, necessary, if the batteries are stacked and adequately secured, for example, on pallets. No dangerous trace of alkali or acid shall appear outside the package.

## 2. Conditions of carriage

(The conditions of carriage for empty packagings are included under F.)

### A. PACKAGES

#### 1. General conditions of packing

802 (1) Packagings shall satisfy the conditions of Appendix V, unless special conditions for the packing of certain substances are prescribed in section A.2.

(2) Intermediate bulk containers (IBCs) shall satisfy the conditions of Appendix VI.

(3) In accordance with the provisions of marg. 800 (1) and 1511 (2) or 1600 (3), the following shall be used:

— Packagings of packing group I, marked with the letter “X”, for the highly corrosive substances classified under (a) of each item;

— Packagings of packing groups II or, 1, marked with the letter “Y” or “X”, or IBCs of packing group II, marked with the letter “Y”, for the corrosive substances classified under (b) of each item;

— Packagings of packing groups III, II or I, marked with the letter “Z”, “Y”, or “X”, or IBCs of packing group III or II, marked with the letter “Z” or “Y”, for the slightly corrosive substances classified under (c) of each item.

(4) For the carriage of substances of Class 8 in tank wagons, see Appendix XI, in tank-containers, see Appendix X. For the carriage in bulk of solid wastes classified under letter (c) of the various items, see marg. 817 and 818 (3).

## 2. *Packing of individual substances*

803 Anhydrous hydrofluoric acid and aqueous solutions of hydrofluoric acid containing more than 85% anhydrous hydrofluoric acid of item 6 or molybdenum hexafluoride of item 25 shall be packed in pressure receptacles made of carbon steel or suitable alloy steel. The following pressure receptacles shall be permitted:

(a) Cylinders having a capacity not exceeding 150 litres;

(b) Receptacles having a capacity of not less than 100 litres and not more than 1,000 litres (for example, cylindrical receptacles fitted with rolling hoops or receptacles mounted on skids).

The pressure receptacles shall satisfy the relevant requirements of Class 2 [see marg. 221, 213 (1) and (2), 215, 216 and 218].

The wall thickness of the pressure receptacles shall not be less than 3 mm.

Before being used for the first time, pressure receptacles shall be subjected to a hydraulic pressure test at a pressure of not less than 1 MPa (10 bar) (gauge pressure). The pressure test shall be repeated every eight years and shall be accompanied by an internal inspection of the pressure receptacles and a check of their equipment. In addition, the resistance of the pressure receptacles to corrosion shall be checked by means of suitable instruments (e.g. by ultrasound), and the conditions of the equipment verified, every two years.

The tests and inspections shall be carried out under the supervision of an expert approved by the competent authority.

The maximum mass of the contents per litre of capacity must not exceed:

0.84 kg for anhydrous hydrofluoric acid and aqueous solutions of hydrofluoric acid;

1.93 kg for molybdenum hexafluoride.

804 (1) Bromine of item 24 shall be packed in glass receptacles containing not more than 2.5 litres each, which shall be placed in combination packagings conforming to marg. 1538. The combination packagings shall be tested and approved in accordance with Appendix V for packing group I.

(2) Bromine containing less than 0.005% water, or between 0.005% and 0.2% water, provided that in the latter case measures are taken to prevent

corrosion of the lining of the receptacles, may also be carried in receptacles satisfying the following conditions:

- (a) The receptacles shall be made of steel and be equipped with a leakproof lining made of lead or of some other material affording equivalent protection and with a hermetic closure; receptacles made of monel metal or nickel, or with a nickel lining, shall also be permitted.
- (b) Their capacity shall not exceed 450 litres.
- (c) The receptacles shall not be filled to more than 92% of their capacity or more than 2.86 kg per litre of capacity.
- (d) The receptacles shall be welded and designed for a calculation pressure of not less than 2.1 MPa (21 bar) (gauge pressure). The materials and workmanship shall in other respects meet the relevant requirements of Class 2 [see marg. 211 (1)]. The initial test of unlined steel receptacles shall be subject to the relevant requirements of Class 2 [see marg. 215 (1) and 216 (1) A and B].
- (e) The closures shall project as little as possible from the receptacle and be fitted with a protective cap. The closures and cap shall be fitted with gaskets made of a material not capable of being attacked by bromine. The closures shall be in the upper part of the receptacle in such a manner that they can in no case be in permanent contact with the liquid phase.
- (f) The receptacles shall be provided with fittings enabling them to stand stably upright, and with lifting attachments (rings, flanges, etc.) at the top, which shall be tested at twice the working load.

(3) Before being put into service, receptacles in conformity with (2) above shall be subjected to a leakproofness test at a pressure of at least 200 kPa (2 bar) (gauge pressure). The leakproofness test shall be repeated every two years and shall be accompanied by an internal inspection of the receptacle and a check of its tare. This test and inspection shall be carried out under the supervision of an expert approved by the competent authority.

(4) Receptacles in conformity with (2) shall bear, in clearly legible and durable characters:

- (a) The name or mark of the maker and the number of the receptacle;
- (b) The word "Bromine";
- (c) The tare of the receptacle and its maximum permitted mass when filled;
- (d) The date (month and year) of the initial test and of the most recent test undergone;
- (e) The stamp of the expert who carried out the test and inspections.

805 (1) Substances classified under (a) of the various items of marg. 801 shall be packed:

- (a) In non-removable head steel drums conforming to marg. 1520, or
- (b) In non-removable head aluminium drums conforming to marg. 1521, or
- (c) In non-removable head steel jerricans conforming to marg. 1522, or
- (d) In non-removable head plastics drums of a capacity not exceeding 60 litres or non-removable head plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings with inner receptacles of glass, plastics or metal conforming to marg. 1538, or
- (g) In composite packagings (glass, porcelain or stoneware) conforming to marg. 1539.

NOTE 1 to (d). The permissible period of use for receptacles intended for the carriage of nitric acid of item 2 (a) and aqueous solutions of hydrofluoric acid of item 7 (a) shall be two years from the date of their manufacture.

NOTE 2 to (f) and (g). Inner receptacles of glass shall not be permitted for fluorides of items 7 (a), 10 (a), 26 (a) [or]<sup>1</sup> 33 (a).

(2) Solid substances within the meaning of marg. 800 (2) may also be packed:

- (a) In removable-head drums conforming to marg. 1520 for steel, 1521 for aluminium, 1523 for plywood, 1525 for fibreboard, or 1526 for plastics material, or in removable-head jerricans conforming to marg. 1522 for steel or 1526 for plastics material, if necessary with one or more sift-proof inner bags; or
- (b) In combination packagings conforming to marg. 1538, with one or more sift-proof inner bags.

806 (1) Substances classified under (b) of the various items of marg. 801 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538, or
- (g) In composite packagings (glass, porcelain or stoneware) conforming to marg. 1539.

NOTE 1 to (a), (b), (c) and (d). Simplified conditions are applicable to removable-head drums and jerricans for viscous substances having a viscosity above 200 mm<sup>2</sup>/s at 23°C and for solid substances (see marg. 1512, 1533, 1554 and 1560).

NOTE 2 to (d). The permissible period of use for receptacles intended for the carriage of nitric acid containing more than 55% pure acid of item 2 (b) and aqueous solutions of hydrofluoric acid of item 7 (b) shall be two years from the date of their manufacture.

NOTE 3 to (f) and (g). Inner receptacles of glass shall not be permitted for fluorides of items 7 (b), 8 (b), 9 (b), 10 (b), 26 (b) or 33 (b).

(2) Substances classified under (b) of the various items of marg. 801 which have a vapour pressure at 50°C of not more than 110 kPa (1.10 bar) may also be packed in metallic IBCs conforming to marg. 1611.

(3) Solid substances within the meaning of marg. 800 (2) may also be packed:

- (a) In drums conforming to marg. 1523 for plywood or 1525 for fibreboard, if necessary with one or more sift-proof inner bags; or
- (b) In waterproof bags made of textile material in conformity with marg. 1533, woven plastics material in conformity with marg. 1534, plastics film in conformity with marg. 1535, or in water-resistant paper bags in conformity with marg. 1536, provided the goods are carried as a full wagon load or the bags secured on pallets; or
- (c) In flexible IBCs conforming to marg. 1621, with the exception of IBCs of types 13H1, 13L1 and 13M1, provided that transport is limited to full wagon loads.

<sup>1</sup> The text between brackets reads "and" in the authentic French text — Le texte entre crochets se lit « et » dans le texte authentique français.

807 (1) Substances classified under (c) of the various items of marg. 801 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538, or
- (g) In composite packagings (glass, porcelain or stoneware) conforming to marg. 1539, or
- (h) In light gauge metal packagings conforming to marg. 1540.

NOTE to (a), (b), (c), (d) and (h). Simplified conditions are applicable to removable-head drums, jerricans and light gauge metal packagings for viscous substances having a viscosity above 200 mm<sup>2</sup>/s at 23°C and for solid substances (see marg. 1512, 1552 to 1554 and 1560).

(2) Substances classified under (c) of the various items of marg. 801 which have a vapour pressure at 50°C of not more than 110 kPa (1.10 bar) may also be packed in metallic IBCs conforming to marg. 1611.

(3) Solid substances within the meaning of marg. 800 (2) may also be packed:

- (a) In drums conforming to marg. 1523 for plywood, or 1525 for fibreboard, if necessary with one or more sift-proof inner bags; or
- (b) In waterproof bags made of textile material in conformity with marg. 1533, woven plastics material in conformity with marg. 1534, plastics film in conformity with marg. 1535, or in water-resistant paper bags in conformity with marg. 1536, or
- (c) In flexible IBCs conforming to marg. 1621, with the exception of IBCs of types 13H1, 13L1 and 13M1.

808 Packagings, including IBCs, containing substances of items 61 or 62 shall be fitted with a vent conforming to marg. 1500 (8) or 1607 (4) respectively.

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### 3. *Mixed packing*

811 (1) Substances covered by the same item number may be packed together in a combination packaging conforming to marg. 1538.

(2) Substances of different items of Class 8 in quantities not exceeding, per receptacle, 3 litres for liquids and/or 5 kg for solids, may be packed together and/or with goods not subject to the requirements of RID, in a combination packaging conforming to marg. 1538 if they do not react dangerously with one another.

(3) Except as otherwise specially provided below, substances of Class 8, in quantities not exceeding, per receptacle, 3 litres for liquids and/or 5 kg for solids, may be packed together in a combination packaging conforming to marg. 1538 with substances or articles of other classes — provided that mixed packing is also permitted for the substances and articles of these classes — and/or with goods which are not subject to the requirements of RID, if they do not react dangerously with one another.

(4) The following are considered dangerous reactions:

- (a) Combustion and/or giving off considerable heat;

- (b) Emission of inflammable and/or toxic gases;  
 (c) Formation of corrosive liquids;  
 (d) Formation of unstable substances.

(5) The mixed packing of acid substances with basic substances in a package shall not be permitted if the two substances are packed in fragile receptacles.

(6) The requirements of marg. 4 (7), 8 and 802 shall be complied with.

(7) If wooden or fibreboard boxes are used, a package may not weigh more than 100 kg.

*Special conditions*

Item	Description of substance	Maximum net filling quantity		Special requirements
		per receptacle	per package	
4	Perchloric acid containing not more than 50% pure acid	Mixed packing not allowed except with perchloric acid of Class 5.1 (see marg. 501, item 3)		
6	Anhydrous hydrofluoric acid, aqueous solutions of hydrofluoric acid containing more than 85% anhydrous hydrofluoric acid	Mixed packing not allowed		
24	Bromine			
25	Molybdenum hexafluoride			
Liquid substances classified under (a) of each item		0.5 litre	1 litre	Shall not be packed together with substances of Classes 1, 5.2 or 7.

4. *Marking and danger labels on packages* (see Appendix IX)

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(1) Packages containing substances of this class shall bear a label conforming to model No. 8.

(2) If liquid substances are packed in composite packagings (glass, porcelain or stoneware) conforming to marg. 1539 of a capacity exceeding 5 litres, the packages shall bear two labels conforming to model No. 8 (see marg. 10).

(3) Packages containing substances having a flash-point of 55°C or below shall in addition bear a label conforming to model No. 3, those containing oleum (fuming sulphuric acid) of item 1 (a) or substances of items 6, 7, 24 to 26 or 44 a label conforming to model No. 6.1 and those containing substances of item 62 a label conforming to model No. 5.

(4) Packages containing fragile receptacles not visible from the outside shall bear on two opposite sides a label conforming to model No. 12.

(5) Packages containing liquid substances in receptacles the closures of which are not visible from the outside, as well as packages containing vented receptacles or vented receptacles without outer packaging, shall bear on two opposite sides a label conforming to model No. 11.

#### B. METHOD OF DISPATCH AND RESTRICTIONS ON FORWARDING

- 813 With the exception of substances of items 6, 24 and 25 and substances classified under (a) of each item, packages containing other substances of this class may be sent by express parcel if they contain:
- Substances classified under (b) of each item, up to 4 litres per package for liquids and 12 kg per package for solids;
  - Substances classified under (c) of each item, up to 12 litres per package for liquids and 24 kg per package for solids.

#### C. PARTICULARS IN THE CONSIGNMENT NOTE

- 814 (1) The description of the goods in the consignment note shall conform to one of the names *in italics* in marg. 801. If the substance is not mentioned by name, the chemical name shall be entered. The description of the goods shall be followed by *particulars of the class, the item number (adding the letter where given), and the initials "RID"* e.g. 8, item 1 (a), *RID*. For the carriage of wastes [see marg. 3 (4)] the description of the goods shall be: 'Waste, containing. . .', the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s), e.g. "*Waste, containing soda lye, 8, item 42 (b), RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed, the description of the substance shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

(2) For bromine containing 0.005% to 0.2% water and carried in receptacles in conformity with marg. 804 (2), the sender shall certify in the consignment note: "*Measures taken to prevent corrosion of the lining of the receptacles.*"

(3) For consignments of chemically unstable substances, the sender shall certify in the consignment note: "*Measures taken in accordance with marg. 800 (5)*".

#### D. TRANSPORT EQUIPMENT

##### 1. Conditions relating to wagons and loading

###### a. For packages

- 815 (1) For the use of wagons fitted with electrical equipment for the carriage of inflammable liquids of Class 8 with a flash-point of 55°C or below, and substances of items 2 (a) and 3 (a), in packages of more than 50 kg, see Appendix IV.
- (2) Wagons intended to carry packages containing substances of items 2 (a) or 3 (a) must be carefully cleaned and in particular be free of all combustible debris (straw, hay, paper, etc.).
- 816 (1) Packages shall be so loaded in wagons that they cannot shift dangerously, overturn or fall.
- Packages bearing two labels conforming to model No. 8 in accordance with marg. 812 (2) or labels conforming to model No. 12 in accordance with marg. 812 (4) shall be protected against any damage that might be caused by other packages.
- (2) Packages containing substances of items 2 (a), 3 (a), 61 or 62 shall rest on a stout floor and be placed with their openings at the top. The use of readily inflammable materials (e.g. straw) for stowing such packages is prohibited.



b. *For carriage in bulk*

817 Substances of item 23 and solid wastes classified under letter (c) of the various items may be carried in bulk in sheeted open wagons or in movable-roof wagons. The wagons shall be equipped with a suitable and sufficiently stout inner lining. Open wagons shall be so arranged that the sheet cannot touch the load.

c. *Carriage in small containers*

818 (1) Packages containing substances of this class may be carried in small containers.

(2) The prohibitions on mixed loading laid down in marg. 820 shall also be applied in small containers.

(3) Substances of item 23 and solid wastes classified under letter (c) of the various items may also be carried in bulk in small containers of the closed type with complete walls and with a suitable lining.

2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

819 (1) Wagons, tank wagons and tank-containers containing substances of this class, as well as wagons carrying such tank-containers, shall bear on both sides a label conforming to model No. 8.

(2) Wagons, tank wagons and tank-containers containing substances having a flash-point of 55°C or below, as well as wagons carrying such tank-containers, shall in addition bear on both sides a label conforming to model No. 3; those containing oleum (fuming sulphuric acid) of item 1 (a) or substances of items 6, 7, 24 to 26 or 44, a label conforming to model No. 6.1; those containing substances of item 62, a label conforming to model No. 5.

(3) Small containers shall be labelled in accordance with marg. 812 (1) and (3). Small containers containing packages bearing labels conforming to model No. 12 shall themselves also bear that label.

E. PROHIBITIONS ON MIXED LOADING

820 (1) Substances of Class 8 contained in packages bearing one or two labels conforming to model No. 8 must not be loaded in the same wagon together with substances or articles of Classes 1 or 5.2, contained in packages bearing a label conforming to models Nos. 1, 1.4 or 1.5.

(2) Liquid substances of Class 8 contained in packages bearing two labels conforming to model No. 8 must not be loaded in the same wagon together with:

(a) Substances of Classes 3, 4.1 or 4.2 contained in packages bearing two labels conforming to models Nos. 3, 4.1 or 4.2;

(b) Substances of Classes 5.1 or 5.2 contained in packages bearing two labels conforming to model No. 5;

(c) Substances of Class 6.1 contained in packages bearing two labels conforming to models Nos. 6.1 or 6.1A

821 Separate consignment notes must be made out for consignments which may not be loaded together in the same wagon.

F. EMPTY PACKAGINGS

822 (1) Empty packagings including IBCs, tank wagons, tank-containers and small containers, uncleaned, of item 71 shall be closed in the same manner and with the same degree of leakproofness as if they were full.

(2) Empty packagings including IBCs, tank wagons, tank-containers and small containers, uncleaned, of item 71 shall bear the same danger labels as if they were full.

(3) The description in the consignment note shall conform to one of the descriptions *in italics* in item 71, e.g.: “*Empty packaging, 8, item 71, RID*”. A cross shall be inserted in the appropriate box on the consignment note. For empty tank wagons, tank-containers and small containers, uncleaned, this description shall be completed by adding the words “Last load” together with the name and item number of the goods last loaded, e.g. “*Last load: sulphuric acid, item 1 (b)*”. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed the name of the goods last loaded shall also be preceded by the *hazard and substance identification numbers* in accordance with marg. 1801 (3) e.g. “*Last load 80 1830 sulphuric acid, item 1 (b)*”.

#### G. OTHER REQUIREMENTS

823 No requirements.  
824-  
899

### CLASS 9. MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES

#### 1. *List of substances*

900 The heading of Class 9 covers substances and articles which, during carriage, present a danger not covered by the headings of other classes. Those substances and articles listed in marg. 901 are subject to the conditions set out in marg. 901 to 923 and are then considered as substances and articles of RID.<sup>(1)</sup>

Substances of Class 9 which are listed under the various items of marg. 901 shall be assigned to one of the following groups according to their degree of danger:

- (b) Dangerous substances
- (c) Substances presenting a minor danger.

NOTE. For the classification of solutions and mixtures (such as preparations and wastes), see also marg. 3 (3).

901 A. SUBSTANCES WHICH, ON INHALATION AS FINE DUST, MAY ENDANGER HEALTH

1. Asbestos and mixtures containing asbestos, such as:

- (b) *2212 blue asbestos* (crocidolite), *2212 brown asbestos* (amosite or mysorite),
- (c) *2590 white asbestos* (chrysotile, actinolite, anthophyllite or tremolite)

NOTE. 1. Talc containing tremolite and/or actinolite is a substance of item 1 (c), identification No. 2590.

2. Asbestos which is immersed or fixed in a natural or artificial binder material (such as cement, plastics, asphalt, resins or mineral ore) and manufactured articles containing asbestos are not subject to the requirements of RID.

<sup>(1)</sup> For the quantities of substances or articles listed in marg. 901 which are not subject to the requirements of Section 2 “Conditions of Carriage”, see marg. 901a.

B. SUBSTANCES AND APPARATUS WHICH IN THE EVENT OF FIRE MAY FORM DIOXINS

2. Polychlorinated biphenyls (PCBs) and mixtures containing PCBs:

(b) 2315 polychlorinated biphenyls

NOTE. Mixtures with a PCB content of not more than 50 mg/kg are not subject to the requirements of RID.

3. Apparatus containing PCBs or PCB mixtures, such as transformers, condensers and hydraulic apparatus.

C. EMPTY PACKAGINGS

NOTE. Empty packagings with residues from their previous contents adhering to the outside are not to be accepted for carriage.

11. *Empty packagings, empty tank wagons, and empty tank-containers, uncleaned, having contained substances of Class 9.*

901a (1) Substances classified under (b) or (c) of items 1 and 2 carried in conformity with the following provisions are not subject to the requirements of Section 2, "Conditions of Carriage":

(a) Substances classified under letter (b) of each item:

- Liquids: up to 500 ml per inner packaging and up to 2 litres per package;
- Solids: up to 1 kg per inner packaging and up to 4 kg per package.

(b) Substances classified under letter (c) of each item:

- Liquids: up to 3 litres per inner packaging and up to 12 litres per package;
- Solids: up to 6 kg per inner packaging and up to 24 kg per package.

These quantities of substances shall be carried in combination packagings conforming at least to the conditions of marg. 1538.

The "General conditions of packing" of marg. 1500 (1), (2) and (5) to (7) shall be observed.

(2) Apparatus of item 3, containing liquids of item 2 (b), up to 500 ml per apparatus and up to 2 litres per package, are not subject to the requirements of Section 2, "Conditions of Carriage". The apparatus shall, however, be packed in conformity with marg. 905 (1) (a).

2. *Conditions of carriage*

(The requirements relating to empty packagings are included under F.)

A. PACKAGES

1. *General conditions of packing*

902 (1) Packagings shall satisfy the conditions of Appendix V, unless special conditions for the packing of certain substances are prescribed in section A.2.

(2) In accordance with the provisions of marg. 900 and 1511 (2), the following shall be used:

— Packagings of packing groups II or I, marked with the letter "Y" or "X", for the dangerous substances classified under (b) of each item;

— Packagings of packing groups III, II or I, marked with the letter “Z”, “Y” or “X”, for the less dangerous substances classified under (c) of each item.

(3) For the carriage of substances of Class 9 in tank wagons, see Appendix XI, in tank-containers, see Appendix X.

2. *Packing of individual substances and articles*

903 (1) Substances classified under (b) of the various items of marg. 901 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538.

NOTE to (a), (b), (c) and (d). Simplified conditions are applicable to removable-head drums and jerricans for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C and for solids (see marg. 1512, 1553, 1554 and 1560).

(2) Solid substances with a melting-point above 45°C may also be packed:

- (a) In drums conforming to marg. 1523 for plywood or 1525 for fibreboard, if necessary with one or more sift-proof inner bags, or
- (b) In water-resistant bags conforming to marg. 1533 for textile material, 1534 for woven plastics material, 1535 for plastics film or 1536 for water-resistant paper, provided the goods are dispatched as a full wagon load or the bags are secured on pallets.

904 (1) Substances classified under (c) of the various items of marg. 901 shall be packed:

- (a) In steel drums conforming to marg. 1520, or
- (b) In aluminium drums conforming to marg. 1521, or
- (c) In steel jerricans conforming to marg. 1522, or
- (d) In plastics drums or plastics jerricans conforming to marg. 1526, or
- (e) In composite packagings (plastics material) conforming to marg. 1537, or
- (f) In combination packagings conforming to marg. 1538, or
- (g) In composite packagings (glass, porcelain or stoneware) conforming to marg. 1539, or
- (h) In light gauge metal packagings conforming to marg. 1540.

NOTE to (a), (b), (c), (d) and (h): Simplified conditions are applicable to removable-head drums, jerricans and light gauge metal packagings for viscous substances having a viscosity of more than 200 mm<sup>2</sup>/s at 23°C and for solids (see marg. 1512, 1552 to 1554 and 1560).

(2) Solid substances with a melting-point above 45°C may also be packed:

- (a) In drums conforming to marg. 1523 for plywood or 1525 for fibreboard, if necessary with one or more sift-proof inner bags, or
- (b) In water-resistant bags conforming to marg. 1533 for textile material, 1534 for woven plastics material, 1535 for plastics film or 1536 for water-resistant paper.

- 905 (1) Apparatus of item 3 shall be packed:
- (a) In leakproof packagings, or
  - (b) In leakproof containers.
- (2) Apparatus of item 3 may also be carried in leakproof receptacles (containment vessels) which shall be able to hold, in addition to the apparatus, at least 1.25 times the substances of item 2 (b) present in the apparatus. There shall be sufficient inert material in the receptacles to absorb at least 1.1 times the substances of item 2 (b) which are contained in the apparatus. The apparatus and the receptacles shall be so designed as to avoid any leak of liquid under normal conditions of carriage.
- 906-910
3. *Mixed packing*
- 911 (1) Substances covered by the same item number may be packed together in a combination packaging conforming to marg. 1538.
- (2) Substances of different items of Class 9 in quantities not exceeding, per receptacle, 3 litres for liquids and/or 5 kg for solids, may be packed together and/or with goods not subject to the requirements of RID, in a combination packaging conforming to marg. 1538.
- (3) Substances of Class 9, in quantities not exceeding, per receptacle, 3 litres for liquids and/or 5 kg for solids, may be packed together in a combination packaging conforming to marg. 1538 with substances or articles of other classes — provided that mixed packing is also permitted for the substances and articles of these classes, and/or with goods which are not subject to the requirements of RID, provided they do not react dangerously with one another.
- (4) The following are considered dangerous reactions:
- (a) Combustion and/or giving off considerable heat,
  - (b) Emission of inflammable and/or toxic gases,
  - (c) Formation of corrosive liquids,
  - (d) Formation of unstable substances.
- (5) The requirements of marg. 4 (7), 8 and 902 shall be observed.
- (6) If wooden or fibreboard boxes are used, a package shall not weigh more than 100 kg.
4. *Marking and danger labels on packages* (see Appendix IX)
- 912 (1) Packages containing substances of this Class shall bear a label conforming to model No. 9. Packages containing substances having a flash-point up to and including 55°C shall in addition bear a label conforming to model No. 3.
- (2) Packages containing fragile receptacles not visible from the outside shall bear on two opposite sides a label conforming to model No. 12.
- (3) Packages containing liquids in receptacles the closures of which are not visible from the outside shall bear on two opposite sides a label conforming to model No. 11.
- B. METHOD OF DISPATCH AND RESTRICTIONS ON FORWARDING
- 913 Packages containing substances of this Class may be forwarded as express parcels, if they contain:
- Substances classified under (b) of each item, up to 2 litres per package for liquids and up to 4 kg per package for solids;

— Substances classified under (c) of each item, up to 12 litres per package for liquids and up to 24 kg per package for solids.

#### C. PARTICULARS IN THE CONSIGNMENT NOTE

914 The description of the goods in the consignment note shall conform to one of the identification numbers and one of the names *in italics* in marg. 901. The description of the goods shall be followed by *particulars of the class, the item number (together with the letter, if any) and the initials "RID"*, e.g. 9, item 1 (b), *RID*.

For the carriage of wastes [see marg. 3 (4)], the description of the goods shall be: "*Waste, containing, . . .*", the component(s) which has/have been used for the classification of the waste under marg. 3 (3) to be entered under its/their chemical name(s) e.g. "*Waste containing 2212 brown asbestos, 9, item 1 (b), RID*". In general, not more than the two components which most predominantly contribute to the danger or dangers of the waste need be shown. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed, the description of the substance shall also be preceded by the *hazard identification number* in accordance with marg. 1801 (3). A cross shall be inserted in the appropriate box on the consignment note.

#### D. TRANSPORT EQUIPMENT

##### 1. *Conditions relating to wagons and their loading*

###### a. *For packages*

915 (1) Packages bearing labels conforming to model No. 9 shall be kept apart, in wagons, from foodstuffs, other articles of consumption and animal feedstuffs.

(2) Packages shall be so loaded in wagons that they cannot shift dangerously, tip over or fall. Packages bearing labels conforming to model No. 12 in accordance with marg. 912 (2) shall be protected against any damage that might be caused by other packages.

(3) Wagons which have contained substances of Class 9 as full wagon loads shall be checked, after unloading, for any residues of the load (see also marg. 923).

###### b. *For carriage in bulk*

916 (Reserved)

###### c. *Carriage in small containers*

917 (1) Packages containing substances of this Class may be carried in small containers.

(2) The prohibition of mixed loading laid down in marg. 919 shall also be observed inside small containers.

(3) The requirements of marg. 915 (3) and 923 are also applicable by analogy to carriage in small containers.

##### 2. *Marking and danger labels on wagons, tank wagons, tank-containers and small containers (see Appendix IX)*

918 (1) Wagons, tank wagons and tank-containers carrying substances of Class 9 and wagons carrying such tank-containers shall bear on both sides a label conforming to model No. 9.

(2) Wagons, tank wagons and tank-containers carrying substances with a flash-point of 55°C or below, and wagons carrying such tank-containers, shall in addition bear on both sides a label conforming to model No. 3.

(3) Small containers shall be labelled in accordance with marg. 912 (1). Small containers containing packages bearing labels conforming to model No. 12 shall also bear that label.

#### E. PROHIBITION OF MIXED LOADING

919 Substances of Class 9 contained in packages bearing a label conforming to model No. 9 shall not be loaded in the same wagon together with substances and articles of Classes 1 and 5.2 contained in packages bearing a label conforming to model No. 1, 1.4 or 1.5.

920 Separate consignment notes shall be made out for consignments which may not be loaded together in the same wagon.

#### F. EMPTY PACKAGINGS

921 (1) If the empty packagings, uncleaned, of item 11 are bags, these shall be placed in boxes or waterproof bags to prevent any leakage of the substance.

(2) Other empty packagings, tank wagons and tank-containers, uncleaned, of item 11 shall be closed in the same way and present the same degree of leakproofness as if they were full.

(3) Empty packagings, tank wagons and tank-containers, uncleaned, of item 11 shall bear the same danger labels as if they were full.

(4) Empty packagings, uncleaned, of item 11 shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in wagons and in warehouses.

(5) The description in the consignment note shall conform to one of the names *in italics* in item 11, e.g. *Empty packaging, 9, item 11, RID*. A cross shall be inserted in the appropriate box on the consignment note. For empty tank wagons or tank-containers, uncleaned, this description shall be completed by adding the words "Last load" together with the name and item number of the goods last loaded, e.g. *Last load: polychlorinated biphenyls, item 2 (b)*. For carriage in tank wagons or tank-containers, when a marking in accordance with Appendix VIII is prescribed, the name of the goods last loaded shall also be preceded by the hazard identification number in accordance with marg. 1801 (3) e.g. "Last load 90 2315 polychlorinated biphenyls, item 2 (b)".

#### G. OTHER REQUIREMENTS

922 Packages bearing a label conforming to model No. 9 shall be kept apart from foodstuffs, other articles of consumption and animal feedstuffs in warehouses.

923 If any substances of this class have leaked and been spilled in a wagon, the latter may not be re-used until after it has been thoroughly cleaned, and, if necessary, decontaminated. Any other goods and articles which were carried in the same wagon shall be examined for possible contamination.

924-  
999

### PART III. APPENDICES

#### APPENDIX I

1000-  
1099

A. STABILITY AND SAFETY CONDITIONS RELATING TO EXPLOSIVE SUBSTANCES,  
INFLAMMABLE SOLIDS AND ORGANIC PEROXIDES

1100

*General*

The following conditions are the minima for substances and articles accepted for carriage.

1101

*Conditions relating to explosive substances and articles*

(1) *Testing for assignment to Class 1*

Any substance or article having or suspected of having explosive properties shall be considered for assignment to Class 1 in accordance with the tests, procedures and criteria prescribed in Part I ("Tests and criteria for the classification of explosive substances and articles") of the "Recommendations on the Transport of Dangerous Goods: Tests and Criteria" published by the United Nations Organization as document ST/SG/AC.10/11, first edition (hereafter called the Test Manual).

A substance or article assigned to Class 1 can only be accepted for carriage when it has been assigned to a name listed in marg. 101 and meets the criteria of the Test Manual.

(2) *Classification*

The substances and articles of Class 1 shall be assigned to the appropriate division and compatibility group in accordance with the procedures and criteria prescribed in the Test Manual.

(3) *Assignment to an item number, identification number and name*

The substances and articles of Class 1 shall be assigned to an item number, an identification number and a name listed in Table 1 of marg. 101.

Interpretation of the names of substances and articles in the individual item numbers of Table 1 of marg. 101 shall be based upon the glossary in marg. 1170.

(4) *Exudation test*

(a) Substances of item 4, No. 0081 (Explosive, blasting, type A) shall, if they contain more than 40% liquid nitric ester, in addition to the testing specified above satisfy the following exudation test.

(b) The apparatus for testing blasting explosive for exudation (figs. 1 to 3) consists of a hollow bronze cylinder. This cylinder, which is closed at one end by a plate of the same metal, has an internal diameter of 15.7 mm and a depth of 40 mm. It is pierced by 20 holes 0.5 mm in diameter (four sets of five holes) on the circumference. A bronze piston, cylindrically fashioned over a length of 48 mm and having a total length of 52 mm, slides into the vertically placed cylinder. The piston, whose diameter is 15.6 mm, is loaded with a mass of 2,220 g so that a pressure of 120 kPa (1.20 bar) is exerted on the base of the cylinder.

(c) A small plug of blasting explosive weighing 5 to 8 g, 30 mm long and 15 mm in diameter, is wrapped in very fine gauze and placed in the cylinder; the piston and its loading mass are then placed on it so that the blasting explosive is subjected to a pressure of 120 kPa (1.20 bar). The time taken for the appearance of the first signs of oily droplets (nitroglycerine) at the outer orifices of the cylinder holes is noted.

(d) The blasting explosive is considered satisfactory if the time elapsing before the appearance of the liquid exudations is more than five minutes, the test having been carried out at a temperature of 15°C to 25°C.



## Test of blasting explosive for exudation

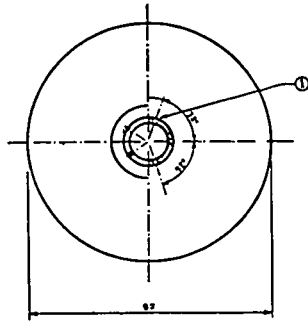


Fig. 1: Hollow bronze cylinder, closed at one end; plan and vertical section

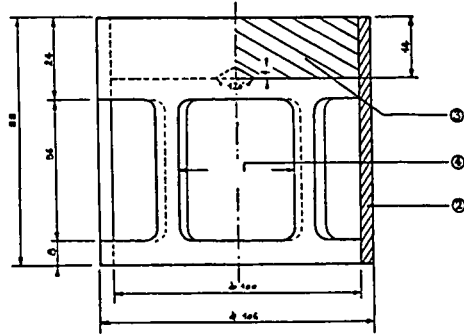


Fig. 2: Bell-shaped mass of 2,220 g capable of being suspended on the bronze piston

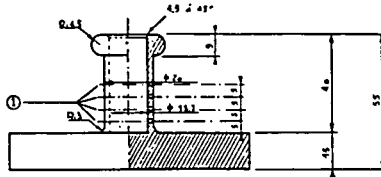


Fig. 3: Cylindrical bronze piston

All dimensions in mm

- (1) 4 sets of 5 holes of 0.5 diameter
- (2) copper
- (3) lead plate with central tapered recess on underside
- (4) 4 openings, about 46×56, evenly spaced round periphery

1102

*Conditions relating to certain substances of Class 4.1*

- (1) Re marg. 401, item 7 (a):

Nitrocellulose heated for half an hour at 132°C must not give off visible yellowish-brown nitrous fumes (nitrous gases). The ignition temperature shall be above 180°C. See paragraphs (3) to (8), (9) (a) and (10) below.

- (2) Re marg. 401, item 7 (b) and (c):

3 g of plasticized nitrocellulose, heated for one hour at 132°C, shall not give off visible yellowish-brown nitrous fumes (nitrous gases). The ignition temperature must be above 170°C. See paragraphs (3) to (8), (9) (b) and (10) below.

(3) The test procedures set out below are to be applied when differences of opinion arise as to the acceptability of substances for carriage by rail.

(4) If other methods or test procedures are used to verify the conditions of stability prescribed above in this appendix, those methods shall lead to the same findings as could be reached by the methods specified below.

(5) In carrying out the stability tests by heating described below, the temperature of the oven containing the sample under test shall not deviate by more than 2°C from the prescribed temperature; the prescribed duration of a

30-minute or 60-minute test shall be observed to within two minutes. The oven shall be such that the required temperature is restored not more than five minutes after insertion of the sample.

(6) Before undergoing the tests in paragraphs (9) and (10), the samples shall be dried for not less than 15 hours at the ambient temperature in a vacuum desiccator containing fused and granulated calcium chloride, the sample substance being spread in a thin layer; for this purpose, substances which are neither in powder form nor fibrous shall be ground, or grated, or cut into small pieces. The pressure in the desiccator shall be brought below 6.6 kPa (0.066 bar).

(7) Before being dried as prescribed in paragraph (6) above, substances of marg. 401, item 7 (b) shall undergo preliminary drying in a well-ventilated oven, with its temperature set at 70°C until the loss of mass per quarter-hour is less than 0.3% of the original mass.

(8) Nitrocellulose of marg. 401, item 7 (a) shall first undergo preliminary drying as prescribed in paragraph (7) above; drying shall then be completed by keeping the nitrocellulose for at least 15 hours over concentrated sulphuric acid in a desiccator.

(9) *Test of chemical stability under heat*

(a) Test of the substance listed in paragraph (1) above.

1. In each of two glass test tubes having the following dimensions:

Length..... 350 mm

Internal diameter ..... 16 mm

Thickness of wall ..... 1.5 mm

is placed 1 g of substance dried over calcium chloride (if necessary the drying shall be carried out after reducing the substance to pieces weighing not more than 0.05 g each). Both test tubes, completely covered with loose-fitting closures, are then so placed in an oven that at least four-fifths of their length is visible, and are kept at a constant temperature of 132°C for 30 minutes. It is observed whether nitrous gases in the form of yellowish-brown fumes clearly visible against a white background are given off during this time.

2. In the absence of such fumes the substance is deemed to be stable.

(b) Test of plasticized nitrocellulose (paragraph (2) above).

1. 3 g of plasticized nitrocellulose are placed in glass test tubes, similar to those referred to in (a), which are then placed in an oven kept at a constant temperature of 132°C.

2. The test tubes containing the plasticized nitrocellulose are kept in the oven for one hour. During this time no yellowish-brown nitrous fumes (nitrous gases) must be visible. Observation and appraisal as in (a).

(10) *Ignition temperature* [see paragraphs (1) and (2) above]

1. The ignition temperature is determined by heating 0.2 g of substance enclosed in a glass test tube immersed in a Wood's alloy bath. The test tube is placed in the bath when the latter has reached 100°C. The temperature of the bath is then progressively increased by 5°C per minute.

2. The test tubes must have the following dimensions:

Length..... [150]<sup>1</sup> mm

<sup>1</sup> The text between brackets reads "125" in the authentic French text — Le texte entre crochets se lit « 125 » dans le texte authentique français.

Internal diameter . . . . . 15 mm

Thickness of wall . . . . . 0.5 mm

and must be immersed to a depth of 20 mm.

3. The test must be repeated three times, the temperature at which ignition of the substance occurs, i.e., slow or rapid combustion, deflagration or detonation, being noted each time.
4. The lowest temperature recorded in the three tests is the ignition temperature.

1103

*Conditions relating to organic peroxides*

*Testing for assignment to Class 5.2*

An organic peroxide is only to be accepted for carriage if it has been assigned to a name in marg. 551 and the criteria in the Test Manual are met.

Assignment of an organic peroxide to a name in marg. 551 shall be made in accordance with the tests, operational methods and criteria set out in Parts II and III (“Tests and criteria for the classification of organic peroxides”) of the “Recommendations on the Transport of Dangerous Goods: Tests and Criteria” published by the United Nations Organization under the reference ST/SG/AC.10/11 and Add.1, first edition (Test Manual).

1104-

1169

B. GLOSSARY OF NAMES IN MARG. 101

(see also marg. 1101 (3))

1170

NOTE. 1. The descriptions in the glossary are not intended to replace the test procedures, nor to determine the hazard classification of a substance or article of Class 1. Assignment to the correct division and a decision on whether Compatibility Group S is appropriate shall be based on testing of the product in accordance with the Test Manual mentioned in marg. 1101 (1) or by analogy with similar products which have already been tested and assigned in accordance with the procedures of the Test Manual.

2. The figures given after the names refer to the relevant item numbers (column 1) and identification numbers (column 2) of Table 1 in accordance with marg. 101, separated by an oblique (e.g. 19/0171).

For the classification code, see marg. 100 (4).

*Ammunition, illuminating*, with or without burster, expelling charge or propelling charge 19/0171; 26/0254; 37/0297

Ammunition designed to produce a single source of intense light for lighting up an area. The term includes illuminating cartridges, grenades and projectiles; and illuminating and target identification bombs.

NOTE. The following articles: *cartridges, signal; signal devices, hand; signals, distress; flares, aerial; flares, surface* are not included in this definition. They are listed separately.

*Ammunition, incendiary*, liquid or gel, with burster, expelling charge or propelling charge 28/0247

Ammunition containing liquid or gelatinous incendiary substance. Except when the incendiary substance is an explosive *per se*, it also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge.

*Ammunition, incendiary, white phosphorus* with burster, expelling charge or propelling charge 20/0243; 27/0244

Ammunition containing white phosphorus as incendiary substance. It also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge.

*Ammunition, incendiary* with or without burster, expelling charge or propelling charge 19/0009; 26/0010; 37/0300

Ammunition containing incendiary composition. Except when the composition is an explosive *per se*, it also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge.

*Ammunition, practice* 37/0362

Ammunition without a main bursting charge, containing a burster or expelling charge. Normally it also contains a fuze and a propelling charge.

NOTE. *Grenades, practice* are not included in this definition. They are listed separately.

*Ammunition, proof* 37/0363

Ammunition containing pyrotechnic substances, used to test the performance or strength of new ammunition, weapon components or assemblies.

*Ammunition, smoke, white phosphorus*, with burster, expelling charge or propelling charge 20/0245; 27/0246

Ammunition containing white phosphorus as a smoke-producing substance. It also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge. The term includes grenades, smoke.

*Ammunition, smoke* with or without burster, expelling charge or propelling charge 19/0015; 26/0016; 37/0303

Ammunition containing a smoke-producing substance such as chlorosulphonic acid mixture (CSAM), hexachloroethane (HC) or titanium tetrachloride (FM). Except when the substance is an explosive *per se*, the ammunition also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge. The term includes grenades, smoke.

NOTE. *Signals, smoke* are not included in this definition. They are listed separately.

*Ammunition, tear-producing*, with burster, expelling charge or propelling charge 19/0018; 26/0019; 37/0301

Ammunition containing a tear-producing substance. It also contains one or more of the following: a pyrotechnic substance; a propelling charge with primer and igniter charge; a fuze with burster or expelling charge.

*Articles, pyrotechnic*, for technical purposes 9/0428; 19/0429; 26/0430; 37/0431; 39/0432

Articles which contain pyrotechnic substances and are used for technical purposes such as heat generation, gas generation, theatrical effects, etc.

NOTE. The following articles: all ammunition; *cartridges, signal; cutters, cable, explosive; fireworks; flares, aerial; flares, surface; release devices, explosive; rivets, explosive; signal devices, hand; signals, distress; signals, railway track, explosives; signals, smoke* are not included in this definition. They are listed separately.

*Black powder (gunpowder), compressed* or *black powder (gunpowder), in pellets* 4/0028

Substance consisting of a pelletized form of black powder.

*Black powder (gunpowder), granular or as meal 4/0027*

Substance consisting of an intimate mixture of charcoal or other carbon and either potassium nitrate or sodium nitrate, with or without sulphur.

*Bombs, with inflammable liquid, with bursting charge 10/0399; 21/0400*

Articles which are dropped from aircraft, consisting of a tank filled with inflammable liquid and bursting charge.

*Bombs, photo-flash 5/0038*

Explosive articles which are dropped from aircraft to provide brief, intense illumination for photography. They contain a charge of detonating explosive without means of initiation or with means of initiation containing two or more effective protective features.

*Bombs, photo-flash 7/0037*

Explosive articles which are dropped from aircraft to provide brief, intense illumination for photography. They contain a charge of detonating explosive with means of initiation not containing two or more effective protective features.

*Bombs, photo-flash 19/0039; 26/0299*

Explosive articles which are dropped from aircraft to provide brief, intense illumination for photography. They contain a photo-flash composition.

*Bombs, with bursting charge 5/0034; 15/0035*

Explosive articles which are dropped from aircraft, without means of initiation or with means of initiation containing two or more effective protective features.

*Bombs with bursting charge 7/0033; 17/0291*

Explosive articles which are dropped from aircraft, with means of initiation not containing two or more effective protective features.

*Boosters, with detonator 1/0225; 11/0268*

Articles consisting of a charge of detonating explosive with means of initiation. They are used to increase the initiating power of detonators or detonating cord.

*Boosters, without detonator 5/0042; 15/0283*

Articles consisting of a charge of detonating explosive without means of initiation. They are used to increase the initiating power of detonators or detonating cord.

*Bursters, explosive 5/0043*

Articles consisting of a small charge of explosive used to open projectiles or other ammunition in order to disperse their contents.

*Cartridges, flash 9/0049; 26/0050*

Articles consisting of a casing, a primer and flash powder, all assembled in one piece ready for firing.

*Cartridges for weapons, blank 3/0326; 13/0413; 23/0327; 31/0338; 39/0014*

Ammunition consisting of a closed cartridge case with a centre or rim fire primer and a charge of smokeless or black powder but no projectile. It produces a loud noise and is used for training, saluting, propelling charge, starter pistols, etc. The term includes ammunition, blank.

*Cartridges for weapons, inert projectile* 13/0328; 23/0417; 31/0339; 39/0012

Ammunition consisting of a projectile without bursting charge but with a propelling charge with or without a primer. The articles may include a tracer, provided that the predominant hazard is that of the propelling charge.

*Cartridges for weapons, with bursting charge* 6/0006; 16/0321; 34/0412

Ammunition consisting of a projectile with a bursting charge without means of initiation or with means of initiation containing two or more effective protective features; and a propelling charge with or without a primer. The term includes fixed (assembled) ammunition, semi-fixed (partially assembled) ammunition and separate loading ammunition when the components are packed together.

*Cartridges for weapons, with bursting charge* 7/0005; 17/0007; 35/0348

Ammunition consisting of a projectile with a bursting charge with means of initiation not containing two or more effective protective features; and a propelling charge with or without a primer. The term includes fixed (assembled) ammunition, semi-fixed (partially assembled) ammunition and separate loading ammunition when the components are packed together.

*Cartridges, oil well* 23/0277; 31/0278

Articles consisting of a thin casing of fibreboard, metal or other material containing only propellant powder which projects a hardened projectile to perforate an oil well casing.

NOTE. *Charges, shaped, commercial* are not included in this definition. They are listed separately.

*Cartridges, power device* 13/0381; 23/0275; 31/0276; 39/0323

Articles designed to accomplish mechanical actions. They consist of a casing with a charge of deflagrating explosive and a means of ignition. The gaseous products of the deflagration produce inflation, linear or rotary motion or activate diaphragms, valves or switches or project fastening devices or extinguishing agents.

*Cartridges, signal* 26/0054; 37/0312; 39/0405

Articles designed to fire coloured flares or other signals from signal pistols, etc.

*Cartridges, small arms* 13/0328; 31/0339; 39/0012

Ammunition consisting of a cartridge case fitted with a centre or rim fire primer and containing both a propelling charge and solid projectile. They are designed to be fired in weapons of calibre not larger than 19.1 mm. Shot-gun cartridges of any calibre are included in this description.

NOTE. *Cartridges, small arms, blank*, are not included in this definition. They are listed separately. Some military small arms cartridges are not included in this definition. They are listed under *cartridges for weapons, inert projectile*.

*Cases, cartridge, empty, with primer* 31/0379; 39/0055

Articles consisting of a cartridge case made from metal, plastics or other non-inflammable material, in which the only explosive component is the primer.

*Cases, combustible, empty, without primer* 23/0447; 31/0446

Articles consisting of a cartridge case made partly or entirely from nitrocellulose.

*Charges, bursting, plastics bonded* 5/0457; 15/0458; 33/0459; 39/0460

Articles consisting of a charge of detonating explosive, plastics bonded, manufactured in a specific form without a casing and without means of initiation. They are designed as components of ammunition such as warheads.

*Charges, demolition 5/0048*

Articles containing a charge of a detonating explosive in a casing of fibreboard, plastics, metal or other material. The articles are without means of initiation or with means of initiation containing two or more effective protective features.

NOTE. The following articles: *bombs; mines; projectiles* are not included in this definition. They are listed separately.

*Charges, depth 5/0056*

Articles consisting of a charge of detonating explosive contained in a drum or projectile without means of initiation or with means of initiation containing two or more effective protective features. They are designed to detonate under water.

*Charges, explosive, commercial, without detonator 5/0442; 15/0443; 33/0444; 39/0445*

Articles consisting of a charge of detonating explosive without means of initiation, used for explosive welding, jointing, forming and other metallurgical processes.

*Charges, propelling, for cannon 3/0279; 13/0414; 23/0242*

Charges of propellant in any physical form for separate-loading ammunition for cannon.

*Charges, propelling, for rocket motors 3/0271; 13/0415; 23/0272*

Articles consisting of a charge of propellant manufactured in a specific form without a casing. They are designed as components of rocket motors.

*Charges, propelling, for rocket motors, composite mixture 3/0273; 13/0416; 23/0274*

Articles consisting of a charge of propellant, plastics bonded, manufactured in a specific form without a casing. They are designed as components of rocket motors.

*Charges, shaped, commercial, without detonator 5/0059; 15/0439; 33/0440; 39/0441*

Articles consisting of a casing containing a charge of detonating explosive with a cavity lined with rigid material, without means of initiation. They are designed to produce a powerful, penetrating jet effect.

*Charges, shaped, flexible, linear 5/0288; 33/0237*

Articles consisting of a V-shaped core of a detonating explosive clad by a flexible sheath.

*Charges, supplementary, explosive 5/0060*

Articles consisting of a small removable booster placed in the cavity of a projectile between the fuze and the bursting charge.

*Cord, detonating, flexible 5/0065; 33/0289*

Article consisting of a core of detonating explosive enclosed in spun fabric with or without plastics or other covering.

*Cord (fuse) detonating, metal clad 5/0290; 15/0102*

Article consisting of a core of detonating explosive clad by a soft metal tube with or without protective covering.

*Cord (fuse) detonating, mild effect, metal clad 33/0104*

Article consisting of a core of detonating explosive clad by a soft metal tube with or without a protective covering. The quantity of explosive substance is so small that only a mild effect is manifested outside the cord.

*Cord, igniter 37/0066*

Article consisting of textile yarns covered with black powder or another fast burning pyrotechnic composition and of a flexible protective covering; or it consists of a core of black powder surrounded by a flexible woven fabric. It burns progressively along its length with an external flame and is used to transmit ignition from a device to a charge or primer.

*Cutters, cable, explosive 39/0070*

Articles consisting of a knife-edged device which is driven by a small charge of deflagrating explosive into an anvil.

*Detonator assemblies, non-electric, for blasting 1/0360; 29/0361*

Non-electric detonators assembled with and activated by such means as safety fuse, shock tube, flash tube or detonating cord. They may be of instantaneous design or incorporate delay elements. Detonating relays incorporating detonating cord are included.

*Detonators, electric, for blasting 1/0030; 29/0255; 39/0456*

Articles specially designed for the initiation of blasting explosives. These detonators may be constructed to detonate instantaneously or may contain a delay element. Electric detonators are activated by an electric current.

*Detonators for ammunition 1/0073; 11/0364; 29/0365, 39/0366*

Articles consisting of a small metal or plastics tube containing explosives such as lead azide, PETN or combinations of explosives. They are designed to start a detonation train.

*Detonators, non-electric, for blasting 1/0029; 29/0267; 39/0455*

Articles specially designed for the initiation of blasting explosives. These detonators may be constructed to detonate instantaneously or may contain a delay element. Non-electric detonators are activated by such means as shock tube, flash tube, safety fuse, other igniferous device or flexible detonating cord. Detonating relays without detonating cord are included.

*Explosive, blasting, type A 4/0081*

Substances consisting of liquid organic nitrates such as nitroglycerine or a mixture of such ingredients with one or more of the following: nitrocellulose; ammonium nitrate or other inorganic nitrates; aromatic nitro-derivatives, or combustible materials, such as wood-meal and aluminium powder. They may contain inert components such as kieselguhr, and additives such as colouring agents and stabilizers. Such explosives may be in powdery, gelatinous, plastic or elastic form. The term includes dynamite, gelatine, blasting and gelatine dynamites.

*Explosive, blasting, type B 4/0082; 40/0331*

Substances consisting of (a) a mixture of ammonium nitrate or other inorganic nitrates with an explosive such as trinitrotoluene, with or without other substances such as wood-meal and aluminium powder, or (b) a mixture of ammonium nitrate or other inorganic nitrates with other combustible substances which are not explosive ingredients. In both cases they may contain inert components such as kieselguhr, and additives such as colouring agents and stabilizers. Such explosives must not contain nitroglycerine, similar liquid organic nitrates or chlorates.

*Explosive, blasting, type C 4/0083*

Substances consisting of a mixture of either potassium or sodium chlorate or potassium, sodium or ammonium perchlorate with organic nitro-derivatives or



combustible materials such as wood-meal or aluminium powder or a hydrocarbon. They may contain inert components such as kieselguhr and additives such as colouring agents and stabilizers. Such explosives must not contain nitroglycerine or similar liquid organic nitrates.

*Explosive, blasting, type D* 4/0084

Substances consisting of a mixture of organic nitrated compounds and combustible materials such as hydrocarbons and aluminium powder. They may contain inert components such as kieselguhr and additives such as colouring agents and stabilizers. Such explosives must not contain nitroglycerine, similar liquid organic nitrates, chlorates or ammonium nitrate. The term generally includes plastic explosives.

*Explosives, blasting, type E* 4/0241; 40/0332

Substances consisting of water as an essential ingredient and high proportions of ammonium nitrate or other oxidizers, some or all of which are in solution. The other constituents may include nitro-derivatives such as trinitrotoluene, hydrocarbons or aluminium powder. They may contain inert components such as kieselguhr and additives such as colouring agents and stabilizers. The term includes explosives, emulsion; explosives, slurry and explosives, watergel.

*Fireworks* 9/0333; 19/0334; 26/0335; 37/0336; 39/0337

Pyrotechnic articles designed for entertainment.

*Flares, aerial* 9/0420; 19/0421; 26/0093; 37/0403; 39/0404

Articles containing pyrotechnic substances which are designed to be dropped from an aircraft to illuminate, identify, signal or warn.

*Flares, surface* 9/0418; 19/0419; 26/0092

Articles containing pyrotechnic substances which are designed for use on the surface to illuminate, identify, signal or warn.

*Flash powder* 8/0094; 25/0305

Pyrotechnic substance which, when ignited, produces an intense light.

*Fracturing devices, explosive, without detonator, for oil wells,* 5/0099

Articles consisting of a charge of detonating explosive contained in a casing without means of initiation. They are used to fracture the rock around a drill shaft to assist the flow of crude oil from the rock.

*Fuse, igniter, tubular, metal clad* 37/0103

Article consisting of a metal tube with a core of deflagrating explosive.

*Fuse, instantaneous, non-detonating (Quickmatch)* 26/0101

Article consisting of cotton yarns impregnated with fine black powder. It burns with an external flame and is used in ignition trains for fireworks, etc.

*Fuse, safety* 39/0105

Article consisting of a core of fine grained black powder surrounded by a flexible woven fabric with one or more protective outer coverings. When ignited, it burns at a predetermined rate without any external explosive effect.

*Fuzes, detonating* 1/0106; 11/0107; 29/0257; 39/0367

Articles with explosive components designed to produce a detonation in ammunition. They incorporate mechanical, electrical, chemical or hydrostatic components to initiate the detonation. They generally incorporate protective features.

*Fuzes, detonating*, with protective features 5/0408; 15/0409; 33/0410

Articles with explosive components designed to produce a detonation in ammunition. They incorporate mechanical, electrical, chemical or hydrostatic components to initiate the detonation. The detonating fuze must incorporate two or more effective protective features.

*Fuzes, igniting* 26/0316; 37/0317; 39/0368

Articles with primary explosive components designed to produce a deflagration in ammunition. They incorporate mechanical, electrical, chemical or hydrostatic components to start the deflagration. They generally incorporate protective features.

*Grenades, hand or rifle, with bursting charge* 5/0284; 15/0285

Articles which are designed to be thrown by hand or to be projected by a rifle. They are without means of initiation or with means of initiation containing two or more effective protective features.

*Grenades, hand or rifle, with bursting charge* 7/0292; 17/0293

Articles which are designed to be thrown by hand or to be projected by a rifle. They are with means of initiation not containing two or more effective protective features.

*Grenades, practice, hand or rifle* 19/0372; 26/0318; 37/0452; 39/0110

Articles without a main bursting charge which are designed to be thrown by hand or to be projected by a rifle. They contain the priming device and may contain a spotting charge.

*Hexatonal, cast* 4/0393

Substance consisting of an intimate mixture of cyclotrimethylene trinitramine (RDX), trinitrotoluene (TNT) and aluminium.

*Hexolite, dry or wetted with less than 15% water, by mass* 4/0118

Substance consisting of an intimate mixture of cyclotrimethylene trinitramine (RDX) and trinitrotoluene (TNT). The term includes "Composition B".

*Igniters* 9/0121; 19/0314; 26/0315; 37/0325; 39/0454

Articles containing one or more explosive substances designed to produce a deflagration in an explosive train. They may be actuated chemically, electrically or mechanically.

NOTE. The following articles: *cord, igniter; fuse, igniter; fuse, instantaneous, non-detonating; fuzes, igniting; lighters, fuse; primers, cap type; primers, tubular* are not included in this definition. They are listed separately.

*Jet perforating guns, charged, oil well, without detonator* 5/0124

Articles consisting of a steel tube or metallic strip, into which are inserted shaped charges connected by detonating cord, without means of initiation.

*Lighters, fuse* 39/0131

Articles of various design actuated by friction, percussion or electricity and used to ignite safety fuse.

*Mines, with bursting charge* 5/0137; 15/0138

Articles consisting normally of metal or composition receptacles filled with a detonating explosive, without means of initiation or with means of initiation containing two or more effective protective features. They are designed to be operated by the passage of ships, vehicles or personnel. The term includes "Bangalore torpedoes".

*Mines, with bursting charge* 7/0136; 17/0294

Articles consisting normally of metal or composition receptacles filled with a detonating explosive, with means of initiation not containing two or more

effective protective features. They are designed to be operated by the passage of ships, vehicles or personnel. The term includes "Bangalore torpedoes".

*Octolite (Octol)*, dry or wetted with less than 15% water, by mass 4/0266

Substance consisting of an intimate mixture of cyclotetramethylene tetranitramine (HMX) and trinitrotoluene (TNT).

*Pentolite*, dry or wetted with less than 15% water, by mass 4/0151

Substance consisting of an intimate mixture of pentaerythrite tetranitrate (PETN) and trinitrotoluene (TNT).

*Powder cake (powder paste)*, wetted with not less than 17% alcohol, by mass.

*Powder cake (powder paste)*, wetted with not less than 35% water, by mass 2/0433; 22/0159

Substance consisting of nitrocellulose impregnated with not more than 60% of nitroglycerine or other liquid organic nitrates or a mixture of these.

*Powder, smokeless* 2/0160, 22/0161

Substance generally based on nitrocellulose used as propellant. The term includes propellants with a single base [nitrocellulose (NC) alone], those with a double base [such as NC and nitroglycerine (NG)] and those with a triple base (such as NC/NG/nitroguanidine).

NOTE. Cast, pressed or bag-charges of smokeless powder are listed under *charges, propelling*.

*Primers, cap type* 1/0377; 29/0378; 39/0044

Articles consisting of a metal or plastics cap containing a small amount of primary explosive mixture that is readily ignited by impact. They serve as igniting elements in small arms cartridges and in percussion primers for propelling charges.

*Primers, tubular* 26/0319; 37/0320; 39/0376

Articles consisting of a primer for ignition and an auxiliary charge of deflagrating explosive such as black powder used to ignite the propelling charge in a cartridge case for cannon, etc.

*Projectiles, inert with tracer* 26/0424; 37/0425; 39/0345

Articles such as a shell or bullet, which are projected from a cannon or other gun, rifle or other small arm.

*Projectiles, with burster or expelling charge* 15/0346; 33/0347

Articles such as a shell or bullet, which are projected from a cannon or other gun. They are without means of initiation or with means of initiation containing two or more effective protective features. They are used to scatter dyes for spotting or other inert materials.

*Projectiles, with burster or expelling charge* 17/0426; 35/0427

Articles such as a shell or bullet, which are projected from a cannon or other gun. They are with means of initiation not containing two or more effective protective features. They are used to scatter dyes for spotting or other inert materials.

*Projectiles, with burster or expelling charge* 19/0434; 37/0435

Articles such as a shell or bullet, which are projected from a cannon or other gun, rifle or other small arm. They are used to scatter dyes for spotting or other inert materials.

*Projectiles, with bursting charge* 5/0168; 15/0169; 33/0344

Articles such as a shell or bullet, which are projected from a cannon or other gun. They are without means of initiation or with means of initiation containing two or more effective protective features.

*Projectiles, with bursting charge* 7/0167; 17/0324

Articles such as a shell or bullet, which are projected from a cannon or other gun. They are with means of initiation not containing two or more effective protective features.

*Release devices, explosive* 39/0173

Articles consisting of a small charge of explosive with means of initiation and rods or links. They sever the rods or links to release equipment quickly.

*Rivets, explosive* 39/0174

Articles consisting of a small charge of explosive inside a metallic rivet.

*Rocket motors* 3/0280; 13/0281; 23/0186

Articles consisting of a charge of explosive, generally a solid propellant, contained in a cylinder fitted with one or more nozzles. They are designed to propel a rocket or a guided missile.

*Rocket motors, liquid fuelled* 21/0395; 28/0396

Articles consisting of a liquid fuel within a cylinder fitted with one or more nozzles. They are designed to propel a rocket or a guided missile.

*Rockets, line throwing* 19/0238; 26/0240; 37/0453

Articles consisting of a rocket motor which is designed to extend a line.

*Rockets, liquid fuelled, with bursting charge* 10/0397; 21/0398

Articles consisting of a liquid fuel within a cylinder fitted with one or more nozzles and fitted with a warhead. The term includes guided missiles.

*Rockets with bursting charge* 6/0181; 16/0182

Articles consisting of a rocket motor and a warhead without means of initiation or with means of initiation containing two or more effective protective features. The term includes guided missiles.

*Rockets, with bursting charge* 7/0180; 17/0295

Articles consisting of a rocket motor and a warhead with means of initiation not containing two or more effective protective features. The term includes guided missiles.

*Rockets, with expelling charge* 13/0436; 23/0437; 31/0438

Articles consisting of a rocket motor and a charge to expel the payload from a rocket head. The term includes guided missiles.

*Rockets, with inert head* 23/0183

Articles consisting of a rocket motor and an inert head. The term includes guided missiles.

*Signal devices, hand* 37/0191; 39/0373

Portable articles containing pyrotechnic substances which produce visual signals or warnings. The term includes small surface flares such as highway or railway flares and small distress flares.

*Signals, distress, ship* 9/0194; 26/0195

Articles containing pyrotechnic substances designed to produce signals by means of sound, flame or smoke or any combination thereof.

*Signals, railway track, explosive* 9/0192; 39/0193

Articles containing a pyrotechnic substance which explodes with a loud report when the article is crushed. They are designed to be placed on a rail.

*Signals, smoke, with explosive sound unit* 9/0196; 19/0313

Articles containing pyrotechnic substances which produce coloured smoke and in addition an audible signal.

*Signals, smoke*, without explosive sound unit 37/0197

Articles containing a pyrotechnic substance as smoke-producing substance. They are designed to produce coloured smoke.

*Sounding devices, explosive* 5/0374; 15/0375

Articles consisting of a charge of detonating explosive, without means of initiation or with means of initiation containing two or more effective protective features. They are dropped from ships and function when they reach a predetermined depth or the sea bed.

*Sounding devices, explosive* 7/0296; 17/0204

Articles consisting of a charge of detonating explosive with means of initiation not containing two or more effective protective features. They are dropped from ships and function when they reach a predetermined depth or the sea bed.

*Torpedoes, liquid fuelled*, with inert head 28/0450

Articles consisting of a liquid explosive system to propel the torpedo through the water, with an inert head.

*Torpedoes, liquid fuelled*, with or without bursting charge 10/0449

Articles consisting of either a liquid explosive system to propel the torpedo through the water, with or without a warhead; or a liquid non-explosive system to propel the torpedo through the water, with a warhead.

*Torpedoes*, with bursting charge 5/0451

Articles consisting of a non-explosive system to propel the torpedo through the water, and a warhead without means of initiation or with means of initiation containing two or more effective protective features.

*Torpedoes*, with bursting charge 6/0329

Articles consisting of an explosive system to propel the torpedo through the water, and a warhead without means of initiation or with means of initiation containing two or more effective protective features.

*Torpedoes*, with bursting charge 7/0330

Articles consisting of an explosive or non-explosive system to propel the torpedo through the water, and a warhead with means of initiation not containing two or more effective protective features.

*Tracers for ammunition* 26/0212; 37/0306

Sealed articles containing pyrotechnic substances, designed to reveal the trajectory of a projectile.

*Tritonal* 4/0390

Substance consisting of trinitrotoluene (TNT) mixed with aluminium.

*Warheads, rocket*, with burster or expelling charge 33/0370

Articles consisting of an inert payload and a small charge of detonating or deflagrating explosive, without means of initiation or with means of initiation containing two or more effective protective features. They are designed to be fitted to a rocket motor to scatter inert material. The term includes warheads for guided missiles.

*Warheads, rocket*, with burster or expelling charge 35/0371

Articles consisting of an inert payload and a small charge of detonating or deflagrating explosive, with means of initiation not containing two or more effective protective features. They are designed to be fitted to a rocket motor to scatter inert material. The term includes warheads for guided missiles.

*Warheads, rocket, with bursting charge 5/0286; 15/0287*

Articles consisting of a detonating explosive, without means of initiation or with means of initiation containing two or more effective protective features. They are designed to be fitted to a rocket. The term includes warheads for guided missiles.

*Warheads, rocket, with bursting charge 7/0369*

Articles consisting of a detonating explosive, with means of initiation not containing two or more effective protective features. They are designed to be fitted to a rocket. The term includes warheads for guided missiles.

*Warheads, torpedo, with bursting charge 5/0221*

Articles consisting of a detonating explosive, without means of initiation or with means of initiation containing two or more effective protective features. They are designed to be fitted to a torpedo.

1171-  
1199

## APPENDIX II

### A. REQUIREMENTS RELATING TO THE NATURE OF ALUMINIUM ALLOY RECEPTACLES FOR CERTAIN GASES OF CLASS 2

#### I. *Quality of material*

1200 (1) The materials of aluminium-alloy receptacles which are to be accepted for the gases referred to in marg. 203 (2) (b) must satisfy the following requirements:

	A	B	C	D
Tensile strength, Rm in MPa (= N/mm <sup>2</sup> ) . . . . .	50 to 190	200 to 380	200 to 380	350 to 500
Yield stress, Re in MPa (= N/mm <sup>2</sup> ) (permanent set $\lambda = 0.2\%$ ) . . . . .	10 to 170	60 to 320	140 to 340	210 to 420
Permanent elongation at fracture ( $l = 5 d$ ) in % . . . . .	12 to 40	12 to 30	12 to 30	11 to 16
Bend test (diameter of mandrel) . . . . .	n = 5 (Rm $\leq$ 100)	n = 6 (Rm $\leq$ 330)	n = 6 (Rm $\leq$ 330)	n = 7 (Rm $\leq$ 400)
d = n $\times$ e, where e is the thickness of the test-piece) . . . . .	n = 6 (Rm > 100)	n = 7 (Rm > 330)	n = 7 (Rm > 330)	n = 8 (Rm > 400)
American Association Series Number <sup>(1)</sup> . . . . .	1000	5000	6000	2000

<sup>(1)</sup> See "Aluminium Standards and Data", 5th edition, January 1976, published by the Aluminium Association, 750 Third Avenue, New York, U.S.A.

The actual properties will depend on the composition of the alloy concerned and also on the final treatment of the receptacle, but whatever alloy is used the thickness of the receptacle shall be calculated by the following formula:

$$e = \frac{P_{\text{MPa}} \times D}{\frac{2 \times Re}{1.30}} + P_{\text{MPa}} \quad \left( e = \frac{P_{\text{bar}} \times D}{\frac{20 \times Re}{1.30}} + P_{\text{bar}} \right)$$

where  $e$  = minimum thickness of receptacle wall, in mm;  
 $P_{\text{MPa}}$  = test pressure, in MPa ( $P_{\text{bar}}$  = test pressure in bar);  
 $D$  = nominal external diameter of the receptacle, in mm; and  
 $Re$  = guaranteed minimum yield stress with 0.2% permanent elongation, in  $\text{N/mm}^2$ .

In addition, the value of the minimum guaranteed proof stress ( $Re$ ) introduced into the formula is in no case to be greater than 0.85 times the guaranteed minimum tensile strength ( $R_m$ ), whatever the type of alloy used.

NOTE. 1. The characteristics above are based on previous experience with the following materials used for receptacles:

- Column A: Aluminium, unalloyed, 99.5% pure;
- Column B: Alloys of aluminium and magnesium;
- Column C: Alloys of aluminium, silicon and magnesium, such as ISO/R 209-Al-Si-Mg (Aluminium Association 6351);
- Column D: Alloys of aluminium, copper and magnesium.

2. The permanent elongation at fracture ( $l = 5d$ ) is measured by means of test-pieces of circular section in which the gauge length  $l$  is equal to five times the diameter  $d$ ; if test-pieces of rectangular section are used the gauge length must be calculated from the formula  $l = 5.65\sqrt{F_0}$ , where  $F_0$  indicates the initial cross-sectional area of the test-piece.

3. (a) The bend test (see illustration) shall be carried out on specimens obtained by cutting a ring from the cylinders into two equal parts of width  $3e$ , but in no case less than 25 mm. Each specimen may be machined only on the edges.

(b) The bend test shall be carried out between a mandrel of diameter ( $d$ ) and two circular supports separated by a distance of ( $d + 3e$ ). During the test the inside faces are to be at a distance apart not greater than the diameter of the mandrel.

(c) The specimen shall remain uncracked when bent inwards around the mandrel until the inside faces are at a distance apart not greater than the diameter of the mandrel.

(d) The ratio ( $n$ ) between the diameter of the mandrel and the thickness of the specimen shall conform to the values given in the table.

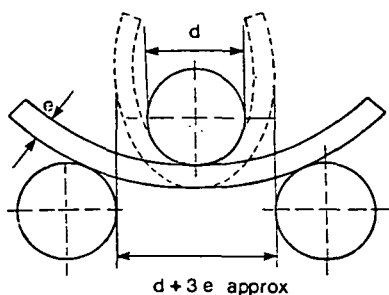


Illustration of bend test

(2) A lower minimum elongation value is acceptable, provided that an additional test approved by the competent authority of the country in which the receptacles are made proves that safety of carriage is assured in the same way as for receptacles manufactured to the values shown in the table in paragraph (1).

(3) The minimum wall thickness of the receptacles at the weakest point shall be the following:

When the diameter of the receptacle is less than 50 mm; at least 1.5 mm;

When the diameter of the receptacle is from 50 to 150 mm; at least 2 mm; and

When the diameter of the receptacle is more than 150 mm; at least 3 mm.

(4) The ends of the receptacles shall have a semicircular, elliptical or "basket-handle" section; they shall afford the same degree of safety as the body of the receptacle.

## II. *Additional Official Test for Aluminium Alloys*

1201 (1) In addition to the tests required by marg. 215, 216 and 217, it is further necessary to test for the possibility of inter crystalline corrosion of the inside wall of the receptacle if made of an aluminium alloy containing copper, or of an aluminium alloy containing magnesium and manganese if the magnesium content is greater than 3.5% or the manganese content is less than 0.5%.

(2) For an aluminium/copper alloy, the test shall be carried out by the manufacturer at the time of approval of a new alloy by the competent authority; it shall be repeated during the course of production for each pour of the alloy.

(3) For an aluminium/magnesium alloy, the test shall be carried out by the manufacturer at the time of approval of a new alloy and manufacturing process by the competent authority. If a change is made in the alloy composition or the manufacturing process the test shall be repeated.

(4) (a) Preparation of aluminium/copper alloys

Before the aluminium/copper alloy is subjected to the corrosion test, the samples shall be cleansed of grease by a suitable solvent, and dried.

(b) Preparation of aluminium/magnesium alloys

Before the aluminium/magnesium alloy is subjected to the corrosion test, the samples shall be heated for seven days at 100°C, and then cleansed of grease by a suitable solvent and dried.

(c) Performance of test

The inner side of a sample of 1,000 mm<sup>2</sup> (33.3 × 30 mm) of the material containing copper shall be treated with 1,000 ml of an aqueous solution containing 3% NaCl and 0.5% HCl at ambient temperature for 24 hours.

(d) Examination

After being washed and dried, the sample shall be examined micrographically at 100 to 500 ×, using a section of the sample 20 mm long, preferably after electropolishing.

The depth of attack shall not go beyond the second layer of grains from the surface tested for corrosion; in principle, if the entire first layer of grains is attacked, only part of the second layer should suffer.



In the case of shapes and sections, the examination shall be performed at right angles to the surface.

If, after any electropolishing, it proves necessary to make the grain boundaries particularly visible for further examination, this shall be done by a method which is acceptable to the competent authority.

### III. *Protection of the Inner Surface*

1202 The inner surface of aluminium-alloy receptacles shall be provided with suitable protection against corrosion if the competent testing stations consider it necessary.

1203-  
1249

#### B. REQUIREMENTS CONCERNING THE MATERIALS AND CONSTRUCTION OF RECEPTACLES IN ACCORDANCE WITH MARG. 207 INTENDED FOR THE CARRIAGE OF DEEPLY-REFRIGERATED LIQUEFIED GASES OF CLASS 2

1250 (1) Receptacles shall be made of steel, aluminium, aluminium alloys, copper or copper alloys, e.g. brass. However, receptacles made of copper or copper alloys shall be allowed only for gases containing no acetylene.

(2) Only materials appropriate to the lowest working temperature of the receptacles and of their accessories may be used.

1251 The following materials shall be allowed for the manufacture of receptacles:

(a) Steels not subject to brittle fracture at minimum working temperature (see marg. 1255).

The following may be used:

1. Fine-grained unalloyed steels, down to a temperature of  $-60^{\circ}\text{C}$ ;

2. Nickel-alloy steels (with a nickel content from 0.5% to 9%), down to a temperature of  $-196^{\circ}\text{C}$ , depending on the nickel content;

3. Chrome-nickel austenitic steels, down to a temperature of  $-270^{\circ}\text{C}$ ;

(b) Aluminium not less than 99.5% pure or aluminium alloys (see marg. 1256);

(c) Deoxidized copper not less than 99.9% pure or copper alloys having a copper content of over 56% (see marg. 1257).

1252 (1) Receptacles shall be either seamless or welded.

(2) Receptacles made of austenitic steel, copper or copper alloys may alternatively be hard-soldered.

1253 The accessories may be screwed to the receptacles or secured thereto as follows:

(a) Receptacles made of steel, aluminium or aluminium alloys: by welding;

(b) Receptacles made of austenitic steel, copper or copper alloys: by welding or hard-soldering.

1254 The construction of receptacles shall be such as to preclude with certainty any reduction of temperature of the load-bearing components likely to render them brittle. The fastenings of the receptacles shall themselves be so designed that even when the receptacle is at its lowest permitted working temperature they still possess the necessary mechanical properties.

1. *Materials and receptacles*a. *Steel receptacles*

1255 The materials used for the manufacture of the receptacles, and the weld beads, shall meet at least the following conditions as to impact strength at their minimum working temperature.

The tests may be conducted with test-pieces having either a U-shaped or a V-shaped notch.

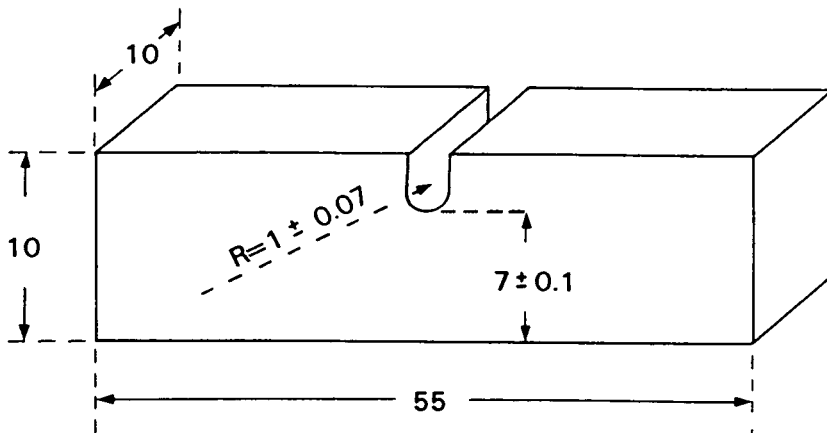
Material	Impact strength <sup>(1) (2)</sup> of the sheets and weld beads at the minimum working temperature	
	J/cm <sup>2</sup> <sup>(3)</sup>	J/cm <sup>2</sup> <sup>(4)</sup>
Unalloyed killed steel . . . . .	35	28
Ferritic alloy steel Ni < 5 % . . . . .	35	22
Ferritic alloy steel 5 % ≤ Ni ≤ 9 % . . . . .	45	35
Cr-Ni austenitic steel . . . . .	40	32

<sup>(1)</sup> The impact strengths determined with different test-pieces are not comparable with each other.

<sup>(2)</sup> See also marg. 1258 to 1260.

<sup>(3)</sup> The values relate to test-pieces with a U-shaped notch as illustrated below.

<sup>(4)</sup> The values relate to test-pieces with a V-shaped notch according to ISO R 148.



In the case of austenitic steels, only the weld bead shall be subject to an impact-strength test.

For working temperatures below  $-196^{\circ}\text{C}$ , the impact-strength test is not carried out at the minimum working temperature, but at  $-196^{\circ}\text{C}$ .

b. *Receptacles made of aluminium or aluminium alloys*

1256 The welds of receptacles shall meet the following requirements as to bending coefficient at ambient temperature:

Thickness of sheet <i>e</i> in mm	Bending coefficient $k^{(1)}$ for the weld	
	Root in compression zone	Root in tension zone
≤ 12.....	≥ 15	≥ 12
> 12 to 20.....	≥ 12	≥ 10
> 20.....	≥ 9	≥ 8

<sup>(1)</sup> See marg. 1261.

*c. Receptacles made of copper or copper alloys*

1257 It is not necessary to carry out tests to determine whether the impact strength is adequate.

2. Tests

a. Impact-strength tests

1258 The impact strength tests shown in marg. 1255 relate to test pieces measuring 10 × 10 mm having a U-shaped or a V-shaped notch.

NOTE. 1. For the shape of the test-piece, see footnotes (3) and (4) to marg. 1255 (table).

2. For sheets less than 10 mm but not less than 5 mm thick, test-pieces with a cross-section of 10 × *e* mm, where "e" represents the thickness of the sheet, shall be used. Such impact-strength tests generally yield higher values than those on standard test-pieces.

3. No impact-strength test is carried out on sheets less than 5 mm thick and their welds.

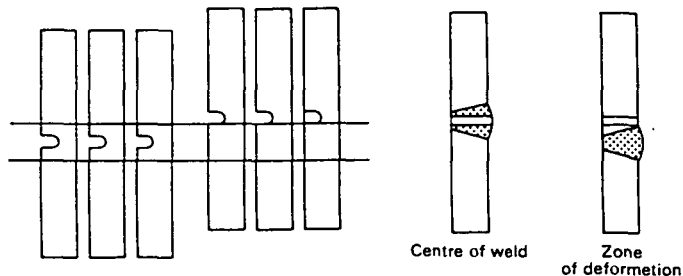
1259 (1) For testing the sheets, the impact strength shall be determined on three test-pieces. These are taken at right angles to the direction of rolling in the case of test-pieces with a U-shaped notch, or in the direction of rolling in the case of test-pieces with a V-shaped notch.

(2) For testing the welds, the test-pieces shall be taken as follows:

$e$  [ $<$ ] 10 mm

3 test-pieces from the centre of the weld;

3 test-pieces from the zone of deformation created by the weld (the notch shall be completely outside the molten area but as near to it as possible).



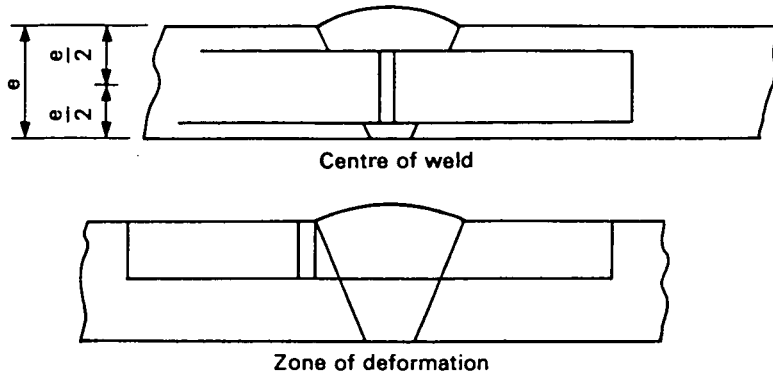
i.e. six test-pieces in all.

<sup>1</sup> The text between brackets reads "≤" in the authentic French text — Le texte entre crochets se lit « ≤ » dans le texte authentique français.

The test-pieces shall be so machined as to have the maximum possible thickness.

$10 \text{ mm} < e \leq 20 \text{ mm}$

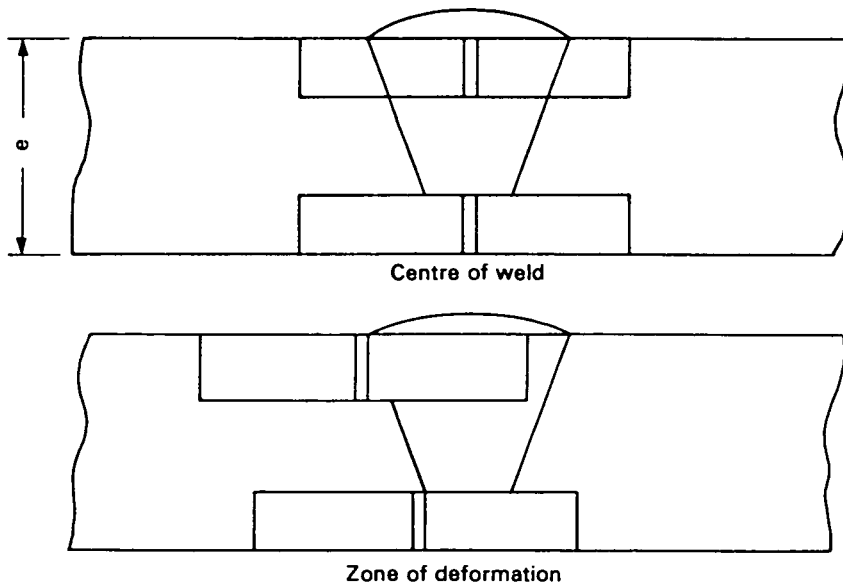
- 3 test-pieces from the centre of the weld;
- 3 test-pieces from the zone of deformation.



i.e. six test-pieces in all.

$e > 20 \text{ mm}$

- 2 sets of 3 test-pieces (one set on the upper face, one set on the lower face) at each of the points indicated below.



i.e. twelve test-pieces in all.

<sup>1</sup> The text between brackets reads "≤" in the authentic French text — Le texte entre crochets se lit « ≤ » dans le texte authentique français.

1260 (1) In the case of sheets, the average of 3 tests shall meet the minimum values given in marg. 1255; none of the values may be more than 30% below the minimum shown.

(2) In the case of the welds, the average values obtained from the test-pieces taken at the different points, centre of weld and zone of deformation, shall correspond to the minimum values shown. None of the values may be more than 30% below the minimum shown.

b. *Determination of bending coefficient*

1261 (1) The bending coefficient  $k$  referred to in marg. 1256 is defined as follows:

$$k = 50 \frac{e}{r}$$

where  $e$  = thickness of the sheet in mm; and

$r$  = mean radius of curvature in mm of the test-piece when the first crack appears in the tension zone.

(2) The bending coefficient  $k$  shall be determined for the weld. The width of the test piece shall be equal to  $3e$ .

(3) Four tests shall be performed on the weld, two with the root in the compression zone (fig. 1) and two with the root in the tension zone (fig. 2); all individual values obtained shall meet the minimum values shown in marg. 1256.

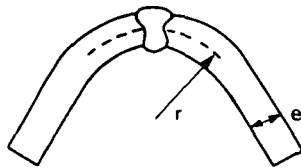


Fig. 1

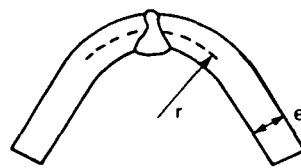


Fig. 2

1262-  
1269

C. REQUIREMENTS CONCERNING THE MATERIALS AND CONSTRUCTION OF SHELLS OF TANK WAGONS AND SHELLS OF TANK CONTAINERS FOR WHICH A TEST PRESSURE OF AT LEAST 1 MPa (10 BAR) IS PRESCRIBED, AS WELL AS SHELLS OF TANK WAGONS AND SHELLS OF TANK CONTAINERS INTENDED FOR THE CARRIAGE OF DEEPLY-REFRIGERATED LIQUEFIED GASES OF CLASS 2

1270 (1) Shells intended for the carriage of substances of Class 2, items 1 to 6 and 9, Class 4.2, item 3 and Class 8, item 6 shall be made of steel.

(2) Shells intended for the carriage of deeply refrigerated liquefied gases of Class 2 shall be made of steel, aluminium alloys, copper or copper alloys (e.g. brass). However, shells made of copper or copper alloys shall be allowed only for gases containing no acetylene; ethylene may, however, contain not more than 0.005% acetylene.

(3) Only materials appropriate to the minimum and maximum working temperatures of the shells and of their accessories may be used.

1271 The following materials shall be allowed for the manufacture of shells:

(a) Steels not subject to brittle fracture at the minimum working temperature (see marg. 1275).

The following may be used:

1. Mild steels (except for gases of items 7 and 8 of Class 2);
  2. Fine-grained steels, down to a temperature of  $-60^{\circ}\text{C}$ ;
  3. Nickel-alloy steels (with a nickel content from 0.5% to 9%), down to a temperature of  $-196^{\circ}\text{C}$ , depending on the nickel content;
  4. Chrome-nickel austenitic steels, down to a temperature of  $-270^{\circ}\text{C}$ .
- (b) Aluminium not less than 99.5% pure or aluminium alloys (see marg. 1276);
- (c) Deoxidized copper not less than 99.9% pure and copper alloys having a copper content of over 56% (see marg. 1277).
- 1272 (1) Shells made of steel, aluminium or aluminium alloys shall be either seamless or welded.
- (2) Shells made of copper or copper alloys may be hard-soldered.
- 1273 The accessories may be screwed to the shells or secured thereto as follows:
- (a) Shells made of steel, aluminium or aluminium alloys: by welding;
- (b) Shells made of austenitic steel, copper or copper alloys: by welding or hard-soldering.
- 1274 The construction of shells and their attachment to the wagon underframe or the container frame shall be such as to preclude with certainty any reduction of temperature of the load-bearing components likely to render them brittle. The fastenings of the shells shall themselves be so designed that even when the shell is at its lowest permitted working temperature they still possess the necessary mechanical properties.
1. *Materials and shells*
- a. *Steel shells*
- 1275 The materials used for the manufacture of the shells, and the weld beads, shall meet at least the following conditions as to impact strength at their minimum working temperature, but at least at  $-20^{\circ}\text{C}$ .
- The tests may be conducted with test-pieces having either a U-shaped or a V-shaped notch.

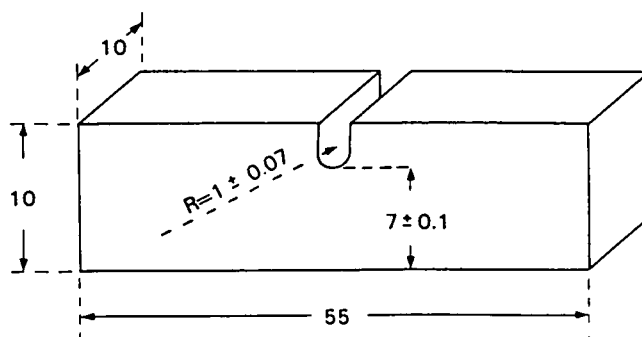
Material	Impact strength <sup>(1) (2)</sup> of the sheets and weld beads at the minimum working temperature	
	J/cm <sup>2</sup> <sup>(3)</sup>	J/cm <sup>2</sup> <sup>(4)</sup>
Mild steel and fine-grained steel, killed. . .	35	28
Ferritic alloy steel Ni < 5 % . . . . .	35	22
Ferritic alloy steel 5 % ≤ Ni ≤ 9 % . . . . .	45	35
Cr-Ni austenitic steel . . . . .	40	32

<sup>(1)</sup> The impact strengths determined with different test-pieces are not comparable with each other.

<sup>(2)</sup> See also marg. 1278 to 1280.

<sup>(3)</sup> The values relate to test-pieces with a U-shaped notch as illustrated below.

<sup>(4)</sup> The values relate to test-pieces with a V-shaped notch according to ISO R 148.



In the case of austenitic steels, only the weld bead shall be subject to an impact-strength test.

For working temperatures below  $-196^{\circ}\text{C}$ , the impact-strength test is not carried out at the minimum working temperature, but at  $-196^{\circ}\text{C}$ .

b. *Shells made of aluminium or aluminium alloys*

1276 The welds of shells shall comply with the conditions laid down by the competent authority.

c. *Shells made of copper or copper alloys*

1277 It is not necessary to carry out tests to determine whether the impact strength is adequate.

2. *Tests*

*Impact-strength tests*

1278 The impact strengths shown in marg. 1275 relate to test pieces measuring  $10 \times 10$  mm having a U-shaped or a V-shaped notch.

NOTE. 1. For the shape of the test-piece, see footnotes (3) and (4) to marg. 1275 (table).

2. For sheets less than 10 mm but not less than 5 mm thick, test-pieces with a cross-section of  $10 \times e$  mm, where "e" represents the thickness of the sheet, shall be used. Such impact-strength tests generally yield higher values than those on standard test-pieces.

3. No impact-strength test is carried out on sheets less than 5 mm thick and their welds.

1279 (1) For testing the sheets, the impact strength shall be determined on three test-pieces. These are taken at right angles to the direction of rolling in the case of test-pieces with a U-shaped notch, or in the direction of rolling in the case of test-pieces with a V-shaped notch.

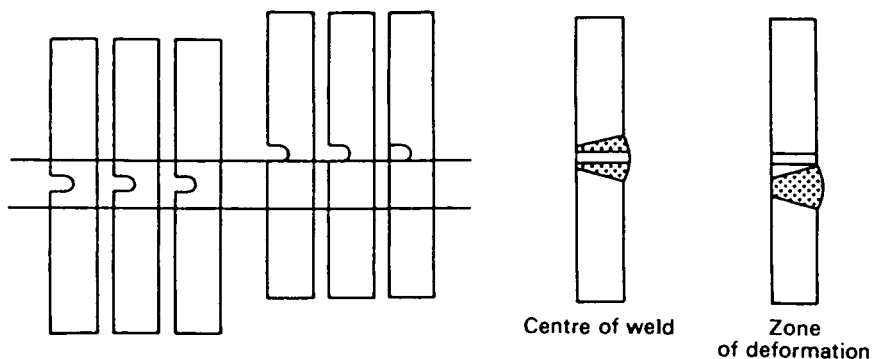
(2) For testing the welds, the test-pieces shall be taken as follows:

e [ $<$ ] 10 mm

3 test-pieces from the centre of the weld;

3 test-pieces from the zone of deformation created by the weld (the notch shall be completely outside the molten area but as near to it as possible).

<sup>1</sup> The text between brackets reads " $\leq$ " in the authentic French text — Le texte entre crochets se lit «  $\leq$  » dans le texte authentique français.



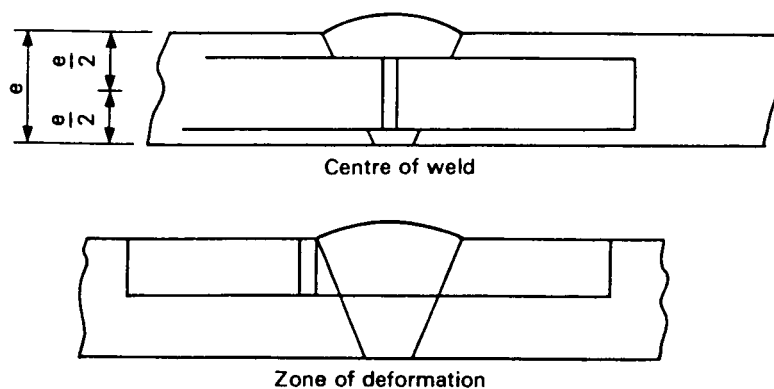
i.e. six test-pieces in all.

The test-pieces shall be so machined as to have the maximum possible thickness.

$10 \text{ mm} < e \text{ [ < ] } ^1 20 \text{ mm}$

3 test-pieces from the centre of the weld;

3 test-pieces from the zone of deformation.



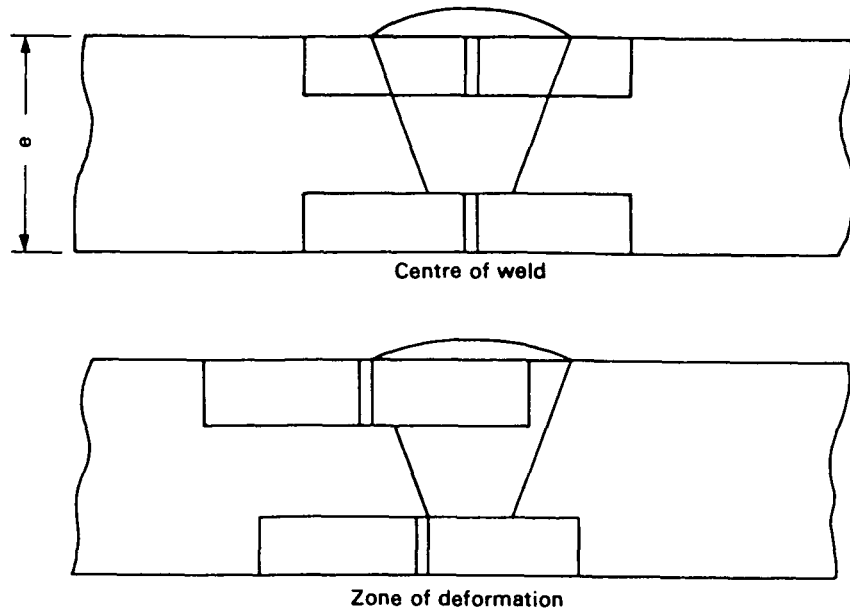
i.e. six test-pieces in all.

$e > 20 \text{ mm}$

2 sets of 3 test-pieces (one set on the upper face, one set on the lower face) at each of the points indicated below.

<sup>1</sup> The text between brackets reads "≤" in the authentic French text — Le texte entre crochets se lit « ≤ » dans le texte authentique français.





i.e. twelve test-pieces in all.

1280 (1) In the case of sheets, the average of 3 tests shall meet the minimum values given in marg. 1275; none of the values may be more than 30% below the minimum shown.

(2) In the case of the welds, the average values obtained from the test-pieces taken at the different points, centre of weld and zone of deformation, shall correspond to the minimum values shown. None of the values may be more than 30% below the minimum shown.

1281-  
1290

**D. REQUIREMENTS RELATING TO TESTS ON AEROSOL DISPENSERS AND NON-REFILLABLE CONTAINERS OF GAS UNDER PRESSURE OF ITEMS 10 AND 11 OF CLASS 2**

**1. Pressure and bursting tests on receptacle model**

1291 Hydraulic pressure tests shall be carried out on at least five empty receptacles of each model:

- (a) Until the prescribed test pressure is reached, by which time no leakage or visible permanent deformation shall have occurred; and
- (b) Until leakage or bursting occurs; the dished end, if any, should yield first and the receptacle should not leak or burst until a pressure 1.2 times the test pressure has been reached or passed.

**2. Leakproofness tests on all receptacles**

1292 (1) For the test on aerosol dispensers (item 10) and non-refillable containers for gas under pressure (item 11) in a hot-water bath, the temperature of the bath and the duration of the test shall be such that the internal pressure of each

receptacle reaches at least 90% of the internal pressure that would be reached at 55°C.

However, if the contents are sensitive to heat or if the receptacles are made of a plastics material which softens at this test temperature, the temperature of the bath shall be from 20° to 30°C; in addition, one dispenser out of every 2,000 shall be tested at the temperature prescribed in the preceding paragraph.

(2) No leakage or permanent deformation of receptacles shall occur. The provision concerning permanent deformation is not applicable to receptacles made of a plastics material which soften.

1293-  
1299

### APPENDIX III

#### A. TESTS RELATING TO INFLAMMABLE LIQUIDS OF CLASSES 3, 6.1 AND 8

1300 (1) The flash-point is determined by means of one of the following types of apparatus:

- (a) For use at temperatures not exceeding 50°C: Abel, Abel-Pensky, Luchaire-Finances, Tag;
- (b) For use at temperatures above 50°C: Pensky-Martens, Luchaire-Finances;
- (c) Failing these, any other closed-up apparatus capable of giving results within 2°C of those which an apparatus listed above would give at the same place.

(2) To determine the flash-point of paints, gums and similar viscous products containing solvents, only apparatus and test methods which are suitable for determining the flash-point of viscous liquids may be used, such as method A of IP standard 170/59 or the more recent IP standards, German standards DIN 53 213 and TGL 14 301 Leaflet 2.

1301 The test procedure shall be:

- (a) For the Abel apparatus, that of IP<sup>(1)</sup> standard No. 33/44; this standard may also be used for the Abel-Pensky apparatus;
- (b) For the Pensky-Martens apparatus, that of IP<sup>(1)</sup> standard No. 34/47 or of ASTM<sup>(2)</sup> standard D.93/46;
- (c) For the Tag apparatus, that of ASTM<sup>(2)</sup> standard D.53/46;
- (d) For the Luchaire apparatus, that of the Instruction annexed to the Ministerial Decree (France) of 26th October 1925, issued under the authority of the Ministère du Commerce et de l'Industrie and which appeared in the *Journal Officiel* of 29th October 1925.

If any other apparatus is used, the following precautions shall be observed:

1. The test shall be performed away from draughts.
2. The rate of heating of the liquid tested shall never exceed 5°C per minute.
3. The pilot-flame shall be 5 mm ( $\pm$  0.5 mm) long.
4. The pilot-flame shall be brought to the opening of the receptacle each time the temperature of the liquid rises by 1°C.

1302 In the event of dispute as to the classification of an inflammable liquid, the item number proposed by the sender shall be accepted if a check-test of the flash-

<sup>(1)</sup> The Institute of Petroleum, 61, New Cavendish Street, London W.1.

<sup>(2)</sup> American Society for Testing and Materials, 1916 Race Str., Philadelphia 3 (Pa).

point carried out on the liquid in question gives a value not differing by more than 2°C from the limits (21°, 55° and 100°C respectively) appearing in marg. 301. If a check-test gives a value differing from these limits by more than 2°C, a second check-test must be carried out, the higher value being finally accepted.

1303 The proportion of peroxide in a liquid shall be determined as follows:

A quantity  $p$  (about 5 g weighed to the nearest cg) of liquid to be titrated shall be placed in an Erlenmeyer flask; 20 cm<sup>3</sup> of acetic anhydride and about 1 g of powdered solid potassium iodide are added; the flask is shaken, then, after 10 minutes, is heated to 60°C for 3 minutes; it is left to cool for 5 minutes, then 25 cm<sup>3</sup> of water are added; after being set aside for half an hour, the liberated iodine is titrated by means of a decinormal solution of sodium thiosulphate, no indicator being added: complete discolouration indicates the end of the reaction. If  $n$  is the number of cm<sup>3</sup> of the thiosulphate solution required, the percentage of peroxide (calculated as H<sub>2</sub>O<sub>2</sub>) present in the sample is obtained by the formula  $\frac{17n}{100p}$ .

1304-  
1309

#### B. TEST FOR DETERMINING FLUIDITY OF INFLAMMABLE LIQUIDS OF CLASS 3

1310 To determine the fluidity of liquid or viscous substances and mixtures of Class 3, the following test method should be used.

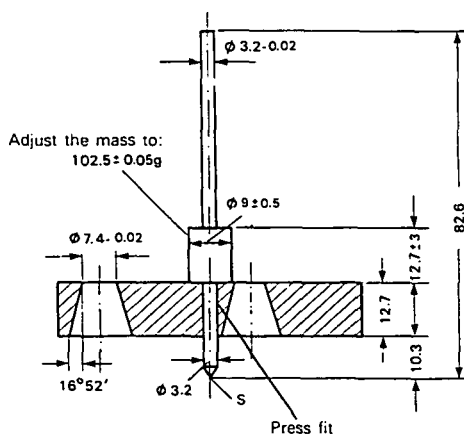
[*Test method*]

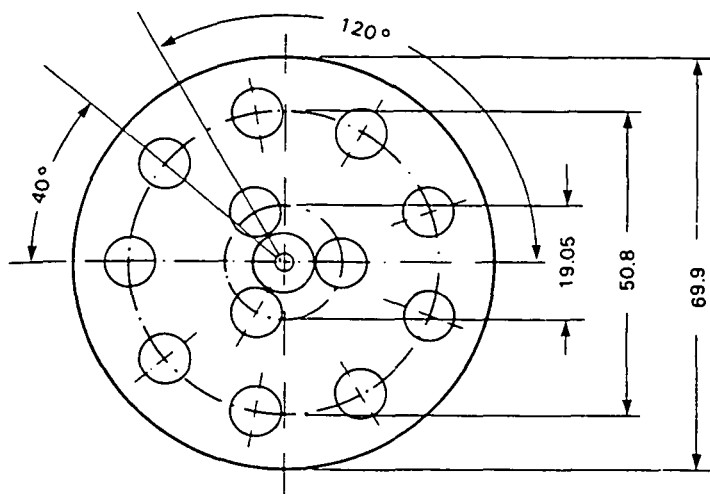
##### (a) *Test apparatus*

Commercial penetrometer conforming to ISO Standard 2137-1972, with a guide rod of  $47.5 \pm 0.05$  g; sieve disc of duralumin with conical bores and a mass of  $102.5 \pm 0.05$  g (see figure); penetration vessel with an inside diameter of 72 mm to 80 mm for reception of the sample.

##### (b) *Test procedure*

The sample is poured into the penetration vessel not less than half an hour before the measurement. The vessel, which is hermetically closed, is kept immovable until the measurement. The sample is heated in the hermetically closed penetration vessel to  $35^\circ\text{C} \pm 0.5$  K and is placed on the penetrometer table only directly before the measurement (not more than two minutes). The centre  $S$  of the sieve disc is then brought into contact with the surface of the liquid and the penetration depth measured in relation to time.





Tolerances not specified are  $\pm 0.1$  mm

#### *Evaluation of test results*

1311 A substance shall not be subject to the conditions of Class 3 of RID if, after the centre S has been brought into contact with the surface of the sample, the penetration indicated by the dial gauge

- (a) After a loading time of  $5 \text{ s} \pm 0.1 \text{ s}$ , is not more than  $15.0 \text{ mm} \pm 0.3 \text{ mm}$ , or
- (b) After a loading time of  $5 \text{ s} \pm 0.1 \text{ s}$ , is more than  $15.0 \text{ mm} \pm 0.3 \text{ mm}$ , but the additional penetration after another  $55 \text{ s} \pm 0.5 \text{ s}$  is less than  $5.0 \text{ mm} \pm 0.5 \text{ mm}$ .

NOTE. In the case of samples having a flow point, it is often impossible to produce a plane surface in the penetration vessel and, hence, to fix clear initial measuring conditions for the contact of the centre S. Furthermore, with some substances, the impact of the sieve disc can cause an elastic deformation of the surface and in the first few seconds simulate a deeper penetration. For these substances it may be useful to make the evaluation mentioned in (b) above.

1312-  
1399

#### APPENDIX IV

##### CONDITIONS GOVERNING THE USE OF WAGONS FITTED WITH ELECTRICAL EQUIPMENT

- 1400 Substances and articles of Class 1,  
Substances of items 1 to 8, 11 to 26, 31 and 33 of Class 3,  
Substances of items 3 to 7, 20 and 21 of Class 4.1,  
Substances of Class 5.1,  
Substances of items 23 to 25 of Class 5.2,  
Inflammable substances of Class 6.1 having a flash-point of  $55^{\circ}\text{C}$  or below,  
Inflammable substances of Class 8 having a flash-point of  $55^{\circ}\text{C}$  or below and  
substances of items 2 (a) and 3 (a)

may not be carried in wagons fitted with electrical equipment unless this satisfies the following conditions:

- (a) The electric wiring must be securely fixed and protected against any mechanical damage. Unless lead-covered cable or similar wiring protected by jointless and rustless metal coverings is used, the wiring must be placed in leakproof steel pipes. Live wires and earthing parts must be ensured against working loose. The metal parts of the wagon must not be able to be used as a return conductor.
- (b) Lighting must only be by means of incandescent electric bulbs. The point of entry of the leads to the bulbs must be leakproof and be provided on the loading space side with strong firmly sealed protective glass. If the bulbs are not fixed in recesses in the walls or ceiling protecting them against any mechanical damage they should be encased in a strong protective basket or grill. Incandescent lamps must be ensured against working loose from their seating.
- (c) Electrical machinery, regulators, switches and safety appliances (e.g. fusible cut-outs, automatic current switches) capable when in action of producing sparks, as well as radiators, heaters and lighting conductors, must be constructed in such a way as not to give rise to the ignition of explosive mixtures of air and gas, of air and vapour or of air and dust which may exist in the surrounding space (anti-explosion construction). This requirement is not applicable to electrical equipment situated in a compartment which is completely separated from the space reserved for the load by absolutely leakproof walls, without communicating doors and is provided with ventilators communicating with the outside.

1401 (1) Substances and articles of marg. 1400 must not be loaded in wagons fitted with transformers.

(2) The use of wagons fitted with air-cooled transformers is allowed for substances of Classes 3, 4.1 and 5.1 as well as for substances of items 2 (a) and 3 (a) of Class 8 as detailed in marg. 1400, if all the raw materials of which the transformers are made are incombustible or not readily inflammable. Air-cooled transformers must be placed under the body of the wagon and separated from it by an insulator of such nature and size that the electric arc produced by any fusion of a winding cannot set fire to the body.

(3) Wagons fitted with transformers must carry a distinctive sign, unless otherwise recognisable.

1402 Wagons not conforming to these conditions may, however, be used for the carriage of substances and articles mentioned above if all those electric installations which do not satisfy the requirements are deprived of current and ensured against being rendered live during carriage.

1403-  
1499

#### APPENDIX V

##### GENERAL PACKING CONDITIONS, TYPES OF PACKAGINGS, REQUIREMENTS APPLICABLE TO PACKAGINGS, TEST REQUIREMENTS FOR PACKAGINGS

NOTE. These requirements apply to packagings containing substances of Classes 1, 3, 4.1 [(items 7 (a))<sup>1</sup>, 20 and 21], 6.1, 8 [or]<sup>2</sup> 9.

<sup>1</sup> The text between brackets does not appear in the authentic French text — Le texte entre crochets n'apparaît pas dans le texte authentique français.

<sup>2</sup> The text between brackets reads "and" in the authentic French text — Le texte entre crochets se lit « et » dans le texte authentique français.

*Section I. General packing conditions*

1500 (1) Packagings shall be so manufactured and closed as to prevent any leakage of contents from a package prepared for dispatch such as might be caused in normal conditions of carriage particularly by changes in temperature, humidity or pressure. No dangerous substance shall adhere to the outside of packages. These provisions apply both to new and to reused packagings.

(2) Parts of packagings which are in direct contact with dangerous substances shall not be affected by chemical or other action of those substances; where necessary, they shall be provided with a suitable inner coating or treatment. Such parts of packagings shall not incorporate constituents liable to react dangerously with the contents, to form hazardous substances, or significantly to weaken them.

(3) Each packaging except inner packagings of combination packagings shall conform to a design type tested and approved in accordance with the requirements laid down in section IV. Mass-produced packagings shall conform to the approved design type.

(4) Where packagings are filled with liquid substances, sufficient ullage shall be left to ensure that no leakage of liquid substance and no permanent distortion of the packaging occurs as a result of expansion of the liquid substance, due to temperatures which may be attained during carriage. For a filling temperature of 15°C, the maximum degree of filling shall be determined as follows, unless otherwise provided under a particular class:

either

(a)

Boiling point (initial boiling point) of the substance in °C	< 60	≥ 60 < 100	≥ 100 < 200	≥ 200 < 300	≥ 300
Degree of filling as a percentage of the capacity of the packaging	90	92	94	96	98

or

(b) Degree of filling =  $\frac{98}{1 + \alpha (50 - t_F)}$  % of the capacity of the packaging.

In this formula  $\alpha$  represents the mean coefficient of cubic expansion of the liquid between 15°C and 50°C, that is to say, for a maximum rise in temperature of 35°C.

$$\alpha \text{ is calculated according to the formula: } \alpha = \frac{d_{15} - d_{50}}{35 \times d_{50}}$$

$d_{15}$  and  $d_{50}$  being the relative densities<sup>(1)</sup> of the liquid at 15°C and 50°C and  $t_F$  the mean temperature of the liquid at the time of filling.

(5) Inner packagings shall be packed in the outer packaging in such a way that, under normal conditions of carriage, they cannot break, be punctured or leak their contents into the outer packaging. Inner packagings which are liable to break or be punctured easily, such as those made of glass, porcelain or stoneware or of

<sup>(1)</sup> The term relative density ( $d$ ) is used instead of specific gravity [see marg. 4 (1)] in this appendix.

certain plastics materials, etc., shall be secured in an outer packaging with suitable cushioning material. Any leakage of the contents shall not substantially impair the protective properties of the cushioning material or of the outer packaging.

(6) Inner packagings containing different substances which may react dangerously with one another shall not be placed in the same outer packaging (see also the mixed packing provisions under the various classes).

(7) The closure of packagings containing wetted or diluted substances shall be such that the percentage of liquid (water, solvent or phlegmatizer) does not fall below the prescribed limits during carriage.

(8) Where overpressure may develop in a packaging through the emission of gas from the contents (as a result of temperature increase or other causes), the packaging may be fitted with a vent provided that the gas emitted will not cause any danger on account of its toxicity, its inflammability, the quantity released, etc. The vent shall be so designed that, when the packaging is in the attitude in which it is intended to be transported, leakages of liquid and the penetration of foreign matter are prevented under normal conditions of carriage. However, a substance may be carried in such a packaging only where a vent is prescribed for that substance in the conditions of carriage of the relevant class.

(9) New, reused or reconditioned packagings shall be capable of passing the tests prescribed in section IV. Before being filled and handed over for carriage, every packaging shall be inspected and its freedom from corrosion, contamination or other damage verified. Any packaging which shows signs of reduced strength in comparison with the approved design type shall no longer be used or shall be so reconditioned that it is able to withstand the design-type tests.

(10) Packagings used for liquids shall undergo a leakproofness test if so required by and under the conditions prescribed in marg. 1560.

(11) Liquids shall be filled only into packagings which have an appropriate resistance to the internal pressure that may be developed under normal conditions of carriage. Packagings marked with the hydraulic test pressure as prescribed in marg. 1512 (1) (d) shall be filled only with a liquid having a vapour pressure:

- (a) Such that the total gauge pressure in the packaging (i.e. the vapour pressure of the filling substance plus the partial pressure of air or other inert gases, less 100 kPa) at 55°C determined on the basis of a maximum degree of filling in accordance with (4) above and a filling temperature of 15°C, will not exceed two-thirds of the marked test pressure; or
- (b) At 50°C less than four-sevenths of the sum of the marked test pressure plus 100 kPa; or
- (c) At 55°C less than two-thirds of the sum of the marked test pressure plus 100 kPa.

1501-  
1509

## Section II. Types of packaging

### Definitions

1510 (1) Subject to the special provisions for each class, the packagings listed below may be used:

*Drums:* flat-ended or convex-ended cylindrical packagings made of metal, fibre, plastics, plywood or other suitable materials. This definition also includes

packagings of other shapes made of metal or plastics, e.g. round taper-necked packagings, or pail-shaped packagings. Wooden barrels and jerricans are not covered by this definition.

*Wooden barrels*: packagings made of natural wood, of round cross-section, having convex walls, consisting of staves and heads and fitted with hoops.

*Jerricans*: metal or plastics packagings of rectangular or polygonal cross-section with one or more orifices.

*Boxes*: packagings with full rectangular or polygonal sides, made of metal, wood, plywood, reconstituted wood, fibreboard, plastics or other suitable material, without orifices.

*Bags*: flexible packagings made of paper, plastics film, textiles, woven material or other suitable materials.

*Composite packagings* (plastics material): packagings consisting of an inner plastics receptacle and an outer packaging (made of metal, fibreboard, plywood, etc.). Once assembled, such a packaging remains thereafter an inseparable unit; it is filled, stored, dispatched and emptied as such.

*Composite packagings* (glass, porcelain or stoneware): packagings consisting of an inner glass, porcelain or stoneware receptacle and an outer packaging (made of metal, wood, fibreboard, plastics material, expanded plastics material, etc.). Once assembled such a packaging remains thereafter an inseparable unit; it is filled, stored, despatched and emptied as such. It shall be tested in accordance with marg. 1552 (1) (a) or (b), 1553 and 1554.

*Combination packagings*: a combination of packagings for transport purposes, consisting of one or more inner packagings secured in an outer packaging in accordance with marg. 1500 (5).

(2) Subject to the special provisions for each class, the following packagings may also be used:

*Composite packagings* (glass, porcelain or stoneware); if tested in accordance with marg. 1552 (1) (e).

*Light gauge metal packagings*: packagings of circular, elliptical, rectangular or polygonal cross-section, (also conical) and taper-necked and pail-shaped packagings made of light metal, having a wall thickness of less than 0.5 mm, flat or convex bottomed and with one or more orifices, which are not covered by the definitions given in (1) for drums and jerricans.

(3) The following definitions are applicable to packagings in (1) and (2) above:

*Closures*: devices which close an opening in a receptacle;

*Inner packagings*: packagings for which an outer packaging is required for carriage.

*Inner receptacles*: receptacles which require an outer packaging in order to perform their containment function.

*Maximum capacity* (as used in Section III): the maximum inner volume of receptacles or packagings expressed in litres.

*Maximum net mass*: the maximum net mass of contents in a single packaging or maximum combined mass of inner packagings and the contents thereof expressed in kilograms.

*Outer packaging*: the outer protection of a composite or combination packaging together with any absorbent materials, cushioning and any other components necessary to contain and protect inner receptacles or inner packagings.



*Packages*: the complete product of the packing operation, consisting of the packaging and its contents prepared for dispatch.

*Packagings*: receptacles and any other components or materials necessary for the receptacle to perform its containment function.

*Receptacles*: containment vessels for receiving and holding substances or articles, including any means of closing.

NOTE. The "inners" of "combination packagings" are always termed "inner packagings" not "inner receptacles". A glass bottle is an example of such an "inner packaging". The "inners" of "composite packagings" are normally termed "inner receptacles". For example, the "inner" of a 6HA1 composite packaging (plastics material) is such an "inner receptacle" since it is normally not designed to perform a containment function without its "outer packaging" and is not therefore an "inner packaging".

*Coding of design types for packagings conforming to marg. 1510 (1) and (2).*

1511 (1) The code number consists of

- An Arabic numeral indicating the type of packaging, e.g. drum, jerrican etc.;
- A capital letter or letters (Latin characters) indicating the nature of the material, e.g. steel, wood, etc.;
- Where necessary, an Arabic numeral indicating the category of packaging within the type to which the packaging belongs.

In the case of composite packagings, two capital letters (Latin characters) shall be used. The first shall indicate the material of the inner receptacle and the second that of the outer packaging.

In the case of combination packagings, only the code number for the outer packaging shall be used.

The following numerals shall be used for the type of packaging:

1. Drum
2. Wooden barrel
3. Jerrican
4. Box
5. Bag
6. Composite packaging
0. Light gauge metal packaging

The following capital letters shall be used for the types of material:

- A. Steel (all types and surface treatments)
- B. Aluminium
- C. Natural wood
- D. Plywood
- F. Reconstituted wood
- G. Fibreboard
- H. Plastics material, including expanded plastics material
- L. Textile
- M. Paper, multiwall
- N. Metal (other than steel or aluminium)
- P. Glass, porcelain or stoneware

(2) Three packing groups are provided for in the special requirements for each class, according to the degree of danger presented by the substances to be carried:

- Packing Group I: for substances of group (a);
  - Packing Group II: for substances of group (b);
  - Packing Group III: for substances of group (c)
- of the items in the list of substances.

The packaging code shall be followed in the marking by a letter indicating the groups of substances for which the design type is approved as follows:

- X for packagings for substances in packing groups I to III;
- Y for packagings for substances in packing groups II and III; and
- Z for packagings for substances in packing group III.

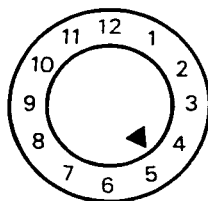
*Marking*

1512 (I) Each packaging shall bear durable and clearly visible marking.

The marking for new packagings manufactured in conformity with the approved design type consists of:

- (a) (i) The symbol  $\left(\frac{U}{n}\right)$  for packagings conforming to marg. 1510 (1). For metal packagings on which the marking is stamped, the letters UN may be applied instead of the symbol  $\left(\frac{U}{n}\right)$ ;
- (ii) The symbol "RID"<sup>(2)</sup> for packagings conforming to marg. 1510 (2);
- (b) The packaging code in accordance with marg. 1511 (1);
- (c) A code in two parts:
  - (i) A letter (X, Y or Z) designating the packing group(s) for which the design type has been approved;
  - (ii) For packagings without inner packagings, intended to contain liquids having a viscosity at 23°C of 200 mm<sup>2</sup>/s or less, the relative density (rounded off to the first decimal) of the substance with which the design type has been tested if more than 1.2;
 

for packagings intended to contain liquids having a viscosity at 23°C of more than 200 mm<sup>2</sup>/s, solids or inner packagings, the maximum gross mass in kilograms;
- (d) Either a letter "S" if the packaging is intended to contain liquids having a viscosity at 23°C of more than 200 mm<sup>2</sup>/s, solids or inner packagings, or, if a hydraulic pressure test has been successfully passed, the test pressure in kPa rounded down to the nearest 10 kPa.
- (e) The year of manufacture (last two digits); in addition for packagings of types 1H and 3H, the month of manufacture; this part of the marking may be affixed in a different place from the other particulars. A suitable method is:



- (f) The mark<sup>(3)</sup> of the State in which the approval was issued;

<sup>(2)</sup> For packagings which are also approved for international road traffic, the symbol may be "RID/ADR".

<sup>(3)</sup> Distinguishing sign for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968).<sup>1</sup>

<sup>1</sup> United Nations, *Treaty Series*, vol. 1042, p. 17.

(g) Either a registration number and the name or mark of the manufacturer or some other packaging identification mark specified by the competent authorities.

(2) Every re-usable packaging liable to undergo reconditioning which might obliterate the packaging markings shall bear the marks specified in (a), (b), (c), (d) and (e) in a permanent form (e.g. by stamping) so as to withstand the reconditioning process.

(3) The registration number is valid for only one design type or series of design types. Different surface treatments may fall within the same design type.

A "series of design types" means packagings of the same structural design, wall thickness, material and cross-section, which differ only in their lesser design heights from the design type approved.

The closures of receptacles shall be identifiable as those referred to in the test report.

(4) After reconditioning a packaging the reconditioner shall affix to it, near the durable marks required by (a) to (e) the following sequence of marks:

- (h) The mark of the State in whose territory the reconditioning was carried out;
- (i) The name or authorized symbol of the reconditioner;
- (j) The year of reconditioning, the letter "R" and, for every packaging which has successfully undergone the leakproofness test in accordance with marg. 1500 (10), the additional letter "L".

(5) Packagings marked in accordance with this marginal but which were approved in a State which has not adhered to COTIF may nevertheless be used for carriage under RID.

(6) Examples of the markings:

For a new steel drum:

Ⓢ 1A1/Y1.4/150/83 (a) (i), (b), (c), (d) and (e)  
NL/VL123 (f) and (g)

For a reconditioned steel drum:

Ⓢ 1A1/Y1.4/150/83 (a) (i), (b), (c), (d) and (e)  
NL/RB/84/RL (h), (i) and (j)

For new light gauge metal packagings:

RID/ADR/OA1/Y/100/83 (a) (ii), (b), (c), (d) and (e) Non-removable head  
NL/VL123 (f) and (g)

RID/ADR/OA2/Y/20/S/83 (a) (ii), (b), (c) and (e) Removable head, intended for liquids with a viscosity at 23°C exceeding 200 mm<sup>2</sup>/s.  
NL/VL124 (f) and (g)

#### *Certification*

1513

The manufacturer certifies, by affixing marking in accordance with marg. 1512 (1) that mass-produced packagings correspond to the approved design type and that the requirements referred to in the approval have been met.

*Index of packagings*

1514

The codes corresponding to the various type of packaging are as follows:

Type	Material	Category	Code	Marginal
<b>A. Packagings conforming to marg. 1510 (1) and marked "UN"</b>				
1. Drums	A. Steel	non-removable head	1A1	1520
		removable head	1A2	
	B. Aluminium	non-removable head	1B1	1521
		removable head	1B2	
	D. Plywood		1D	1523
	G. Fibre		1G	1525
H. Plastics	non-removable head	1H1	1526	
	removable head	1H2		
2. Barrels	C. Natural wood	bung type	2C1	1524
		removable head	2C2	
3. Jerricans	A. Steel	non-removable head	3A1	1522
		removable head	3A2	
	H. Plastics	non-removable head	3H1	1526
		removable head	3H2	
4. Boxes	A. Steel	–	4A1	1532 <sup>(4)</sup>
		with liner	4A2	
	B. Aluminium	–	4B1	1532 <sup>(4)</sup>
		with liner	4B2	
	C. Natural wood	ordinary	4C1	1527 <sup>(4)</sup>
		with sift-proof walls	4C2	
	D. Plywood	–	4D	1528 <sup>(4)</sup>
	F. Reconstituted wood	–	4F	1529 <sup>(4)</sup>
	G. Fibreboard	–	4G	1530 <sup>(4)</sup>
	H. Plastics	expanded	4H1	1531 <sup>(4)</sup>
solid		4H2		
5. Bags	H. Woven plastics	without inner lining or coating	5H1	1534
		sift-proof	5H2	
		water resistant	5H3	
	H. Plastics film	–	5H4	1535

<sup>(4)</sup> In accordance with marg. 1538 these packagings may be used as the outer packagings of combination packagings.

Type	Material	Category	Code	Marginal
5. Bags (continued)	L. Textile	without inner lining or coating	5L1	1533
		sift-proof	5L2	
		water resistant	5L3	
	M. Paper	multiwall	5M1	1536
		multiwall, water resistant	5M2	
6. Composite packagings	H. Plastics receptacle	in steel drum	6HA1	1537
		in steel crate <sup>(5)</sup> or box	6HA2	
		in aluminium drum	6HB1	
		in aluminium crate <sup>(5)</sup> or box	6HB2	
		in wooden box	6HC	
		in plywood drum	6HD1	
		in plywood box	6HD2	
		in fibre drum	6HG1	
		in fibreboard box	6HG2	
		in plastics drum	6HH	
<b>B. Packagings which may conform to marg. 1510 (1) or (2)</b>				
6. Composite packagings	P. Glass, porcelain or stoneware receptacle	in steel drum	6PA1	1539
		in steel crate <sup>(5)</sup> or box	6PA2	
		in aluminium drum	6PB1	
		in aluminium crate <sup>(5)</sup> or box	6PB2	
		in wooden box	6PC	
		in plywood drum	6PD1	
		in wickerwork hamper	6PD2	
		in fibre drum	6PG1	
		in fibreboard box	6PG2	
		in expanded plastics packaging	6PH1	
		in solid plastics packaging	6PH2	
<b>C. Packagings conforming only to marg. 1510 (2) and marked "RID" (or "RID/ADR")<sup>(6)</sup></b>				
0. Light gauge metal packagings	A. Steel	non-removable head	0A1	1540
		removable head	0A2	

1515-  
1519<sup>(5)</sup> A crate is an outer packaging with incomplete surfaces.<sup>(6)</sup> See footnote (2) [page 440].

*Section III. Requirements for packagings*

## A. PACKAGINGS CONFORMING TO MARG. 1510 (1)

1520

*Steel drums*

- 1A1 non-removable head;  
1A2 removable head.

- (a) The sheet metal for the body and ends shall be of suitable steel and of a gauge appropriate to the drum's capacity and intended use.
- (b) Body seams shall be welded on drums intended to contain more than 40 litres of liquid. Body seams shall be mechanically seamed or welded on drums intended to contain solids or 40 litres or less of liquids.
- (c) Head and chime seams shall be mechanically seamed or welded.
- (d) If there are built-on rolling hoops they shall be fitted tightly on the body and so secured that they cannot shift. These hoops shall not be spot-welded.
- (e) Internal coatings of lead, zinc, tin, lacquer and the like shall be tough and resilient and shall adhere to the steel at every point, including the closures.
- (f) Openings for filling, emptying and venting in the bodies or heads of non-removable head (1A1) drums shall not exceed 7 cm in diameter. Drums with larger openings are considered to be of the removable head type (1A2).
- (g) Closures shall incorporate a leakproof gasket except where a taper thread ensures comparable leakproofness.
- (h) Closures of non-removable-head drums (1A1) shall either be of the screw-threaded type or be capable of being secured by a screw-threaded device or at least equally effective device.
- (i) Closure devices for removable head drums (1A2) shall be so designed and applied that they will remain secure and drums will remain leakproof under normal conditions of carriage. Gaskets or other sealing elements shall be used with all removable heads.
- (j) Maximum capacity of drum: 450 litres.
- (k) Maximum net mass: 400 kg.

1521

*Aluminium drums*

- 1B1 non-removable head;  
1B2 removable head.

- (a) The body and heads shall be of aluminium at least 99% pure, or of an aluminium-base alloy having corrosion resistance and mechanical properties appropriate to the capacity of the drum and its intended use.
- (b) Openings for filling, emptying and venting in the bodies or heads of non-removable head (1B1) drums shall not exceed 7 cm in diameter. Drums with larger openings are considered to be of the removable head type (1B2).
- (c) Aluminium drums 1B1.  
End seams, if any, shall be adequately reinforced for their protection. If there are any body and end seams they shall be welded. The closure shall either be of the screw-threaded type or be capable of being secured by a screw-threaded device or a device at least equally effective. Closures shall incorporate a leak-proof gasket except where a taper thread ensures comparable leakproofness.
- (d) Aluminium drums 1B2.  
The body of the drum shall either be seamless or have a welded seam. The closures shall be so designed and fitted that they will remain secure and the

drums will remain leakproof under normal conditions of carriage. Gaskets or other sealing elements shall be used with all removable heads.

(e) Maximum capacity of drum: 450 litres.

(f) Maximum net mass: 400 kg.

1522 *Steel jerricans*

3A1 non-removable head;

3A2 removable head.

(a) Body and heads shall be constructed of steel sheet of a suitable type and of adequate thickness in relation to the capacity of the jerrican and its intended use.

(b) Chimes of all jerricans shall be mechanically seamed or welded. Body seams of jerricans intended to contain more than 40 litres of liquid shall be welded. Body seams of jerricans intended to carry 40 litres of liquid or less shall be mechanically seamed or welded.

(c) Openings in jerricans (3A1) shall not exceed 7 cm in diameter. Jerricans with larger openings are considered to be of the removable head type (3A2).

(d) The closure shall either be of the screw-threaded type or be capable of being secured by a screw-threaded device or a device at least equally effective.

(e) Maximum capacity of jerrican: 60 litres.

(f) Maximum net mass: 120 kg.

1523 *Plywood drums*

1D

(a) The wood used shall be well seasoned, commercially dry and free from any defect likely to lessen the effectiveness of the drum for the purpose intended. If a material other than plywood is used for the manufacture of the ends, it shall be of a quality equivalent to the plywood.

(b) At least two-ply plywood shall be used for the body and at least three-ply plywood for the ends; the plies shall be firmly glued together, with their grain crosswise, by a water-resistant adhesive.

(c) The body and ends shall be of a design appropriate to the capacity of the drum and its intended use.

(d) In order to prevent sifting of the contents, lids shall be lined with kraft paper or some other equivalent material which shall be securely fastened to the lid and extend to the outside along its full circumference.

(e) Maximum capacity of drum: 250 litres.

(f) Maximum net mass: 400 kg.

1524 *Wooden barrels*

2C1 bung type;

2C2 removable head.

(a) The wood used shall be of good quality, straight-grained, well-seasoned and free from knots, bark, rotten wood, sapwood or other defects likely to lessen the effectiveness of the barrel for the purpose intended.

(b) The body and ends shall be of a design appropriate to the capacity of the barrel and its intended use.

(c) Staves and ends shall be sawn or cleft with the grain so that no annual ring shall extend over more than half the thickness of a stave or head.

- (d) Barrel hoops shall be of steel or iron and of good quality. The hoops of barrels with removable heads (2C2) may be of a suitable hardwood.
- (e) Wooden barrels 2C1:  
The diameter of the bung-hole shall not exceed half the width of the stave in which it is placed.
- (f) Wooden barrels 2C2:  
Heads shall fit tightly into the crozes.
- (g) Maximum capacity of barrel: 250 litres.
- (h) Maximum net mass: 400 kg.

1525 *Fibre drums*

## 1G

- (a) The body of the drum shall consist of multiple plies of kraft paper or fibreboard (without corrugations) firmly glued or laminated together and may include one or more protective layers of bitumen, waxed kraft paper, metal foil, plastics material, etc.
- (b) Heads shall be of natural wood, fibreboard, metal, plywood or plastics material and may include one or more protective layers of bitumen, waxed kraft paper, metal foil, plastics material, etc.
- (c) The body and heads of the drum and their joins shall be of a design appropriate to the capacity of the drum and its intended use.
- (d) The assembled packaging shall be sufficiently water-resistant so as not to delaminate under normal conditions of carriage.
- (e) Maximum capacity of drum: 450 litres.
- (f) Maximum net mass: 400 kg.

1526 *Plastics drums and jerricans*

- 1H1 drums, non-removable head;
- 1H2 drums, removable head;
- 3H1 jerricans, non-removable head;
- 3H2 jerricans, removable head.

- (a) The packagings shall be capable of withstanding the physical (in particular mechanical and thermal) and chemical stresses to be expected in carriage and of remaining leakproof. They shall be capable of withstanding dangerous substances and their vapours. They shall also have the necessary degree of resistance to ageing and ultra-violet radiation. Packagings shall be safe to handle.
- (b) The permitted period of use of the packagings for the carriage of dangerous goods shall be five years from the date of their manufacture except where the conditions for carriage of the various classes prescribe a shorter period of use.
- (c) If protection against ultra-violet radiation is required, it shall be provided by the addition of carbon black or other suitable pigments or inhibitors. These additives shall be compatible with the contents and remain effective throughout the permitted period of use of the packaging.

Where use is made of carbon black, pigments or inhibitors other than those used in the manufacture of the tested design type, retesting may be waived if the carbon black content does not exceed 2% by mass or if the pigment content does not exceed 3% by mass; the content of inhibitors of ultra-violet radiation is not limited.



- (d) Additives serving purposes other than protection against ultra-violet radiation may be included in the composition of the plastics material provided that they do not adversely affect the chemical and physical properties of the material of the packaging. In such circumstances, retesting may be waived.
- (e) Appropriate steps shall be taken to ensure that the plastics material to be used in the manufacture of the packaging is chemically compatible with the goods which the packaging is intended to contain [see marg. 1551 (5)].
- (f) Packagings shall be manufactured from suitable plastics material of known origin and specifications; their construction shall be fully appropriate to plastics materials and in accordance with technological developments. For new packagings, no used material other than production residues or regrind from the same manufacturing process may be used.
- (g) The wall thickness at every point of the packaging shall be appropriate to its capacity and intended use, taking into account, however, the stresses to which each point is liable to be exposed.
- (h) Openings for filling, emptying and venting in the bodies or heads of non-removable head drums (1H1) and jerricans (3H1) shall not exceed 7 cm in diameter. Drums and jerricans with larger openings are considered to be of the removable head type (1H2, 3H2).
- (i) Removable head drums (1H2) and jerricans (3H2) used for solid substances shall remain leakproof at every point with respect to the filling substance.  
Closure devices for removable head drums and jerricans shall be so designed and applied that they will remain secure and leakproof under normal conditions of carriage. Gaskets or other sealing elements shall be used with all removable heads unless the drum or jerrican design is such that, where the removable head is properly secured, the drum or jerrican is inherently leakproof.
- (j) The maximum permissible permeation for inflammable liquids shall be  $\frac{0.008g}{l.h}$  at 23°C (see marg. 1556).
- (k) Maximum capacity of drums and jerricans:  
1H1, 1H2: 450 litres;  
3H1, 3H2: 60 litres.
- (l) Maximum net mass:  
1H1, 1H2: 400 kg  
3H1, 3H2: 120 kg.

1527 *Boxes made of natural wood*

- 4C1 ordinary;  
4C2 with sift-proof walls.

- NOTE. For plywood boxes, see marg. 1528; for reconstituted wood boxes, see marg. 1529.
- (a) The wood used shall be well seasoned, commercially dry and free from defects that would materially lessen the strength of any part of the box. The strength of the material used and the method of construction shall be appropriate to the capacity of the box and its intended use. The top and bottom may be made of water-resistant reconstituted wood such as hard-board, particle board or other suitable type.
- (b) Boxes with sift-proof walls 4C2:  
Each part of the box shall be in one piece or equivalent thereto. A part shall be deemed equivalent to a part in one piece if it is glued together by one of

the following methods: Lindermann (dovetail) jointing, tongue-and-groove jointing, ship-lap or rabbet jointing, or butt-jointing with at least two corrugated metal fasteners at each joint.

(c) Maximum net mass: 400 kg.

1528 *Plywood boxes*

4D

(a) The plywood used shall have at least three plies. It shall be made of well-seasoned rotary-cut, sliced or sawn veneer commercially dry and free from defects likely to lessen the strength of the box. All plies shall be glued by means of a water-resistant adhesive. Other suitable materials may be used together with plywood in the manufacture of boxes. Boxes shall be firmly nailed or secured to corner posts or ends or be assembled by other equivalent and equally suitable devices.

(b) Maximum net mass: 400 kg.

1529 *Reconstituted wood boxes*

4F

(a) The walls of boxes shall be made of water-resistant reconstituted wood such as hardboard, particle board or other suitable type. The strength of the material used and the method of construction shall be appropriate to the capacity of the box and its intended use.

(b) Other parts of the boxes may be made of other suitable material.

(c) Boxes shall be securely assembled by means of suitable devices.

(d) Maximum net mass: 400 kg.

1530 *Fibreboard boxes*

4G

(a) Good quality solid or double-faced (single-wall or multiwall) corrugated fibreboard appropriate to the capacity and intended use of the boxes shall be used. The water-resistance of the outer surface shall be such that the increase in mass, as measured in a test carried out over a period of 30 minutes by the Cobb method of water-absorption determination, is not greater than 155 g/m<sup>2</sup> (in accordance with ISO International Standard 535-1976). The fibreboard shall be capable of bending sufficiently without breaking. It shall be cut, creased without scoring and slotted so as to permit assembly without cracking and without its surfaces tearing or bulging unduly. The fluting of corrugated fibreboard shall be firmly glued to the facings.

(b) Ends of boxes may have a wooden frame or be entirely of wood. Reinforcements of wooden battens may be used.

(c) Joins of boxes shall be taped with adhesive tape, be lapped and glued, or be lapped and metal-stapled. Lapped joins shall have a suitable overlap. Where closure is effected by gluing or by applying adhesive tape, the adhesive shall be water-resistant.

The dimensions of the box shall be appropriate for the contents.

(d) Maximum net mass: 400 kg.

1531 *Plastics boxes*

4H1 expanded plastics boxes

4H2 solid plastics boxes

(a) The box shall be manufactured from suitable plastics material and be of adequate strength in relation to its capacity and intended use. The box shall be

adequately resistant to ageing and to degradation caused either by the substance contained or by ultra-violet radiation.

- (b) An expanded plastics box (4H1) shall comprise two parts made of a moulded expanded plastics material, a bottom section containing cavities for the inner packagings and a top section covering and interlocking with the bottom section. The top and bottom sections shall be designed so that the inner packagings fit snugly. The closure cap for any inner packaging shall not be in contact with the inside of the top section of this box.
- (c) For dispatch, an expanded plastics box (4H1) shall be closed with a self-adhesive tape having sufficient tensile strength to prevent the box from opening. The adhesive tape shall be weather-resistant and its adhesive compatible with the expanded plastics material of the box. Other closing devices at least equally effective may be used.
- (d) For solid plastics boxes (4H2), protection against ultra-violet radiation, if required, shall be provided by the addition of carbon black or other suitable pigments or inhibitors. These additives shall be compatible with the contents and remain effective throughout the permitted period of use of the box. Where use is made of carbon black, pigments or inhibitors other than those used in the manufacture of the tested design type, retesting may be waived if the carbon black content does not exceed 2% by mass or if the pigment content does not exceed 3% by mass; the content of inhibitors of ultra-violet radiation is not limited.
- (e) Solid plastics boxes (4H2) shall have closure devices made of a suitable material of adequate strength and so designed as to prevent the box from unintentional opening.
- (f) Additives serving purposes other than protection against ultra-violet radiation may be included in the composition of the plastics material of boxes (4H1 and 4H2) provided that they do not adversely affect the chemical and physical properties of the material. In such circumstances, retesting may be waived.
- (g) Maximum net mass:  
4H1: 60 kg;  
4H2: 400 kg.

1532 *Steel or aluminium boxes*

- 4A1 steel;
- 4A2 steel, with liner;
- 4B1 aluminium;
- 4B2 aluminium, with liner.

- (a) The strength of the metal and the construction of the box shall be appropriate to the capacity of the box and its intended use.
- (b) Boxes (4A2) and 4B2) shall be lined with fibreboard or felt packing pieces as required or shall have an inner liner of suitable material. If a double seamed metal liner is used, steps shall be taken to prevent the ingress of substances into the recesses of the seams.
- (c) Closures may be of any suitable type; they shall remain secured under normal conditions of carriage.
- (d) Maximum net mass: 400 kg.

1533 *Textile bags*

- 5L1 without lining or inner coating;
- 5L2 sift-proof;
- 5L3 water-resistant.

- (a) The textiles used shall be of good quality. The strength of the fabric and the construction of the bag shall be appropriate to the capacity of the bag and its intended use.

## (b) Bags, sift-proof, 5L2.

The bag shall be made sift-proof, for example by the use of:

- Paper bonded to the inner surface of the bag by a water-resistant adhesive such as bitumen; or
- Plastics film bonded to the inner surface of the bag; or
- One or more inner liners made of paper or plastics material.

## (c) Bags, water-resistant, 5L3.

To prevent any entry of moisture the bag shall be made waterproof, for example by the use of:

- Separate inner liners of water-resistant paper (e.g. waxed kraft paper, tarred paper or plastics-coated kraft paper); or
- Plastics film bonded to the inner surface of the bag; or
- One or more inner liners made of plastics material.

## (d) Maximum net mass: 50 kg.

1534 *Woven plastics bags*

- 5H1 without inner lining or coating;
- 5H2 sift-proof;
- 5H3 water-resistant.

## (a) Bags shall be made from stretched tapes or stretched monofilaments of a suitable plastics material. The strength of the material used and the construction of the bag shall be appropriate to the capacity of the bag and its intended use.

## (b) Bags may be fitted with an inner liner of plastics film or given a thin inner coating of plastics material.

## (c) If the fabric is woven flat, the bags shall be formed by sewing or some other method ensuring closure of the bottom and one side. If the fabric is tubular, the bottom of the bag shall be closed by sewing, weaving or some other equally strong method of closure.

## (d) Bags, sift-proof, 5H2:

The bag shall be made sift-proof, for example by means of:

- Paper or a plastics film bonded to the inner surface of the bag; or
- One or more separate inner liners made of paper or plastics material.

## (e) Bags, water-resistant, 5H3:

To prevent any entry of moisture, the bag shall be made waterproof, e.g. by means of:

- Separate inner liners of water-resistant paper (e.g. waxed kraft paper, double-tarred kraft paper or plastics-coated kraft paper);
- Plastics film bonded to the inner or outer surface of the bag; or
- One or more inner plastics liners.

## (f) Maximum net mass: 50 kg.

1535 *Plastics film bags*

## 5H4

## (a) Bags shall be made of suitable plastics material. The strength of the material used and the construction of the bag shall be appropriate to the capacity of the

bag and its intended use. Seams shall withstand pressures and impacts liable to occur in normal conditions of carriage.

(b) Maximum net mass: 50 kg.

1536 *Paper bags*

5M1, multiwall

5M2, multiwall, water-resistant.

(a) Bags shall be made of a suitable kraft paper or of an equivalent paper with at least three plies. The strength of the paper and the construction of the bags shall be appropriate to the capacity of the bag and its intended use. Joins and closures shall be sift-proof.

(b) Paper bags 5M2:

Water-resistant paper shall be used for the outermost ply or for the one in contact with it. Where there is a danger of the intended contents reacting to moisture, or where they are packed damp, the innermost ply also shall be water-resistant. The side seams and top and bottom closures shall be sift-proof and water-resistant.

(c) Maximum net mass: 50 kg.

1537 *Composite packagings (plastics material)*

6HA1 plastics receptacle with outer steel drum;

6HA2 plastics receptacle with outer steel crate<sup>(7)</sup> or box;

6HB1 plastics receptacle with outer aluminium drum;

6HB2 plastics receptacle with outer aluminium crate<sup>(7)</sup> or box;

6HC plastics receptacle with outer wooden box;

6HD1 plastics receptacle with outer plywood drum;

6HD2 plastics receptacle with outer plywood box;

6HG1 plastics receptacle with outer fibre drum;

6HG2 plastics receptacle with outer fibreboard box;

6HH plastics receptacle with outer plastics drum.

a) Inner receptacle

(1) The provisions of marg. 1526 (a) and (c)-(h) shall apply to the plastics inner receptacle.

(2) The plastics inner receptacle shall fit snugly inside the outer packaging, which shall be free of any projection that might abrade the plastics material.

(3) Maximum capacity of inner receptacle:

6HA1, 6HB1, 6HD1, 6HG1, 6HH: 250 litres;

6HA2, 6HB2, 6HC, 6HD2, 6HG2: 60 litres.

(4) Maximum net mass:

6HA1, 6HB1, 6HD1, 6HG1, 6HH: 400 kg.

6HA2, 6HB2, 6HC, 6HD2, 6HG2: 75 kg.

(b) Outer packaging

(1) Plastics receptacle with outer steel or aluminium drum 6HA1 or 6HB1: The relevant provisions of marg. 1520 (a)-(i) or 1521 (a)-(d), as appropriate, shall apply to the construction of the outer packaging.

<sup>(7)</sup> See footnote (5) [page 443].

- (2) Plastics receptacle with outer steel or aluminium crate or box 6HA2 or 6HB2;  
The relevant provisions of marg. 1532 shall apply to the construction of the outer packaging.
- (3) Plastics receptacle with outer box of natural wood 6HC:  
The relevant provisions of marg. 1527 shall apply to the construction of the outer packaging.
- (4) Plastics receptacle with outer plywood drum 6HD1:  
The relevant provisions of marg. 1523 shall apply to the construction of the outer packaging.
- (5) Plastics receptacle with outer plywood box 6HD2:  
The relevant provisions of marg. 1528 shall apply to the construction of the outer packaging.
- (6) Plastics receptacle with outer fibre drum 6HG1:  
The relevant provisions of marg. 1525 (a)-(d) shall apply to the construction of the outer packaging.
- (7) Plastics receptacle with outer fibreboard box 6HG2:  
The relevant provisions of marg. 1530 (a)-(c) shall apply to the construction of the outer packaging.
- (8) Plastics receptacle with outer plastics drum 6HH:  
The relevant provisions of marg. 1526 (a) and (c)-(h) shall apply to the construction of the outer packaging.

1538 *Combination packagings*

(a) *Inner packagings*

The following may be used:

Glass, porcelain or stoneware packagings with a maximum permissible capacity of 5 litres for liquids or 5 kg for solids;

Plastics packagings with a maximum permissible capacity of 30 litres for liquids or 30 kg for solids;

Metal packagings with a maximum permissible capacity of 40 litres for liquids or 40 kg for solids;

Paper, textile, woven plastics or plastics-film sachets and bags with a maximum permissible capacity of 5 kg for solids in sachets and 50 kg in bags;

Cans, folding cartons and boxes made of fibreboard or plastics with a maximum permissible capacity of 10 kg for solids;

Other types of small packagings such as tubes with a maximum permissible capacity of 1 litre for liquids or 1 kg for solids.

(b) *Outer packaging*

The following may be used:

Outer packagings made of natural wood (marg. 1527), plywood (marg. 1528), reconstituted wood (marg. 1529), fibreboard (marg. 1530), plastics material (marg. 1531), or steel or aluminium (marg. 1532).

## B. PACKAGINGS WHICH MAY CONFORM TO MARG. 1510 (1) OR (2)

1539 *Composite packagings (glass, porcelain or stoneware)*

- 6PA1 receptacle with outer steel drum
- 6PA2 receptacle with outer steel crate<sup>(8)</sup> or box
- 6PB1 receptacle with outer aluminium drum
- 6PB2 receptacle with outer aluminium crate<sup>(8)</sup> or box
- 6PC receptacle with outer wooden box
- 6PD1 receptacle with outer plywood drum
- 6PD2 receptacle with outer wickerwork hamper
- 6PG1 receptacle with outer fibre drum
- 6PG2 receptacle with outer fibreboard box
- 6PH1 receptacle with outer expanded plastics packaging
- 6PH2 receptacle with outer solid plastics packaging.

## (a) Inner receptacle

- (1) The receptacle shall be suitably moulded (cylindrical or pear-shaped) and be made of good quality material free from any defect that could impair its strength. The walls shall be sufficiently thick at every point and free from internal stresses.
- (2) Screw-threaded plastics closures, ground glass stoppers or closures at least equally effective shall be used as closures for receptacles. Any part of the closure likely to come into contact with the contents of the receptacle shall be resistant to those contents.  
Care should be taken to ensure that the closures are so fitted as to be leakproof and are suitably secured to prevent any loosening during carriage.  
If vented closures are necessary, they shall be leakproof.
- (3) The receptacle shall be firmly secured in the outer packaging by means of cushioning and/or absorbent materials.
- (4) Maximum capacity of receptacle: 60 litres
- (5) Maximum net mass: 75 kg.

## (b) Outer packaging

- (1) Receptacle with outer steel drum 6PA1:  
The relevant provisions of marg. 1520 (a)-(i) shall apply to the construction of the outer packaging. The removable lid required for this type of packaging may however be in the form of a cap.
- (2) Receptacle with outer steel crate or box 6PA2:  
The relevant provisions of marg. 1532 (a)-(c) shall apply to the construction of the outer packaging. For cylindrical receptacles the outer packaging should, when upright, rise above the receptacle and its closure. If the protective crate surrounds a pear-shaped receptacle and is of matching shape, the outer packaging shall be fitted with a protective cover (cap).
- (3) Receptacle with outer aluminium drum 6PB1:  
The relevant provisions of marg. 1521 (a)-(d) shall apply to the construction of the outer packaging.

<sup>(8)</sup> See footnote (5) [page 443].

- (4) Receptacle with outer aluminium crate or box 6PB2:  
The relevant provisions of marg. 1532 shall apply to the construction of the outer packaging.
- (5) Receptacle with outer box of natural wood 6PC:  
The relevant provisions of marg. 1527 shall apply to the construction of the outer packaging.
- (6) Receptacle with outer plywood drum 6PD1:  
The relevant provisions of marg. 1523 shall apply to the construction of the outer packaging.
- (7) Receptacle with outer wickerwork hamper 6PD2:  
The wickerwork hamper shall be properly made with material of good quality. It shall be fitted with a protective cover (cap) so as to prevent damage to the receptacle.
- (8) Receptacle with outer fibre drum 6PG1:  
The relevant provisions of marg. 1525 (a)-(d) shall apply to the construction of the outer packaging.
- (9) Receptacle with outer fibreboard box 6PG2:  
The relevant provisions of marg. 1530 (a)-(c) shall apply to the construction of the outer packaging.
- (10) Receptacles with outer expanded plastics or solid plastics packaging (6PH1 or 6PH2):  
The materials of these two outer packagings shall meet the relevant provisions of marg. 1531 (a)-(f). Solid plastics outer packaging shall be made of high molecular mass polyethylene or other comparable plastics material. The removable lid required for this type of packaging may however be in the form of a cap.

C. PACKAGINGS CONFORMING ONLY TO MARG. 1510 (2)

1540 *Light gauge metal packagings*

- 0A1 non-removable-head;
- 0A2 removable-head.

- (a) The sheet metal for the body and ends shall be of suitable steel, and of a gauge appropriate to the capacity and intended use of the packaging.
- (b) The joints shall be welded, at least double-seamed by welting or produced by a method ensuring a similar degree of strength and leakproofness.
- (c) Inner coatings of zinc, tin, lacquer, etc., shall be tough and shall adhere to the steel at every point, including the closures.
- (d) Openings for filling, emptying and venting in the bodies or heads of non-removable head (0A1) packagings shall not exceed 7 cm in diameter. Packagings with larger openings shall be considered to be of the removable-head type (0A2).
- (e) The closures of non-removable-head packagings shall either be of the screw-threaded type or be capable of being secured by a screwable device or a device at least equally effective.
- (f) Maximum capacity of packagings: 40 litres.
- (g) Maximum net mass: 50 kg.

1541-  
1549



*Section IV. Test requirements for packagings*

A. DESIGN-TYPE TESTS

*Performance and frequency of tests*

- 1550 (1) The design type of each packaging shall be tested and approved by the competent authority or by a body designated by that authority.
- (2) Tests in accordance with (1) shall be carried out again after any modification of the design type unless the authorized testing body has agreed to the modification of the design type. In the latter event a new approval of the design type is not required.
- (3) The competent authority may at any time require proof, through tests in accordance with this section, that mass-produced packagings meet the requirements of the design-type tests.
- (4) For verification purposes the authorized testing body shall keep a record of the materials used, through materials testing or by retaining samples or pieces of the materials.
- (5) If an inner coating is required for safety reasons, it shall retain its protective properties even after the tests.

*Preparation of packagings and packages for testing*

- 1551 (1) Tests shall be carried out on packagings and packages prepared as for despatch, including inner packagings in the case of combination packagings. Inner or single receptacles or packagings shall be filled to not less than 95% of their capacity for solids or 98% for liquids.

The substances to be carried in the packages may be replaced by other substances except where this would invalidate the results of the tests.

For solids, when another substance is used it shall have the same physical characteristics (mass, grain size, etc.) as the substance to be carried. It is permissible to use additives, such as bags of lead shot, to achieve the requisite total package mass, so long as they are placed so that the test results are not affected.

Suitable mixtures of powdery solids, such as polyethylene or PVC powder with sawdust, fine sand etc., may be used as a substitute filling substance for substances having a viscosity in excess of 2,680 mm<sup>2</sup>/s at 23°C.

(2) In the drop tests for liquids, when another substance is used its relative density and viscosity shall be similar to those of the substance to be carried. Water may also be used for the liquid drop test under the conditions in marg. 1552 (4).

(3) Paper or fibreboard packagings shall be conditioned for at least 24 hours in an atmosphere having a controlled temperature and relative humidity (r.h.). There are three options, one of which shall be chosen.

The preferred atmosphere is 23° ± 2°C and 50% ± 2% r.h. The two other options are 20° ± 2°C and 65% ± 2% r.h. or 27° ± 2°C and 65% ± 2% r.h.

(4) Bung-type barrels made of natural wood shall be left filled with water for at least 24 hours before the tests.

(5) To check that their chemical compatibility with the liquids is sufficient, plastics drums and jerricans in accordance with marg. 1526 and if necessary composite packagings (plastics material) in accordance with marg. 1537 shall be subjected to storage at ambient temperature for six months, during which time the test samples shall be kept filled with the goods they are intended to carry.

For the first and last 24 hours of storage, the test samples shall be placed with the closure downwards. However, packagings fitted with a vent shall be so placed on each occasion for five minutes only. After this storage the test samples shall undergo the tests prescribed in marg. 1552 to 1556.

When it is known that the strength properties of the plastics material of the inner receptacles of composite packagings (plastics material) are not significantly altered by the action of the filling substance, it shall not be necessary to check that the chemical compatibility is sufficient.

A significant alteration in strength properties means:

- (a) Distinct embrittlement; or
- (b) A considerable decrease in elasticity, unless related to a not less than proportionate increase in the elastic elongation.

NOTE. For plastics drums and jerricans and composite packagings (plastics material) made of high molecular mass polyethylene, see also (6) below.

(6) For high molecular mass polyethylene drums and jerricans in accordance with marg. 1526 and if necessary composite packagings of high molecular mass polyethylene in accordance with marg. 1537, conforming to the following specifications:

- Relative density at 23°C after thermal conditioning for one hour at 100°C  $\geq 0.940$ , in accordance with ISO Standard 1183,
- Melt flow rate at 190°C/21.6 kg load  $\leq 12$  g/10 min. in accordance with ISO Standard 1133,

chemical compatibility with the liquids listed in Section II of the annex to this appendix may be verified as follows with standard liquids (see Section I of the annex to this appendix):

The sufficient chemical compatibility of these packagings may be verified by storage for three weeks at 40°C with the appropriate standard liquid; where this standard liquid is water, proof of chemical compatibility is not required.

For the first and last 24 hours of storage, the test samples shall be placed with the closure downwards. However, packagings fitted with a vent shall be so placed on each occasion for five minutes only. After this storage, the test samples shall undergo the tests prescribed in marg. 1552 to 1556.

When a packaging design-type has satisfied the approval tests with a standard liquid, the comparable filling substances listed in Section II of the annex to this appendix may be accepted for carriage without further testing, subject to the following conditions:

- The relative densities of the filling substances shall not exceed that used to determine the height for the drop test and the mass for the stacking test;
- The vapour pressures of the filling substances at 50°C or 55°C shall not exceed that used to determine the pressure for the internal pressure test.

(7) For drums and jerricans conforming to marg. 1526, and where necessary composite packagings conforming to marg. 1537, made of high molecular mass polyethylene, which have passed the test in paragraph (6) of this marginal, filling substances other than those listed in Section II of the annex may also be approved. Such approval shall be based on laboratory tests proving that the effect of such filling substances on the test specimens is less than that of the standard liquids. The processes of deterioration to be taken into account shall be the following: softening through swelling, cracking under stress and molecular degradation. The same conditions as those set out in (6) above shall apply with respect to relative density and vapour pressure.

*Drop test*<sup>(9)</sup>

1552 (1) Number of test samples (per design type and manufacturer) and drop orientation.

For other than flat drops the centre of gravity shall be vertically over the point of impact.

Packaging	No. of test samples	Drop orientation
(a) Steel drums Aluminium drums Steel jerricans Plywood drums Wooden barrels Fibre drums Plastics drums and jerricans Composite packagings (plastics material) which are in the shape of a drum Composite packagings (glass, stoneware or porcelain) conforming to marg. 1510 (1) and which are in the shape of a drum Light gauge metal packagings	Six (three for each drop)	<i>First drop</i> (using three samples): the packaging shall strike the target diagonally on the chime or, if the packaging has no chime, on a circumferential seam or an edge. <i>Second drop</i> (using the other three samples): the packaging shall strike the target on the weakest part not tested by the first drop, for example a closure or, for some cylindrical drums, the welded longitudinal seam of the drum body.
(b) Boxes of natural wood Plywood boxes Reconstituted wood boxes Fibreboard boxes Plastics boxes Steel or aluminium boxes Composite packagings (plastics material) which are in the shape of a box Composite packagings (glass, stoneware or porcelain) conforming to marg. 1510 (1) and which are in the shape of a box	Five (one for each drop)	<i>First drop</i> : flat on the bottom <i>Second drop</i> : flat on the top <i>Third drop</i> : flat on the long side <i>Fourth drop</i> : flat on the short side <i>Fifth drop</i> : on a corner
(c) Textile bags Paper bags	Three (two drops per bag)	<i>First drop</i> : flat on a face of the bag <i>Second drop</i> : on the end of the bag
(d) Woven plastics bags Plastics film bags	Three (three drops per bag)	<i>First drop</i> : flat on a wide face <i>Second drop</i> : flat on a narrow face <i>Third drop</i> : on the end of the bag
(e) Composite packagings (glass, stoneware or porcelain) conforming to marg. 1510 (2) and which are in the shape of a drum or box	Three (one for each drop)	Diagonally on the bottom chime, or, if there is no chime, on a circumferential seam or the bottom edge

<sup>(9)</sup> See ISO Standard 2248.

## (2) Special preparation of test samples for the drop test:

## Testing of

- Plastics drums and jerricans and solid plastics boxes in accordance with marg. 1526 and 1531,
- Composite packagings (plastics material) in accordance with marg. 1537 and
- Combination packagings with plastics inner packagings — with the exception of bags and plastics boxes — in accordance with marg. 1538

shall be carried out when the temperature of the test sample and its contents has been reduced to  $-18^{\circ}\text{C}$  or lower.

Where test samples with an outer packaging of fibreboard are prepared in this way the conditioning specified in marg. 1551 (3) may be waived. Test liquids shall be kept in the liquid state, if necessary by the addition of anti-freeze.

## (3) Target

The target shall be a rigid, non-resilient, flat and horizontal surface.

## (4) Drop height

For solids:

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

For liquids:

— If the test is performed with water:

(a) Where the substances to be carried have a relative density not exceeding 1.2.

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

(b) Where the substances to be carried have a relative density exceeding 1.2, the drop height shall be calculated on the basis of the relative density of the substance to be carried, rounded to the first decimal, as follows:

Packing group I	Packing group II	Packing group III
Relative density $\times 1.5$ (m)	Relative density $\times 1.0$ (m)	Relative density $\times 0.67$ (m)

(c) For light-gauge metal packagings intended for the carriage of substances having a viscosity at  $23^{\circ}\text{C}$  greater than  $200 \text{ mm}^2/\text{s}$  (corresponding to a flow time of 30 seconds with an ISO flow cup having a jet orifice of 6 mm diameter in accordance with ISO Standard 2431-1984):

(i) If the relative density does not exceed 1.2:

Packing group II	Packing group III
0.6 m	0.4 m

- (ii) Where the substances to be carried have a relative density exceeding 1.2 the drop height shall be calculated on the basis of the relative density of the substance to be carried, rounded up to the first decimal place, as follows:

Packing group II	Packing group III
Relative density $\times 0.5$ (m)	Relative density $\times 0.33$ (m)

- If the test is performed with the substance to be carried or with a liquid of at least equal relative density:

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

(5) Criteria for passing the test:

(a) Every packaging containing liquid shall be leakproof when equilibrium has been reached between the internal and external pressures, except for inner packagings of combination packagings or composite packagings (glass, porcelain or stoneware) when it is not necessary that the pressures be equalized.

(b) Where removable-head drums for solids undergo a drop test and their upper faces strike the target, the test sample passes the test if the entire contents are retained by an inner packaging (e.g. a plastics bag) even if the closure on the top face of the drum is no longer sift-proof.

(c) The outermost ply of a bag shall not exhibit any damage liable to affect safety in carriage.

(d) The outer packaging of a composite or combination packaging shall not exhibit any damage liable to affect safety in carriage. There shall be no leakage of the filling substance from the inner packaging.

(e) A slight discharge from the closure(s) upon impact shall not be considered to be a failure of the packaging provided that no further leakage occurs.

(f) No rupture is permitted in packagings for goods of Class 1 which would cause the spillage of loose explosive substances or articles from the outer packaging.

*Leakproofness test (with air)*

- 1553 (1) The leakproofness test shall be performed on all types of packagings intended to contain liquids; however, this test is not required for:

- Inner packagings of combination packagings;
- Inner receptacles of composite packagings (glass, porcelain or stoneware) conforming to marg. 1510 (2);
- Removable head packagings intended for substances with a viscosity at 23°C exceeding 200 mm<sup>2</sup>/s,

(2) Number of test samples:

Three test samples per design type and manufacturer.

(3) Special preparation of test samples for the test:

Test samples shall be pierced for entry of the compressed air at a neutral point, so as also to test the tightness of the closure. Vented closures of packagings shall be replaced by non-vented closures.

## (4) Test method:

The test samples shall be immersed in water; they shall be kept under water in such a way as not to distort the result of the test. The test samples may also be covered with soap solution, heavy oil or other suitable liquid on the seams or at any other place where leakage might occur. Other methods at least equally effective may also be used.

## (5) Air pressure to be applied:

Packing group I	Packing group II	Packing group III
Not less than 30 kPa	Not less than 20 kPa	Not less than 20 kPa

## (6) Criterion for passing the test:

There shall be no leakage.

*Internal pressure (hydraulic) test*

1554

(1) The hydraulic pressure test shall be carried out on all types of steel, aluminium and plastics packagings and on all composite packagings intended to contain liquids. However, this test is not required for:

- Inner packagings of combination packagings;
- Inner receptacles of composite packagings (glass, porcelain or stoneware), conforming to marg. 1510 (2);
- Removable head packagings intended for substances with a viscosity at 23°C exceeding 200 mm<sup>2</sup>/s.

## (2) Number of test samples:

Three test samples per design type and manufacturer.

## (3) Special preparation of packagings for the test:

Test samples shall be pierced for entry of the pressure at a neutral point, so as also to test the tightness of the closure. Vented closures of packagings shall be replaced by non-vented closures.

## (4) Test method and pressure to be applied:

The packagings shall be subjected for five minutes (30 minutes in the case of plastics packagings) to a hydraulic pressure not lower than:

- (a) The total gauge pressure measured in the packaging (i.e. the vapour pressure of the filling substance and the partial pressure of the air or other inert gases, less 100 kPa) at 55°C, multiplied by a safety factor of 1.5; this total gauge pressure shall be determined on the basis of a maximum degree of filling in accordance with marg. 1500 (4) and a filling temperature of 15°C,  
or
- (b) 1.75 times the vapour pressure of the filling substance at 50°C, less 100 kPa, but at a gauge pressure of not less than 100 kPa,  
or
- (c) 1.5 times the vapour pressure of the filling substance at 55°C, less 100 kPa, but at a gauge pressure of not less than 100 kPa.

The manner in which the packagings are maintained in place shall not distort the results of the test. Pressure shall be applied continuously and evenly. The test pressure shall be kept constant throughout the test period.

The minimum test pressure for packagings for Packing Group I shall be 250 kPa.

(5) Criterion for passing the test:

No packaging shall leak.

*Stacking test*

1555 (1) All packagings other than bags and non-stackable composite packagings (glass, porcelain or stoneware) conforming to marg. 1510 (2), shall be subjected to a stacking test.

(2) Number of test samples:

Three test samples per design type and manufacturer.

(3) Test method:

The test samples shall be capable of withstanding a guided mass placed on a flat surface resting on the test sample and equivalent to the total mass of identical packages which might be stacked on it during carriage.

The duration of the test shall be 24 hours, except for plastics drums and jerricans in accordance with marg. 1526, or plastics composite packagings 6HH in accordance with marg. 1537, intended for liquids.

The stacking height to be allowed for shall be at least 3 m.

In the stacking test account shall be taken of the highest relative density of filling substance to be approved.

Plastics drums and jerricans in accordance with marg. 1526, or plastics composite packagings (6HH) in accordance with marg. 1537, intended for liquids shall be subjected to the stacking test for a period of 28 days, with the original filling substance, at a temperature of 40°C. A stacking height of at least 3 m shall be allowed for. For the test in accordance with marg. 1551 (6), a stacking test shall also be carried out with a standard liquid. The guided mass of the stacking load shall be determined on the basis of the highest relative density of filling substance to be approved.

(4) Criteria for passing the test:

No test sample shall leak. In composite packagings or combination packagings, there shall be no leakage of the filling substance from the inner receptacle or inner packaging.

No test sample shall show any deterioration which could adversely affect transport safety or any distortion liable to reduce its strength or cause instability in stacks of packages.<sup>(10)</sup>

*Supplementary permeability test for plastics drums and jerricans in accordance with marg. 1526 and for composite packagings (plastics material) in accordance with marg. 1537 intended for the carriage of liquids having a flash-point ≤ 55°C, other than 6HA1 packagings*

1556 (1) Polyethylene packagings need be subjected to this test only if they are to be approved for the carriage of benzene, toluene, xylene or mixtures or preparations containing those substances.

(2) Number of test samples:

Three test samples per design type and manufacturer.

<sup>(10)</sup> Where the stability is examined after the stacking test (e.g. for a stacking test with a guided mass for drums and jerricans), stacking stability may be considered sufficient when, after the stacking test, and in the case of plastics packagings, after cooling to ambient temperature, two filled packagings of the same type placed on the test sample maintain their position.

## (3) Special preparation of the test sample for the test:

The test samples shall be pre-stored with the original filling substance in accordance with marg. 1551 (5) or, for high molecular mass polyethylene packagings, with the standard liquid mixture of hydrocarbons (white spirit) in accordance with marg. 1551 (6).

## (4) Test method:

The test samples filled with the substance for which the packaging is to be approved shall be weighed before and after another storage for 28 days at 23°C and 50% relative atmospheric humidity. For high molecular mass polyethylene packagings, the test may be carried out with the standard liquid mixture of hydrocarbons (white spirit) in place of benzene, toluene or xylene.

## (5) Criterion for passing the test:

Permeability shall not exceed  $\frac{0.008g}{l.h}$

*Supplementary test for natural wood (bung-type) barrels*

## 1557 (1) Number of test samples:

One test sample per design type and manufacturer.

## (2) Test method:

Remove all hoops above the bilge of an empty barrel which has previously stood assembled for at least two days.

## (3) Criterion for passing [the] test:

The diameter of the upper part of the barrel shall not increase by more than 10%.

*Approval of combination packagings*

NOTE. Combination packagings shall be tested in accordance with the provisions applicable to the outer packaging.

## 1558 (1) During design-type tests of combination packagings, approval may at the same time be given for packagings:

- (a) Containing inner packagings of less volume;
- (b) Having a lower net mass than that of the design type tested.

(2) Where several types of combination packaging having different types of inner packaging have been approved, the various inner packagings may also be assembled in a single outer packaging if the sender certifies that this package meets the test requirements.

(3) Provided that the strength properties of the plastics inner packagings of a combination packaging are not significantly altered by the action of the filling substance, proof of sufficient chemical compatibility is not necessary. A significant alteration in strength properties means:

- (a) Distinct embrittlement;
- (b) A considerable decrease in elasticity, unless related to a not less than proportionate increase in elastic elongation.

*Test report*

## 1559 A test report giving at least the following particulars shall be drawn up:

- 1. Testing body;
- 2. Applicant;



3. Manufacturer of packaging;
4. Description of packaging (e.g. distinctive features such as material, inner coating, dimensions, wall thickness, mass, closures, colouring of plastics materials);
5. Design drawing of packaging and closures (if necessary, photographs);
6. Method of manufacture;
7. Actual capacity;
8. Approved filling substances (in particular details of relative densities and vapour pressures at 50°C or 55°C);
9. Drop height;
10. Test pressure in leakproofness test in accordance with marg. 1553;
11. Test pressure in internal pressure test in accordance with marg. 1554;
12. Stacking height;
13. Test results;
14. Marking of packaging and details to identify closures.

A copy of the test report shall be retained by the competent authority.

**B. LEAKPROOFNESS TEST FOR ALL NEW OR RECONDITIONED PACKAGINGS INTENDED TO CONTAIN LIQUIDS**

1560

(1) Application of the test.

Every packaging intended to contain liquids shall undergo the leakproofness test:

- Before it is first used for carriage;
- After reconditioning, before it is re-used for carriage.

This test is not required for:

- Inner packagings of combination packagings;
- Inner receptacles of composite packagings (glass, porcelain or stoneware) conforming to marg. 1510 (2);
- Removable head packagings intended for substances with a viscosity at 23°C exceeding 200 mm<sup>2</sup>/s;
- Light gauge metal packagings conforming to marginal 1510 (2).

(2) Test method

Compressed air shall be introduced through the filling orifice of each packaging. The packaging shall be immersed in water; it shall be kept under water in such a way as not to distort the result of the test. The packaging may also be covered with soap solution, heavy oil or other suitable liquid on its seams or at any other place where leakage might occur. Other methods at least equally effective may also be used.

Packagings need not be equipped with their own closures.

(3) Air pressure to be applied:

Packing group I	Packing group II	Packing group III
Not less than 30 kPa	Not less than 20 kPa	Not less than 20 kPa

(4) Criterion for passing the test:

There shall be no leakage.

1561-  
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#### *Section V. Transitional period*

1570 Packagings not conforming to the provisions of this appendix but which nevertheless could be used in accordance with the provisions of RID applicable on 30 April 1985 for the corresponding substances of Classes 3, 6.1 and 8 may still be used for a transitional period of five years until 30 April 1990 for the carriage of these substances.

Packagings not conforming to the provisions of this appendix, but which were used for substances not regulated by RID on 30 April 1985 but falling under the provisions of Classes 3, 6.1 and 8 applicable from 1 May 1985, may continue to be used for a transitional period of five years until 30 April 1990 for the carriage of those substances, provided that the provisions of marg. 1500, paragraphs (1), (2), (4), (5), (6) and (7) of this appendix are complied with.

1571 Packagings which, while not complying with the provisions of this appendix nor with those of Class 1 could, however, be used in conformity with the provisions of RID applicable at 31 December 1989 for the corresponding substances and articles of Classes 1a, 1b and 1c may still be used during a transitional period of five years up to 31 December 1994 for the carriage of these substances.

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#### ANNEX TO APPENDIX V

##### *Section I. Standard liquids for verifying the chemical compatibility of high molecular mass polyethylene packagings in accordance with marg. 1551 (6)*

The following standard liquids shall be used for this plastics material:

(a) Wetting solution for substances causing severe cracking in polyethylene under stress, in particular for all solutions and preparations containing wetting agents.

An aqueous solution of 1-10% of a wetting agent shall be used. The surface tension of this solution shall be 31 to 35 mN/m at 23°C.

The stacking test shall be carried out on the basis of a relative density of not less than 1.2.

A compatibility test with acetic acid is not required if adequate chemical compatibility is proved with a wetting solution.

(b) Acetic acid for substances and preparations causing cracking in polyethylene under stress, in particular for monocarboxylic acids and monovalent alcohols.

Acetic acid in 98-100% concentration shall be used. Relative density = 1.05.

The stacking test shall be carried out on the basis of a relative density not less than 1.1.

In the case of filling substances causing polyethylene to swell more than acetic acid and to such an extent that the polyethylene mass is increased by up to 4%, adequate chemical compatibility may be proved after preliminary storing for three weeks at 40°C, in accordance with marg. 1551 (6) but with the original filling matter.

- (c) Normal butyl acetate/normal butyl acetate-saturated wetting solution for substances and preparations causing polyethylene to swell to such an extent that the polyethylene mass is increased by up to about 4% and at the same time causing cracking under stress, in particular for phyto-sanitary products, liquid paints and esters.

Normal butyl acetate in 98-100% concentration shall be used for preliminary storage in accordance with marg. 1551 (6).

For the stacking test in accordance with marg. 1555, a test liquid consisting of a 1 to 10% aqueous wetting solution mixed with 2% normal butyl acetate conforming to (a) above shall be used.

The stacking test shall be carried out on the basis of a relative density not less than 1.0.

In the case of filling substances causing polyethylene to swell more than normal butyl acetate and to such an extent that the polyethylene mass is increased by up to 7.5%, adequate chemical compatibility may be proved after preliminary storing for three weeks at 40°C, in accordance with marg. 1551 (6) but with the original filling matter.

- (d) Mixture of hydrocarbons (white spirit) for substances and preparations causing polyethylene to swell, in particular for hydrocarbons, certain esters and for ketones.

A mixture of hydrocarbons having a boiling zone of 180°-200°C, a relative density of 0.79, a flash-point above 61°C and an aromatics content of 16 to 18% (C9 and higher aromatics only) shall be used.

The stacking test shall be carried out on the basis of a relative density not less than 1.0.

In the case of filling substances causing polyethylene to swell to such an extent that the polyethylene mass is increased by more than 7.5%, adequate chemical compatibility may be proved after preliminary storing for three weeks at 40°C, in accordance with marg. 1551 (6) but with the original filling matter.

- (e) Nitric acid for all substances and preparations having an oxidizing effect on polyethylene or causing molecular degradation identical to or less than 55% nitric acid.

Nitric acid in 55% concentration shall be used.

The stacking test shall be carried out on the basis of a relative density of not less than 1.4.

In the case of filling substances more strongly oxidizing than 55% nitric acid or causing degradation of the molecular mass, proceed in accordance with marg. 1551 (5).

- (f) Water for substances which do not attack polyethylene in any of the cases referred to under (a) to (e), in particular for inorganic acids and lyes, aqueous saline solutions, polyvalent alcohols and organic substances in aqueous solution.

The stacking test shall be carried out on the basis of a relative density of not less than 1.2.

*Section II. List of substances to which the standard liquids may be regarded as equivalents in accordance with marg. 1551 (6)*

Item	Substance	Standard Liquid
<i>Class 3</i>		
<i>A. Substances, not toxic and not corrosive, having a flash-point below 21°C</i>		
3.	<i>(b) Substances having a vapour pressure at 50°C of not more than 110 kPa (1.1 bar):</i>	
	— Crude petroleums and other crude oils	Mixture of hydrocarbons
	— Hydrocarbons	Mixture of hydrocarbons
	— Halogenated substances	Mixture of hydrocarbons
	— Alcohols	Acetic acid
	— Ethers	Mixture of hydrocarbons
	— Aldehydes	Mixture of hydrocarbons
	— Ketones	Mixtures of hydrocarbons
	— Esters	Normal butyl acetate where the swelling effect is not more than 4% (mass): other cases, mixture of hydrocarbons
4.	<i>(b) Mixtures of substances of item 3 (b) having a boiling point or initial boiling point exceeding 35°C, containing not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6%.</i>	Normal butyl acetate/normal butyl acetate-saturated wetting solution and mixture of hydrocarbons
5.	Viscous substances: certain colours for rotogravures and for leathers	Mixture of hydrocarbons
<i>B. Toxic substances having a flash-point below 21°C</i>		
17.	<i>(b) Methanol (methyl alcohol)</i>	Acetic acid
<i>D. Substances, not toxic and not corrosive, having a flash-point between 21°C and 100°C inclusive</i>		
31.	<i>(c) Substances having a flash-point between 21°C and 55°C inclusive:</i>	
	— Petroleum, solvent naphtha	Mixture of hydrocarbons
	— White spirit (turpentine substitute)	Mixture of hydrocarbons
	— Hydrocarbons	Mixture of hydrocarbons
	— Halogenated substances	Mixture of hydrocarbons
	— Alcohols	Acetic acid
	— Ethers	Mixture of hydrocarbons
	— Aldehydes	Mixture of hydrocarbons
	— Ketones	Mixture of hydrocarbons
	— Esters	Normal butyl acetate where the swelling effect is not more than 4% (mass): other cases, mixture of hydrocarbons
	— Nitrogenous substances	Mixture of hydrocarbons

Item	Substance	Standard Liquid
32.	(c) Substances having a flash-point above 55°C, but not exceeding 100°C:	
	— Heavy products from distillation of petroleum	Mixture of hydrocarbons
	— Heating oils, diesel oils	Mixture of hydrocarbons
	— Hydrocarbons	Mixture of hydrocarbons
	— Oxygenated substances	Mixture of hydrocarbons
	— Halogenated substances	Mixture of hydrocarbons
	— Nitrogenous substances	Mixture of hydrocarbons
33.	(c) Mixtures of substances of item 31 (c) containing not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6%.	Normal butyl acetate/normal butyl acetate-saturated wetting solution and mixture of hydrocarbons

*Class 6.1*

B. *Organic substances which have a flash-point of 21°C or above or are non-inflammable*

- |     |   |             |
|-----|---|-------------|
| 11. | Nitrogenous substances having a boiling point below 200°C:      |             |
|     | (b) Aniline   | Acetic acid |
| 13. | Oxygenated substances having a boiling point below 200°C:       |             |
|     | (b) Phenol  | Acetic acid |
|     | (c) Ethylene glycol monobutyl ether                             | Acetic acid |
|     | Furfuryl alcohol  | Acetic acid |
| 14. | Oxygenated substances having a boiling point of 200°C or above: |             |
|     | (b) Cresols   | Acetic acid |
|     | (c) Alkyl phenols   | Acetic acid |

*Class 8*

A. *Acid substances*

Inorganic acids

- |    |   |             |
|----|---|-------------|
| 1. | (b) Sulphuric acid  | Water       |
|    | Waste sulphuric acid  | Water       |
| 2. | (b) Nitric acid containing not more than 55% pure acid (HNO <sub>3</sub> )  | Nitric acid |
| 4. | (b) Aqueous solutions of perchloric acid containing not more than 50% pure acid (HClO <sub>4</sub> )                                  | Nitric acid |
| 5. | (b) Solutions of hydrochloric acid containing not more than 36% pure acid, solutions of hydrobromic acid, solutions of hydriodic acid | Water       |
| 7. | (b) Aqueous solutions of hydrofluoric acid containing not more than 60% anhydrous hydrofluoric acid <sup>(1)</sup>                    | Water       |

<sup>(1)</sup> Maximum 60 litres; permissible period of use two years.

Item	Substance	Standard Liquid
8.	(b) Fluoboric acid containing not more than 50% pure acid (HBF <sub>4</sub> )	Water
9.	(b) Fluosilicic acid (hydrofluosilicic acid)	Water
11.	(b) Solutions of chromic acid containing not more than 30% pure acid	Nitric acid
	(c) Phosphoric acid	Water
	Organic substances	
32.	Liquid carboxylic acids and liquid halogenated carboxylic acids and their liquid anhydrides:	
	(b) Acrylic acid, formic acid, acetic acid, thioglycolic acid	Acetic acid
	(c) Methacrylic acid, propionic acid	Acetic acid
B.	<i>Basic substances</i>	
	Inorganic substances	
42.	Solutions of alkaline substances:	
	(b) Soda lye, potash lye, caustic lyes	Water
43.	(c) Ammonia solutions	Water
44.	Hydrazine and its aqueous solutions:	
	(b) Aqueous solutions of hydrazine containing not more than 64% hydrazine (N <sub>2</sub> H <sub>4</sub> )	Water
C.	<i>Other corrosive substances</i>	
61.	Hypochlorite solutions <sup>(12)</sup>	Nitric acid
62.	Solutions of hydrogen peroxide <sup>(13)</sup> :	
	(b), (c) Aqueous solutions containing not less than 8% and not more than 60% hydrogen peroxide	Water
63.	Formaldehyde solutions:	
	(c) Aqueous solutions of formaldehyde containing not less than 5% formaldehyde, also with not more than 35% methanol	Water

## APPENDIX VI

### PROVISIONS RELATING TO INTERMEDIATE BULK CONTAINERS (IBCS)

NOTE. These provisions apply to IBCs the use of which is expressly authorized in the relevant classes for the carriage of certain dangerous substances.

<sup>(12)</sup> Test to be carried out only with vent. If the test is carried out with nitric acid as the standard liquid, an acid-resistant vent shall be used. In the case of tests with hypochlorite solutions themselves, vents of the same design type, resistant to hypochlorite (e.g. of silicone rubber) but not resistant to nitric acid, are permitted.

<sup>(13)</sup> Test to be carried out only with vent.

*Section 1. General provisions applicable to all type of IBCs*

*Definitions and designatory code system*

1600

(1) Definitions

“Intermediate Bulk Containers” (IBCs) are rigid, semi-rigid or flexible portable packagings, other than those specified in Appendix V, that:

- (a) Have a capacity of not more than 3 m<sup>3</sup> (3,000 litres)
- (b) Are designed for mechanical handling
- (c) Are resistant to the stresses produced in handling and transport as determined by the tests specified in this appendix.

NOTE. 1. Tank-containers which meet the requirements of Appendix X are not considered to be IBCs.

2. IBCs which meet the conditions of this appendix are not considered to be “containers” for the purposes of RID.

(2) Designatory code system for IBCs

The code consists of:

- Two Arabic numerals indicating the type of IBC as specified under (a) below;
- A capital letter or letters (Latin characters) as specified under (b) below, indicating the nature of the material (e.g. metal, plastics, etc.);
- Where necessary, an Arabic numeral indicating the category of IBC within the type in question.

For composite IBCs, two capital letters (Latin characters) shall be used. The first shall indicate the material of the inner receptacle of the IBC and the second that of the outer packaging of the IBC.

Type	For solids, discharged		For liquids
	By gravity or under pressure of 10 kPa (0.1 bar) or less	Under pressure of more than 10 kPa (0.1 bar)	
Rigid	11	21	31
Semi-rigid	12	22	32
Flexible	13	—	—

(b) A. Steel (all types and surface treatments)

- B. Aluminium
- C. Natural wood
- D. Plywood
- F. Reconstituted wood
- G. Fibreboard
- H. Plastics material
- L. Textile
- M. Paper, multiwall
- N. Metal (other than steel or aluminium).

(3) The IBC code shall be followed in the marking by a letter indicating the groups of substances for which the design type is approved, i.e.:

- Y for substances of packing groups II and III;
- Z for substances of packing group III.

NOTE. For packing groups, see marg. 1511 (2).

*Constructional requirements*

1601 (1) IBCs shall be resistant to or adequately protected from deterioration due to the environment.

(2) IBCs shall be so constructed and closed that none of the contents can escape under normal conditions of carriage.

(3) IBCs and their closures shall be constructed of materials compatible with their contents, or be protected internally, so that they are not liable:

(a) To be attacked by the contents so as to make their use dangerous;

(b) To cause the contents to react or decompose, or form harmful or dangerous compounds with the IBCs.

(4) Gaskets, where used, shall be made of materials not subject to attack by the contents of the IBCs.

(5) All service equipment shall be so positioned or protected as to minimize the risk of escape of the contents owing to damage during handling and transport.

(6) IBCs, their attachments and their service and structural equipment shall be designed to withstand, without loss of contents, the internal pressure of the contents and the stresses of normal handling and transport. IBCs intended for stacking shall be designed for stacking. Any lifting or securing features of IBCs shall be of sufficient strength to withstand the normal conditions of handling and transport without gross distortion or failure and shall be so positioned that no undue stress is caused in any part of the IBC.

(7) Where an IBC consists of a body within a framework it shall be so constructed that:

— The body does not chafe or rub against the framework so as to cause material damage to the body,

— The body is retained within the framework at all times,

— The items of equipment are fixed in such a way that they cannot be damaged if the connections between body and frame allow relative expansion or movement.

(8) Where a bottom discharge valve is fitted, it shall be capable of being made secure in the closed position and the whole discharge system shall be suitably protected from damage. Valves having lever closures shall be able to be secured against accidental opening and the open or closed position shall be readily identifiable. For IBCs containing liquids, a secondary means of sealing the discharge aperture shall also be provided, e.g. by a blank flange or equivalent device.

(9) New, reused or reconditioned IBCs shall be capable of passing the prescribed tests.

*Quality assurance*

1602 The IBCs shall be designed, manufactured and tested under a quality assurance programme which satisfies the competent authority, in order to ensure that each IBC meets the requirements of this appendix.

*Test requirements*

1603 (1) The design type of each IBC shall be tested and approved by the competent authority or by a body designated by that authority.

(2) Tests shall be successfully performed on each IBC design type before such an IBC is used. An IBC design type is defined by the design, size, material and thickness, manner of construction and means of filling and discharging but



may include various surface treatments. It also includes IBCs which differ from the design type only in their lesser external dimensions.

(3) Tests shall be carried out on IBCs prepared as for dispatch. IBCs shall be filled as indicated in the individual sections. The substances to be carried in the IBCs may be replaced by other substances except where this would invalidate the results of the tests. For solids, when another substance is used it shall have the same physical characteristics (mass, grain size, etc.) as the substance to be carried. It is permissible to use additives, such as bags of lead shot, to achieve the requisite total package mass, provided they are placed so that the test results are not affected.

(4) In the drop tests for liquids, when another substance is used, its relative density and viscosity shall be similar to those of the substance to be carried. Water may also be used for the liquid drop test under the following conditions:

- (a) Where the substances to be carried have a relative density not exceeding 1.2, the drop heights shall be those shown under the relevant sections for the various types of IBCs;
- (b) Where the substances to be carried have a relative density exceeding 1.2, the drop heights shall be those shown in the relevant sections for the various types of IBCs multiplied by the ratio of the relative density of the substance to be carried, rounded off to the first decimal, to 1.2, i.e.

$$\frac{\text{relative density}}{1.2} \times \text{specified drop height.}$$

(5) Every IBC intended to contain liquids shall undergo the leakproofness test prescribed under the relevant sections for the various types of IBCs:

- (a) Before it is first used for transport,
- (b) After any reconditioning, before it is reused for transport.

(6) The competent authority may at any time require proof, by tests in accordance with this appendix, that IBCs meet the requirements of the design type tests.

#### *Test report*

1604 The test report shall include the test results and a design type identification assigned by the competent authority, and be valid for IBCs which correspond to the design type.

The test report shall include at least the following particulars:


1. Testing body;
2. Applicant;
3. Manufacturer of the IBC;
4. Description of the IBC (e.g. distinctive features such as material, inner lining, dimensions, wall thickness, mass, closures, colouring of plastics materials);
5. Design drawing of IBC and closures (if necessary, photographs);
6. Method of manufacture;
7. Actual capacity;
8. Permissible filling substances (in particular, details of relative densities and vapour pressures at 50°C or 55°C);
9. Drop height;

10. Test pressure used in leakproofness test;
11. Test pressure used in internal pressure test;
12. Test load in stacking test;
13. Bottom lift test, if prescribed;
14. Top lift test, if prescribed;
15. Topple test, if prescribed;
16. Tear test, if prescribed;
17. Righting test, if prescribed;
18. Test results;
19. Marking of the IBC and details to identify closures.

A copy of the test report shall be retained by the competent authority.

*Marking*

1605 (1) Primary marking. Each IBC manufactured and intended for use according to these provisions shall bear durable and legible marking showing:

- (a) The United Nations packaging symbol  for metallic IBCs on which the marking is stamped or embossed, the letters UN may be applied instead of the symbol;
- (b) The code designating the type of IBC according to marg. 1600 (2);
- (c) A letter (Y or Z) designating the packing group(s) for which the design type has been approved;
- (d) The month and year (last two digits) of manufacture;
- (e) The mark<sup>(1)</sup> of the State in which the approval was issued;
- (f) The name or symbol of the manufacturer or any other identification of the IBC as specified by the competent authority;
- (g) The stacking test load in kg.

The primary marking required above shall be applied in the sequence of the subparagraphs unless the requirements of a specific section demand the insertion of additional information. The marking required by paragraph (2) and any further marking authorized by a competent authority shall be arranged so as to enable the various parts of the marking to be correctly identified.

(2) Additional marking. See special requirements shown in the individual sections.

(3) After reconditioning an IBC, the reconditioner shall affix to it the following sequence of additional marks:

- (h) The mark<sup>(1)</sup> of the State in which the reconditioning was carried out;
- (i) The name or authorized symbol of the reconditioner;
- (j) The year of reconditioning and letter "R".

(4) IBCs marked in accordance with this appendix but which were approved in a State which is not a Contracting Party to COTIF may also be used for carriage under RID.

<sup>(1)</sup> Distinguishing sign for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968).

*Certification*

1606 The manufacturer shall certify, by affixing marking in accordance with this appendix, that mass-produced IBCs correspond to the approved design type and that the conditions referred to in the approval certificate have been met.

*Operational requirements*

1607 (1) Before being filled and handed over for carriage, every IBC shall be inspected to ensure that it is free from corrosion, contamination or other damage and with regard to proper functioning of any service equipment. Any IBC which shows signs of reduced strength as compared with the tested design type shall no longer be used or shall be so reconditioned that it is able to withstand the design type tests.

(2) Where two or more closure systems are fitted in series, that nearest to the substance being carried shall be closed first.

(3) During carriage, no dangerous residue shall adhere to the outside of the IBC.

(4) Where overpressure may develop in an IBC through the emission of gas from the contents (as a result of temperature increase or other causes), the IBC may be fitted with a vent provided that the gas emitted will not cause any danger on account of its toxicity, its inflammability, the quantity released, etc. The vent shall be so designed that, when the IBC is in the attitude in which it is intended to be transported, leakages of liquid and the penetration of foreign matter are prevented under normal conditions of carriage. However, a substance may be carried in such an IBC only where a vent is expressly prescribed for that substance in the conditions of carriage of the relevant class.

(5) Where IBCs are filled with liquids, sufficient ullage shall be left to ensure that no leakage of liquid and no permanent distortion of the IBC occurs as a result of expansion of the liquid, due to temperatures which may be attained during carriage.

For a filling temperature of 15°C, the maximum degree of filling shall be determined as follows, unless otherwise provided under a particular class:

either (a)

Boiling point (initial boiling point) of the substance in °C	> 35 < 60	≥ 60 < 100	≥ 100 < 200	≥ 200 < 300	≥ 300
Degree of filling as a percentage of the capacity of the IBC	90	92	94	96	98

or b) Degree of filling =  $\frac{98}{1 + \alpha (50 - t_F)}$  % of the capacity of the IBC.

In this formula  $\alpha$  represents the mean coefficient of cubic expansion of the liquid between 15°C and 50°C; that is to say, for a maximum rise in temperature of 35°C,

$$\alpha \text{ is calculated according to the formula: } \alpha = \frac{d_{15} - d_{50}}{35 \times d_{50}}$$

$d_{15}$  and  $d_{50}$  being the relative densities of the liquid at 15°C and 50°C and  $t_F$  the mean temperature of the liquid at the time of filling.

(6) When IBCs are used for the carriage of liquids with a flash-point of 55°C (closed cup) or lower, or powders liable to dust explosion, measures shall be taken to prevent a dangerous electrostatic discharge during filling and discharging.

(7) The closure of IBCs containing wetted or diluted substances shall be such that the percentage of liquid (water, solvent or phlegmatizer) does not fall below the prescribed limits during carriage.

1608-  
1609

## Section 2. Specific requirements for metallic IBCs

### Scope

1610 These provisions apply to metallic IBCs intended for the carriage of solids or liquids. There are three categories of metallic IBCs:

- (i) For solids loaded or discharged by gravity or under a gauge pressure of 10 kPa (0.1 bar) or less (11A, 11B, 11N);
- (ii) For solids loaded or discharged under a gauge pressure greater than 10 kPa (0.1 bar) 21A, 21B, 21N);
- (iii) For liquids (31A, 31B, 31N). IBCs intended for the carriage of liquids and being in accordance with the provisions of this section shall not be used to carry liquids having a vapour pressure of more than 110 kPa (1.1 bar) at 50°C, or more than 130 kPa (1.3 bar) at 55°C.

### Definitions

1611 (1) A *metallic IBC* consists of a metal body together with appropriate service and structural equipment.

(2) *Body* means the receptacle proper, including openings and their closures.

(3) *Protected* means being provided with additional protection against impact, the protection taking the form of, for example, a multi-layer (sandwich) or double wall construction or a frame with a metal lattice-work casing.

(4) *Service equipment* means filling and discharge, pressure relief, safety, heating and heat-insulating devices and measuring instruments.

(5) *Structural equipment* means the reinforcing, fastening, handling, protective or stabilizing members of the body.

(6) *Maximum permissible gross mass* means the mass of the body and its service equipment and structural equipment and the heaviest load authorized to be carried.

### Construction

1612 (1) Bodies shall be made of suitable ductile metallic materials in which the weldability has been fully demonstrated. Welds shall be skilfully made and afford complete safety.

(2) If contact between the substance carried and the material used for the construction of the body entails a progressive decrease in the thickness of the walls, this thickness shall be increased at manufacture by an appropriate amount. This extra thickness to allow for corrosion shall be added to the wall thickness as determined according to paragraph (6) [see also marg. 1601 (3)].

(3) Care shall be taken to avoid damage by galvanic action due to the juxtaposition of dissimilar metals.

(4) Aluminium IBCs intended for the carriage of inflammable liquids with a flash-point of not more than 55°C shall have no movable parts, such as covers, closures etc., made of unprotected steel liable to rust, which might cause a dangerous reaction by coming into frictional or percussive contact with the aluminium.

(5) Metallic IBCs shall be made of metals which meet the following requirements:

- (a) For steel the elongation at fracture, in per cent, shall not be less than  $\frac{10,000}{R_m}$  with an absolute minimum of 20%;  
where  $R_m$  = guaranteed minimum tensile strength of the steel to be used in  $N/mm^2$ .
- (b) For aluminium and its alloys the elongation at fracture, in per cent, shall not be less than  $\frac{10,000}{[6]^1 R_m}$  with an absolute minimum of 8%.

Specimens used to determine the elongation at fracture shall be taken transversely to the direction of rolling and be so secured that:

$$L_0 = 5d \text{ or } L_0 = 5.65 \sqrt{A}$$

where:  $L_0$  = gauge length of the specimen before the test

$d$  = diameter

$A$  = cross-sectional area of test specimen.

(6) Minimum wall thickness:

(a) For a reference steel having a product of  $R_m \times A_0 = 10,000$  the wall thickness shall not be less than:

Capacity in m <sup>3</sup>	Wall thickness in mm			
	Types: 11A, 11B, 11N		Types: 21A, 21B, 21N, 31A, 31B, 31N	
	Unprotected	Protected	Unprotected	Protected
≤ 1.0	2.0	1.5	2.5	2.0
> 1.0 – ≤ 2.0	2.5	2.0	3.0	2.5
> 2.0 – ≤ 3.0	3.0	2.5	4.0	3.0

where:  $A_0$  = minimum elongation (as a percentage) of the reference steel used on fracture under tensile stress [see paragraph (5)].

(b) For metals other than the reference steel described in (a), the minimum wall thickness is given by the following equivalence formula:

$$e_1 = \frac{21.4 \times e_0}{\sqrt[3]{R_{m1} \times A_1}}$$

where:

$e_1$  = required equivalent wall thickness of the metal to be used (in mm);

$e_0$  = required minimum wall thickness for the reference steel (in mm);

$R_{m1}$  = guaranteed minimum tensile strength of the metal to be used (in  $N/mm^2$ );

$A_1$  = minimum elongation (as a percentage) of the metal to be used on fracture under tensile stress [see paragraph (5)].

<sup>1</sup> The text between brackets does not appear in the authentic French text — Le texte entre crochets n'apparaît pas dans le texte authentique français.

However, in no case shall the wall thickness be less than 1.5 mm.

(7) Pressure relief requirements

IBCs for liquids shall be capable of releasing a sufficient amount of vapour to ensure that in the case of fire engulfment no rupture of the body will occur. This can be achieved by conventional relief devices or by other constructional means.

The start to discharge pressure shall not be higher than 65 kPa (0.65 bar) and no lower than the total gauge pressure experienced in the IBC [i.e. the vapour pressure of the filling substance plus the partial pressure of the air or other inert gases, minus 100 kPa (1 bar)] at 55°C, determined on the basis of a maximum degree of filling as defined in marg. 1607 (5). The required relief devices shall be fitted in the vapour space.

*Testing and inspection*

1613 Metallic IBCs shall be subject to:

- (a) Type approval including design type tests in accordance with marg. 1614;
- (b) Initial and periodic tests in accordance with marg. 1615;
- (c) Inspections in accordance with marg. 1616.

*Design type tests*

1614 (1) One IBC of each design type, size, wall thickness and manner of construction shall be subjected to the tests listed in the order below and as set out in the marginals indicated. Another IBC of the same design may be used for the drop test as set out in marg. 1617 (6).

Tests	See marg.	Type of IBC	
		11A, 11B, 11N	21A, 21B, 21N 31A, 31B, 31N
Bopptom lift	1617 (1)	required <sup>(a)</sup>	required <sup>(a)</sup>
Top lift	1617 (2)	required <sup>(a)</sup>	required <sup>(a)</sup>
Stacking	1617 (3)	required <sup>(b)</sup>	required <sup>(b)</sup>
Leakproofness	1617 (4)	required	required
Internal pressure (hydraulic)	1617 (5)	not required	required
Drop	1617 (6)	required	required

<sup>(a)</sup> When IBCs are designed for this method of handling.

<sup>(b)</sup> When IBCs are designed to be stacked.

(2) The competent authority may permit the selective testing of IBCs which differ only in minor respects from a tested type, e.g. with small reductions in external dimensions.

*Initial and periodic testing of individual IBCs*

1615 (1) Each IBC shall correspond in all respects to its design type, and be subjected to the leakproofness test.

(2) The leakproofness test in paragraph (1) shall be repeated at intervals of not more than two and a half years.

(3) The results of tests shall be recorded in test reports to be kept by the owner of the IBC.

*Inspection*

1616 (1) Every IBC shall be inspected to the satisfaction of the competent authority before it is put into service, and thereafter at intervals not exceeding five years, with regard to:

- Conformity to design type including marking;
- Internal and external condition;
- Proper functioning of service equipment.

Thermal insulation need be removed only to the extent necessary for a proper examination of the body of the IBC.

(2) Every IBC shall be visually inspected to the satisfaction of the competent authority at intervals of not more than two and a half years with regard to its external condition and the proper functioning of its service equipment.

Thermal insulation need be removed only to the extent necessary for a proper examination of the body of the IBC.

(3) A report of each inspection shall be kept by the owner at least until the date of the next inspection.

(4) When the structure of an IBC is impaired as a result of impact (e.g. accident) or any other cause, it shall be repaired and then subjected to the full testing and inspection as set out in marg. 1614 (1) and paragraph (1) above.

*Test specifications*

1617 (1) Bottom lift test

*(a) Applicability*

For all types of IBC which are fitted with means of lifting from the base, as a design type test.

*(b) Preparation of IBCs for test*

The IBC shall be loaded to 1.25 times its maximum permissible gross mass, the load being evenly distributed.

*(c) Method of testing*

The IBC shall be raised and lowered twice by a lift truck with the forks centrally positioned and spaced at three quarters of the dimension of the side of entry (unless the points of entry are fixed). The forks shall penetrate to three quarters of the direction of entry. The test shall be repeated from each possible direction of entry.

*(d) Criteria for passing the test*

No permanent deformation which renders the IBC unsafe for carriage and no loss of contents.

*(2) Top lift test**(a) Applicability*

For all types of IBC which are fitted with means of lifting from the top, as a design type test.

*(b) Preparation of IBCs for test*

The IBC shall be loaded to twice its maximum permissible gross mass.

*(c) Method of testing*

The IBC shall be lifted in the manner for which it is designed until it is clear of the floor and maintained in that position for a period of five minutes.

(d) Criteria for passing the test

No permanent deformation which renders the IBC unsafe for transport and no loss of contents.

(3) Stacking test

(a) Applicability

For all types of IBC which are designed to be stacked on each other, as a design type test.

(b) Preparation of IBCs for test

The IBC shall be loaded to its maximum permissible gross mass.

(c) Method of testing

The IBC shall be placed on its base on level hard ground and subjected to a uniformly distributed superimposed test load [see (d)] for a period of at least five minutes.

(d) Calculation of superimposed test load

The load to be placed on the IBC shall be at least 1.8 times the combined maximum permissible gross mass of the number of similar IBCs that may be stacked on top of the IBC during carriage.

(e) Criteria for passing the test

No permanent deformation which renders the IBC unsafe for transport and no loss of contents.

(4) Leakproofness test

(a) Applicability

For all types of IBC, as a design type test and as an initial and periodic test.

(b) Preparation of IBCs for test

The initial test shall be carried out before the fitting of any thermal insulation equipment. The bottom discharge apertures of IBC types 11A, 11B and 11N, which are not required to be hermetically closed, may be blanked off prior to the test.

(c) Method of testing and pressure to be applied

The test shall be carried out for a period of at least 10 minutes using air at a constant gauge pressure of not less than 20 kPa (0.2 bar). The airtightness of the IBC shall be determined by a suitable method such as the air-pressure differential test or by immersing the IBC in water. In the latter case a correction factor shall be applied for the hydrostatic pressure.

(d) Criterion for passing the test

No leakage of air.

(5) Internal pressure (hydraulic) test

(a) Applicability

For IBC types 21A, 21B, 21N, 31A, 31B and 31N, as a design type test.

(b) Preparation of IBCS for test

The test shall be carried out before the fitting of any thermal insulation equipment. Pressure relief devices shall be removed and their apertures plugged, or shall be rendered inoperative.



## (c) Method of testing

The test shall be carried out for a period of at least 10 minutes applying a hydraulic pressure not less than that indicated at letter (d). The IBCs shall not be mechanically restrained during the test.

## (d) Pressures to be applied

(i) For all IBCs of type 21A, 21B, 21N, 31A, 31B, 31N, a test pressure of 200 kPa (2 bar);

(ii) As a supplementary test, for IBCs of type 31A, 31B, 31N, for liquids, a test pressure of 65 kPa (0.65 bar). This test shall be performed before the test in accordance with (i).

## (e) Criteria for passing the test(s)

For all IBCs of type 21A, 21B, 21N, 31A, 31B, 31N when subjected to the test pressure specified in (d)(i), no leakage.

For IBCs of type 31A, 31B, 31N, for liquids, when subjected to the test pressure specified in (d)(ii), neither permanent deformation which would render the IBC unsafe for transport, nor leakage.

## (6) Drop test

## (a) Applicability

For all types of IBC as a design type test.

## (b) Preparation of IBCs for test

The IBC shall be filled to not less than 95% of its capacity for solids or 98% for liquids and to its maximum permissible load in accordance with the design type. Pressure relief devices shall be removed and their apertures plugged, or shall be rendered inoperative.

## (c) Method of testing

The IBC shall be dropped on to a rigid, non-resilient, smooth, flat and horizontal surface, in such a manner as to ensure that the point of impact is on that part of the base of the IBC considered to be the most vulnerable.

## (d) Drop height

Packing Group II	Packing Group III
1.2 m	0.8 m

## (e) Criterion for passing the test

No loss of contents.

*Additional marking*

1618

Each IBC shall be fitted with a corrosion-resistant metal plate permanently attached to the body or structural equipment and in a place readily accessible for inspection. This metal plate shall bear the markings prescribed in marg. I605 and, in addition:

- Capacity in litres at 20°C;
- Tare mass in kg;
- Maximum permissible gross mass in kg;
- Date of last leakproofness test (month and year);

- Maximum filling/discharge pressure in kPa (or bar)<sup>(2)</sup> (if applicable);
- Body material and its minimum thickness in mm;
- Serial number of the manufacturer.

Examples of complete marking:

- Ⓢ 11A/Y/7-83/8/FM/0  
1000/250/1000/3-90/-/Steel/3.5/S4-82
- Ⓢ 31N/Y/9-85/F/FM/5940  
1000/450/1650/3-90/60 kPa/CrNi/2.5/S20-85.

1619

### *Section 3. Specific requirements for flexible IBCs*

#### *Scope*

1620 These provisions apply to flexible IBCs intended for the carriage of solids. These IBCs are of the following types:

- 13H1 woven plastics without coating or liner
- 13H2 woven plastics, coated
- 13H3 woven plastics with liner
- 13H4 woven plastics, coated and with liner
- 13H5 plastics film
- 13L1 textile without coating or liner
- 13L2 textile, coated
- 13L3 textile with liner
- 13L4 textile, coated and with liner
- 13M1 paper multiwall
- 13M2 paper, multiwall, water resistant

#### *Definitions*

- 1621 (1) *Flexible IBCs* consist of a body constituted of film, woven fabric or any other flexible material or combinations thereof, together with any appropriate service equipment and handling devices.
- (2) *Body* means the receptacle proper, including openings and their closures.
- (3) *Woven plastics* means a material made from stretched tapes or monofilaments of suitable plastics material.
- (4) *Service equipment* means filling, discharge, venting and safety devices.
- (5) *Handling device* means any sling, loop, eye or frame attached to the body of the IBC or formed from a continuation of the IBC body material.
- (6) *Maximum permissible load* means the maximum net mass for which the IBC is intended to be used and which it is authorized to carry.

#### *Construction*

- 1622 (1) Bodies shall be manufactured from suitable materials. The strength of the material and the construction of the flexible IBC shall be appropriate to its capacity and its intended use.
- (2) All materials used in the construction of flexible IBCs of types 13M1 and 13M2 shall, after complete immersion in water for not less than 24 hours,

<sup>(2)</sup> The unit used should be indicated.

retain at least 85% of the tensile strength as measured originally on the material conditioned to equilibrium at 67% relative humidity or less.

(3) Seams shall be formed by stitching, heat sealing, glueing or any equivalent method. All stitched seam-ends shall be secured.

(4) Flexible IBCs shall provide adequate resistance to ageing and to degradation caused either by ultraviolet radiation, the climatic conditions or by the substance contained, thereby rendering them appropriate to their intended use.

(5) For plastics flexible IBCs, where protection against ultraviolet radiation is required, it shall be provided by the addition of carbon black or other suitable pigments or inhibitors. These additives shall be compatible with the contents and remain effective throughout the life of the body. Where use is made of carbon black, pigments or inhibitors other than those used in the manufacture of the tested design type, retesting may be waived if changes in the carbon black content, the pigment content or the inhibitor content do not adversely affect the physical properties of the material of construction.

(6) Additives may be incorporated into the material of the body to improve the resistance to ageing or to serve other purposes, provided that these do not adversely affect the physical or chemical properties of the material.

(7) No material recovered from used receptacles shall be used in the manufacture of IBC bodies. Production residues or scrap from the same manufacturing process may, however, be used. This shall not preclude the reuse of component parts such as fittings and pallet bases provided such components have not in any way been damaged in previous use.

(8) When filled, the ratio of height to width shall be not more than 2:1.

#### *Testing*

1623 IBCs shall be subjected to type approval, including design type tests, in accordance with marg. 1624.

#### *Design type tests*

1624 (1) Design types of each IBC shall be submitted to the tests listed below as set out in the marginals indicated in accordance with procedures established by the competent authority.

An IBC which has passed one test may be used for other tests.

Test	See marg.
Top lift <sup>(3)</sup>	1625 (1)
Tear	1625 (2)
Stacking	1625 (3)
Drop	1625 (4)
Topple	1625 (5)
Righting <sup>(3)</sup>	1625 (6)

(2) The competent authority may permit the selective testing of IBCs which differ only in minor respects from a tested type, e.g. with small reductions in external dimensions.

(3) Paper IBCs shall be conditioned for at least 24 hours in an atmosphere having a controlled temperature and relative humidity (r.h.). There are three

<sup>(3)</sup> When IBCs are designed to be lifted from the top or the side.

options, one of which shall be chosen. The preferred atmosphere is  $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and  $50\% \pm 2\%$  r.h. The two other options are  $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and  $65\% \pm 2\%$  r.h. or  $27^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and  $65\% \pm 2\%$  r.h.

*Design type test specifications*

1625

(1) Top lift test

(a) Applicability

For all types of IBCs designed to be lifted from the top or the side, as a design type test.

(b) Preparation of IBCs for test

The IBC shall be filled to six times its maximum permissible load, the load being evenly distributed.

(c) Method of testing

The IBC shall be lifted in the manner for which it is designed until it is clear of the floor and maintained in that position for a period of five minutes.

(d) Other methods of top lift testing and preparation at least equally effective may be used.

(e) Criteria for passing the test

No damage to the IBC or its lifting devices which renders the IBC unsafe for transport or handling.

(2) Tear test

(a) Applicability

For all types of IBCs, as a design type test.

(b) Preparation of IBCs for test

The IBC shall be filled to not less than 95% of its capacity and to its maximum permissible load, the load being evenly distributed.

(c) Method of testing

Once the IBC is placed on the ground, a 100 mm knife score, completely penetrating the wall of a wide face, is made at a  $45^{\circ}$  angle to the principal axis of the IBC, halfway between the bottom surface and the top level of contents. The IBC shall then be subjected to a uniformly distributed superimposed load equivalent to twice the maximum permissible load. The load shall be applied for at least five minutes.

IBCs which are designed to be lifted from the top or the side shall then, after removal of the superimposed load, be lifted clear of the floor and maintained in that position for a period of five minutes. Other equivalent methods may be used.

(d) Criterion for passing the test

The cut shall not propagate more than 25% of its original length.

(3) Stacking test

(a) Applicability

For all types of IBCs, as a design type test.

(b) Preparation of IBCs for test

The IBC shall be filled to not less than 95% of its capacity and to its maximum permissible load, the load being evenly distributed.

## (c) Method of testing

The IBC shall be placed on its base on level hard ground and subjected to a uniformly distributed superimposed test load for a period of 24 hours. This load shall be applied by one of the following methods:

- One or more IBCs of the same type filled to the maximum permissible load and stacked on the test IBC;
- Appropriate weights loaded on to a flat pallet which is placed on the test IBC.

## (d) Calculation of superimposed test load

The load to be placed on the IBC shall be at least 1.8 times the combined maximum permissible gross mass of the number of similar IBCs that may be stacked on top of the IBC during carriage.

## (e) Criteria for passing the test

No deterioration of the body which renders the IBC unsafe for carriage and no loss of contents.

## (4) Drop test

## (a) Applicability

For all types of IBCs, as a design type test.

## (b) Preparation of IBCs for test

The IBC shall be filled to not less than 95% of its capacity and to its maximum permissible load, the load being evenly distributed.

## (c) Method of testing

The IBC shall be dropped on its base on to a rigid, non-resilient, smooth, flat and horizontal surface.

## (d) Drop height

Packing Group II	Packing Group III
1.2 m	0.8 m

## (e) Criteria for passing the test

No loss of contents. A slight discharge, e.g. from closures or stitch holes, upon impact shall not be considered to be a failure of the IBC, provided that no further leakage occurs after the IBC has been raised clear of the ground.

## (5) Topple test

## (a) Applicability

For all types of IBCs, as a design type test.

## (b) Preparation of IBCs for test

The IBC shall be filled to not less than 95% of its capacity and to its maximum permissible load, the load being evenly distributed.

## (c) Method of testing

The IBC shall be caused to topple on to any part of its top on to a rigid, non-resilient, smooth, flat and horizontal surface.

## (d) Topple height

Packing Group II	Packing Group III
1.2 m	0.8 m

## (e) Criteria for passing the test

No loss of contents. A slight discharge, e.g. from closures or stitch holes, upon impact shall not be considered to be a failure of the IBC, provided that no further leakage occurs.

## (6) Righting test

## (a) Applicability

For all IBCs designed to be lifted from the top or side, as a design type test.

## (b) Preparation of IBCs for test

The IBC shall be filled to not less than 95% of its capacity and to its maximum permissible load, the load being evenly distributed.

## (c) Method of testing

The IBC, lying on its side, shall be lifted at a speed of at least 0.1 m/s to upright position, clear of the floor, by one lifting device or by two lifting devices when four are provided.

## (d) Criterion for passing the test

No damage to the IBC or its lifting devices which renders the IBC unsafe for transport or handling.

*Additional marking*

1626 Each IBC shall bear the markings required by marg. 1605 (1) and in addition the maximum permissible load in kg:

Each IBC may also bear a pictogram indicating recommended lifting methods.

Examples of complete markings:

⊕ 13H2/Y/9 83/B/FM/8127/1500

⊕ 13L1/Z/7 84/USA/FM/12996/1800

⊕ 13M1/Z/5 85/GB/FM/0/1300

1627-  
1699

## APPENDIX VII

## REQUIREMENTS RELATING TO RADIOACTIVE MATERIAL OF CLASS 7

This Appendix comprises:

## Sections

- I. Activity and fissile material limits
- II. Preparation provisions and controls for shipment and for storage in transit
- III. Provisions for radioactive material, for packaging and packages and test procedures
- IV. Approval and administrative provisions
- V. Radioactive material having other hazardous properties

*Section I. Activity and fissile material limits**Basic A<sub>1</sub> and A<sub>2</sub> values*

1700 A<sub>1</sub>/A<sub>2</sub> values for radionuclides are given in Table I.

Table I.  $A_1$  and  $A_2$  values for radionuclides

Symbol of radionuclide	Element and atomic number	$A_1$		$A_2$	
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )
<sup>225</sup> Ac <sup>(2)</sup>	Actinium (89)	0.6	10	$1 \times 10^{-2}$	$2 \times 10^{-1}$
<sup>227</sup> Ac		40	1000	$2 \times 10^{-5}$	$5 \times 10^{-4}$
<sup>228</sup> Ac		0.6	10	0.4	10
<sup>105</sup> Ag	Silver (47)	2	50	2	50
<sup>108</sup> Ag <sup>m</sup>		0.6	10	0.6	10
<sup>110</sup> Ag <sup>m</sup>		0.4	10	0.4	10
<sup>111</sup> Ag		0.6	10	0.5	10
<sup>26</sup> Al		0.4	10	0.4	10
<sup>241</sup> Am	Americium (95)	2	50	$2 \times 10^{-4}$	$5 \times 10^{-3}$
<sup>242</sup> Am <sup>m</sup>		2	50	$2 \times 10^{-4}$	$5 \times 10^{-3}$
<sup>243</sup> Am		2	50	$2 \times 10^{-4}$	$5 \times 10^{-3}$
<sup>37</sup> Ar	Argon (18)	40	1000	40	1000
<sup>39</sup> Ar		20	500	20	500
<sup>41</sup> Ar		0.6	10	0.6	10
<sup>42</sup> Ar <sup>(2)</sup>		0.2	5	0.2	5
<sup>72</sup> As	Arsenic (33)	0.2	5	0.2	5
<sup>73</sup> As		40	1000	40	1000
<sup>74</sup> As		1	20	0.5	10
<sup>76</sup> As		0.2	5	0.2	5
<sup>77</sup> As		20	500	0.5	10
<sup>211</sup> At		Astatine (85)	30	800	2
<sup>193</sup> Au	Gold (79)	6	100	6	100
<sup>194</sup> Au		1	20	1	20
<sup>195</sup> Au		10	200	10	200
<sup>196</sup> Au		2	50	2	50
<sup>198</sup> Au		3	80	0.5	10
<sup>199</sup> Au		10	200	0.9	20
<sup>131</sup> Ba		Barium (56)	2	50	2
<sup>133</sup> Ba <sup>m</sup>	10		200	0.9	20
<sup>133</sup> Ba	3		80	3	80
<sup>140</sup> Ba <sup>(2)</sup>	0.4		10	0.4	10
<sup>7</sup> Be	Beryllium (4)	20	500	20	500
<sup>10</sup> Be		20	500	0.5	10
<sup>205</sup> Bi	Bismuth (83)	0.6	10	0.6	10
<sup>206</sup> Bi		0.3	8	0.3	8
<sup>207</sup> Bi		0.7	10	0.7	10
<sup>210</sup> Bi <sup>m(2)</sup>		0.3	8	$3 \times 10^{-2}$	$8 \times 10^{-1}$
<sup>210</sup> Bi		0.6	10	0.5	10
<sup>212</sup> Bi <sup>(2)</sup>	0.3	8	0.3	8	
<sup>247</sup> Bk	Berkelium (97)	2	50	$2 \times 10^{-4}$	$5 \times 10^{-3}$
<sup>249</sup> Bk		40	1000	$8 \times 10^{-2}$	2
<sup>76</sup> Br	Bromine (35)	0.3	8	0.3	8
<sup>77</sup> Br		3	80	3	80
<sup>82</sup> Br		0.4	10	0.4	10
<sup>11</sup> C		Carbon (6)	1	20	0.5
<sup>14</sup> C	40		1000	2	50
<sup>41</sup> Ca	Calcium (20)	40	1000	40	1000
<sup>45</sup> Ca		40	1000	0.9	20
<sup>47</sup> Ca		0.9	20	0.5	10
<sup>109</sup> Cd		Cadmium (48)	40	1000	1
<sup>113</sup> Cd <sup>m</sup>	20		500	$9 \times 10^{-2}$	2
<sup>115</sup> Cd <sup>m</sup>	0.3		8	0.3	8
<sup>115</sup> Cd	4	100	0.5	10	
<sup>139</sup> Ce	Cerium (58)	6	100	6	100

Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>		
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )	
<sup>141</sup> Ce	Californium (98)	10	200	0.5	10	
<sup>143</sup> Ce		0.6	10	0.5	10	
<sup>144</sup> Ce <sup>(2)</sup>		0.2	5	0.2	5	
<sup>248</sup> Cf		30	800	3 × 10 <sup>-3</sup>	8 × 10 <sup>-2</sup>	
<sup>249</sup> Cf		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>	
<sup>250</sup> Cf		5	100	5 × 10 <sup>-4</sup>	1 × 10 <sup>-2</sup>	
<sup>251</sup> Cf		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>	
<sup>252</sup> Cf		0.1	2	1 × 10 <sup>-3</sup>	2 × 10 <sup>-2</sup>	
<sup>253</sup> Cf		40	1000	6 × 10 <sup>-2</sup>	1	
<sup>254</sup> Cf		3 × 10 <sup>-3</sup>	8 × 10 <sup>-2</sup>	6 × 10 <sup>-4</sup>	1 × 10 <sup>-2</sup>	
<sup>36</sup> Cl	Chlorine (17)	20	500	0.5	10	
<sup>38</sup> Cl		0.2	5	0.2	5	
<sup>240</sup> Cm	Curium (96)	40	1000	2 × 10 <sup>-2</sup>	5 × 10 <sup>-1</sup>	
<sup>241</sup> Cm		2	50	0.9	20	
<sup>242</sup> Cm		40	1000	1 × 10 <sup>-2</sup>	2 × 10 <sup>-1</sup>	
<sup>243</sup> Cm		3	80	3 × 10 <sup>-4</sup>	8 × 10 <sup>-3</sup>	
<sup>244</sup> Cm		4	100	4 × 10 <sup>-4</sup>	1 × 10 <sup>-2</sup>	
<sup>245</sup> Cm		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>	
<sup>246</sup> Cm		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>	
<sup>247</sup> Cm		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>	
<sup>248</sup> Cm		4 × 10 <sup>-2</sup>	1	5 × 10 <sup>-5</sup>	1 × 10 <sup>-3</sup>	
<sup>55</sup> Co		Cobalt (27)	0.5	10	0.5	10
<sup>56</sup> Co	0.3		8	0.3	8	
<sup>57</sup> Co	8		200	8	200	
<sup>58</sup> Co <sup>m</sup>	40		1000	40	1000	
<sup>58</sup> Co	1		20	1	20	
<sup>60</sup> Co	0.4		10	0.4	10	
<sup>51</sup> Cr	Chromium (24)		30	800	30	800
<sup>129</sup> Cs			Caesium (55)	4	100	4
<sup>131</sup> Cs	40	1000		40	1000	
<sup>132</sup> Cs	1	20		1	20	
<sup>134</sup> Cs <sup>m</sup>	40	1000		9	200	
<sup>134</sup> Cs	0.6	10		0.5	10	
<sup>135</sup> Cs	40	1000		0.9	20	
<sup>136</sup> Cs	0.5	10		0.5	10	
<sup>137</sup> Cs <sup>(2)</sup>	2	50		0.5	10	
<sup>64</sup> Cu	Copper (29)	5		100	0.9	20
<sup>67</sup> Cu		9		200	0.9	20
<sup>159</sup> Dy	Dysprosium (66)	20	500	20	500	
<sup>165</sup> Dy		0.6	10	0.5	10	
<sup>166</sup> Dy <sup>(2)</sup>	Erbium (68)	0.3	8	0.3	8	
<sup>169</sup> Er		40	1000	0.9	20	
<sup>171</sup> Er		0.6	10	0.5	10	
<sup>147</sup> Eu	Europium (63)	2	50	2	50	
<sup>148</sup> Eu		0.5	10	0.5	10	
<sup>149</sup> Eu		20	500	20	500	
<sup>150</sup> Eu		0.7	10	0.7	10	
<sup>152</sup> Eu <sup>m</sup>		0.6	10	0.5	10	
<sup>152</sup> Eu		0.9	20	0.9	20	
<sup>154</sup> Eu		0.8	20	0.5	10	
<sup>155</sup> Eu		20	500	2	50	
<sup>156</sup> Eu		0.6	10	0.5	10	
<sup>18</sup> F		Fluorine (9)	1	20	0.5	10
<sup>52</sup> Fe <sup>(2)</sup>	Iron (26)	0.2	5	0.2	5	



Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>	
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )
<sup>55</sup> Fe		40	1000	40	1000
<sup>59</sup> Fe		0.8	20	0.8	20
<sup>60</sup> Fe		40	1000	0.2	5
<sup>67</sup> Ga	Gallium (31)	6	100	6	100
<sup>68</sup> Ga		0.3	8	0.3	8
<sup>72</sup> Ga		0.4	10	0.4	10
<sup>146</sup> Gd <sup>(2)</sup>	Gadolinium (64)	0.4	10	0.4	10
[ <sup>148</sup> Gd		3	80	3 × 10 <sup>-4</sup>	8 × 10 <sup>-3</sup> ] <sup>1</sup>
<sup>153</sup> Gd		10	200	5	100
<sup>159</sup> Gd		4	100	0.5	10
<sup>68</sup> Ge <sup>(2)</sup>	Germanium (32)	0.3	8	0.3	8
<sup>71</sup> Ge		40	1000	40	1000
<sup>77</sup> Ge		0.3	8	0.3	8
<sup>172</sup> Hf <sup>(2)</sup>	Hafnium (72)	0.5	10	0.3	8
<sup>175</sup> Hf		3	80	3	80
<sup>181</sup> Hf		2	50	0.9	20
<sup>182</sup> Hf		4	100	3 × 10 <sup>-2</sup>	8 × 10 <sup>-1</sup>
<sup>194</sup> Hg <sup>(2)</sup>	Mercury (80)	1	20	1	20
<sup>195</sup> Hg <sup>m</sup>		5	100	5	100
<sup>197</sup> Hg <sup>m</sup>		10	200	0.9	20
<sup>197</sup> Hg		10	200	10	200
<sup>203</sup> Hg		4	100	0.9	20
<sup>163</sup> Ho	Holmium (67)	40	1000	40	1000
<sup>166</sup> Ho <sup>m</sup>		0.6	10	0.3	8
<sup>166</sup> Ho		0.3	8	0.3	8
<sup>123</sup> I	Iodine (53)	6	100	6	100
<sup>124</sup> I		0.9	20	0.9	20
<sup>125</sup> I		20	500	2	50
<sup>126</sup> I		2	50	0.9	20
<sup>129</sup> I		Unlimited		Unlimited	
<sup>131</sup> I		3	80	0.5	10
<sup>132</sup> I		0.4	10	0.4	10
<sup>133</sup> I		0.6	10	0.5	10
<sup>134</sup> I		0.3	8	0.3	8
<sup>135</sup> I		0.6	10	0.5	10
<sup>111</sup> In	Indium (49)	2	50	2	50
<sup>113</sup> In <sup>m</sup>		4	100	4	100
<sup>114</sup> In <sup>m</sup> (2)		0.3	8	0.3	8
<sup>115</sup> In <sup>m</sup>		6	100	0.9	20
<sup>189</sup> Ir	Iridium (77)	10	200	10	200
<sup>190</sup> Ir		0.7	10	0.7	10
<sup>192</sup> Ir		1	20	0.5	10
<sup>193</sup> Ir <sup>m</sup>		10	200	10	200
<sup>194</sup> Ir		0.2	5	0.2	5
[ <sup>40</sup> K	Potassium (19)	0.6	10	0.6	10] <sup>1</sup>
<sup>42</sup> K		0.2	5	0.2	5
<sup>43</sup> K		1	20	0.5	10
<sup>81</sup> Kr	Krypton (36)	40	1000	40	1000
<sup>85</sup> Kr <sup>m</sup>		6	100	6	100
<sup>85</sup> Kr		20	500	10	200
<sup>87</sup> Kr		0.2	5	0.2	5
<sup>137</sup> La	Lanthanum (57)	40	1000	2	50
<sup>140</sup> La		0.4	10	0.4	10

<sup>1</sup> The text between brackets does not appear in the authentic French text — Le texte entre crochets n'apparaît pas dans le texte authentique français.

Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>	
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )
LSA	Low specific activity material (see marg. 700 (2))				
172Lu	Lutetium (71)	0.5	10	0.5	10
173Lu		8	200	8	200
174Lu <sup>m</sup>		20	500	8	200
174Lu		8	200	4	100
177Lu		30	800	0.9	20
MFP	For Mixed Fission Products, use formula for mixtures or Table II (marg. 1701)				
28Mg <sup>(2)</sup>	Magnesium (12)	0.2	5	0.2	5
52Mn	Manganese (25)	0.3	8	0.3	8
53Mn		Unlimited		Unlimited	
54Mn		1	20	1	20
56Mn		0.2	5	0.2	5
93Mo	Molybdenum (42)	40	1000	7	100
99Mo		0.6	10	0.5	10
13N	Nitrogen (7)	0.6	10	0.5	10
22Na	Sodium (11)	0.5	10	0.5	10
24Na		0.2	5	0.2	5
92Nb <sup>m</sup>	Niobium (41)	0.7	10	0.7	10
93Nb <sup>m</sup>		40	1000	6	100
94Nb		0.6	10	0.6	10
95Nb		1	20	1	20
97Nb		0.6	10	0.5	10
147Nd	Neodymium (60)	4	100	0.5	10
149Nd		0.6	10	0.5	10
59Ni	Nickel (28)	40	1000	40	1000
63Ni		40	1000	30	800
65Ni		0.3	8	0.3	8
235Np	Neptunium (93)	40	1000	40	1000
236Np		7	100	1 × 10 <sup>-3</sup>	2 × 10 <sup>-2</sup>
237Np		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>
239Np		6	100	0.5	10
185Os	Osmium (76)	1	20	1	20
191Os <sup>m</sup>		40	1000	40	1000
191Os		10	200	0.9	20
193Os		0.6	10	0.5	10
194Os <sup>(2)</sup>		0.2	5	0.2	5
32P	Phosphorus (15)	0.3	8	0.3	8
33P		40	1000	0.9	20
230Pa	Protactinium (91)	2	50	0.1	2
231Pa		0.6	10	6 × 10 <sup>-5</sup>	1 × 10 <sup>-3</sup>
233Pa		5	100	0.9	20
201Pb	Lead (82)	1	20	1	20
202Pb		40	1000	2	50
230Pb		3	80	3	80
205Pb		Unlimited		Unlimited	
210Pb <sup>(2)</sup>		0.6	10	9 × 10 <sup>-3</sup>	2 × 10 <sup>-1</sup>
212Pb <sup>(2)</sup>		0.3	8	0.3	8
103Pd	Palladium (46)	40	1000	40	1000
107Pd		Unlimited		Unlimited	
109Pd		0.6	10	0.5	10
143Pm	Promethium (61)	3	80	3	80
144Pm		0.6	10	0.6	10
145Pm		30	800	7	100
147Pm		40	1000	0.9	20

Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>	
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )
<sup>148</sup> Pm <sup>m</sup>	Polonium (84)	0.5	10	0.5	10
<sup>149</sup> Pm		0.6	10	0.5	10
<sup>151</sup> Pm		3	80	0.5	10
<sup>208</sup> Po		40	1000	2 × 10 <sup>-2</sup>	5 × 10 <sup>-1</sup>
<sup>209</sup> Po		40	1000	2 × 10 <sup>-2</sup>	5 × 10 <sup>-1</sup>
<sup>210</sup> Po	Praseodymium (59)	40	1000	2 × 10 <sup>-2</sup>	5 × 10 <sup>-1</sup>
<sup>142</sup> Pr		0.2	5	0.2	5
<sup>143</sup> Pr		4	100	0.5	10
<sup>188</sup> Pt <sup>(2)</sup>		Platinum (78)	0.6	10	0.6
<sup>191</sup> Pt	3		80	3	80
<sup>193</sup> Pt <sup>m</sup>	40		1000	9	200
<sup>193</sup> Pt	40		1000	40	1000
<sup>195</sup> Pt <sup>m</sup>	10		200	2	50
<sup>197</sup> Pt <sup>m</sup>	Plutonium (94)	10	200	0.9	20
<sup>197</sup> Pt		20	500	0.5	10
<sup>236</sup> Pu		7	100	7 × 10 <sup>-4</sup>	1 × 10 <sup>-2</sup>
<sup>237</sup> Pu		20	500	20	500
<sup>238</sup> Pu		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>
<sup>239</sup> Pu		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>
<sup>240</sup> Pu		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>
<sup>241</sup> Pu		40	1000	1 × 10 <sup>-2</sup>	2 × 10 <sup>-1</sup>
<sup>242</sup> Pu		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>
<sup>244</sup> Pu <sup>(2)</sup>		Radium (88)	0.3	8	2 × 10 <sup>-4</sup>
<sup>223</sup> Ra <sup>(2)</sup>	0.6		10	3 × 10 <sup>-2</sup>	8 × 10 <sup>-1</sup>
<sup>224</sup> Ra <sup>(2)</sup>	0.3		8	6 × 10 <sup>-2</sup>	1
<sup>225</sup> Ra <sup>(2)</sup>	0.6		10	2 × 10 <sup>-2</sup>	5 × 10 <sup>-1</sup>
<sup>226</sup> Ra <sup>(2)</sup>	0.3		8	2 × 10 <sup>-2</sup>	5 × 10 <sup>-1</sup>
<sup>228</sup> Ra <sup>(2)</sup>	Rubidium (37)	0.6	10	4 × 10 <sup>-2</sup>	1
<sup>81</sup> Rb		2	50	0.9	20
<sup>83</sup> Rb		2	50	2	50
<sup>84</sup> Rb		1	20	0.9	20
<sup>86</sup> Rb		0.3	8	0.3	8
<sup>87</sup> Rb		Unlimited	Unlimited	Unlimited	Unlimited
Rb (natural)		Unlimited	Unlimited	Unlimited	Unlimited
<sup>183</sup> Re	Rhenium (75)	5	100	5	100
<sup>184</sup> Re <sup>m</sup>		3	80	3	80
<sup>184</sup> Re		1	20	1	20
<sup>186</sup> Re		4	100	0.5	10
<sup>187</sup> Re		Unlimited	Unlimited	Unlimited	Unlimited
<sup>188</sup> Re		0.2	5	0.2	5
<sup>189</sup> Re		4	100	0.5	10
Re (natural)		Unlimited	Unlimited	Unlimited	Unlimited
<sup>99</sup> Rh	Rhodium (45)	2	50	2	50
<sup>101</sup> Rh		4	100	4	100
<sup>102</sup> Rh <sup>m</sup>		2	50	0.9	20
<sup>102</sup> Rh		0.5	10	0.5	10
<sup>103</sup> Rh <sup>m</sup>		40	1000	40	1000
<sup>105</sup> Rh		10	200	0.9	20
<sup>222</sup> Rn <sup>(2)</sup>		Radon (86)	0.2	5	4 × 10 <sup>-3</sup>
<sup>97</sup> Ru	Ruthenium (44)		4	100	4
<sup>103</sup> Ru		2	50	0.9	20
<sup>105</sup> Ru		0.6	10	0.5	10
<sup>106</sup> Ru <sup>(2)</sup>		0.2	5	0.2	5

Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>		
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )	
<sup>35</sup> S	Sulphur (16)	40	1000	2	50	
<sup>122</sup> Sb	Antimony (51)	0.3	8	0.3	8	
<sup>124</sup> Sb		0.6	10	0.5	10	
<sup>125</sup> Sb		2	50	0.9	20	
<sup>126</sup> Sb		0.4	10	0.4	10	
<sup>44</sup> Sc		Scandium (21)	0.5	10	0.5	10
<sup>46</sup> Sc	0.5		10	0.5	10	
<sup>47</sup> Sc	9		200	0.9	20	
<sup>48</sup> Sc	0.3		8	0.3	8	
SCO	Surface Contaminated Objects (see marg. 700 (2))					
<sup>75</sup> Se	Selenium (34)	3	80	3	80	
<sup>79</sup> Se		40	1000	2	50	
<sup>31</sup> Si	Silicon (14)	0.6	10	0.5	10	
<sup>32</sup> Si		40	1000	0.2	5	
<sup>145</sup> Sm	Samarium (62)	20	500	20	500	
<sup>147</sup> Sm		Unlimited		Unlimited		
<sup>151</sup> Sm	Tin (50)	40	1000	4	100	
<sup>153</sup> Sm		4	100	0.5	10	
<sup>113</sup> Sn <sup>(2)</sup>		4	100	4	100	
<sup>117</sup> Sn <sup>m</sup>		6	100	2	50	
<sup>119</sup> Sn <sup>m</sup>		40	1000	40	1000	
<sup>121</sup> Sn <sup>m</sup>		40	1000	0.9	20	
<sup>123</sup> Sn		0.6	10	0.5	10	
<sup>125</sup> Sn		0.2	5	0.2	5	
<sup>126</sup> Sn <sup>(2)</sup>		0.3	8	0.3	8	
<sup>82</sup> Sr <sup>(2)</sup>		Strontium (38)	0.2	5	0.2	5
<sup>85</sup> Sr <sup>m</sup>	5		100	5	100	
<sup>85</sup> Sr	2		50	2	50	
<sup>87</sup> Sr <sup>m</sup>	3		80	3	80	
<sup>89</sup> Sr	0.6		10	0.5	10	
<sup>90</sup> Sr <sup>(2)</sup>	0.2		5	0.1	2	
<sup>91</sup> Sr	0.3		8	0.3	8	
<sup>92</sup> Sr <sup>(2)</sup>	0.2		5	0.2	5	
T (all forms)	Tritium (1)		40	1000	40	1000
<sup>178</sup> Ta	Tantalum (73)		1	20	1	20
<sup>179</sup> Ta		30	800	30	800	
<sup>182</sup> Ta		0.8	20	0.5	10	
<sup>157</sup> Tb	Terbium (65)	40	1000	10	200	
<sup>158</sup> Tb		1	20	0.7	10	
<sup>160</sup> Tb		0.9	20	0.5	10	
<sup>95</sup> Tc <sup>m</sup>	Technetium (43)	2	50	2	50	
<sup>96</sup> Tc <sup>m(2)</sup>		0.4	10	0.4	10	
<sup>96</sup> Tc		0.4	10	0.4	10	
<sup>97</sup> Tc <sup>m</sup>		40	1000	40	1000	
<sup>97</sup> Tc		Unlimited		Unlimited		
<sup>98</sup> Tc		0.7	10	0.7	10	
<sup>99</sup> Tc <sup>m</sup>		8	200	8	200	
<sup>99</sup> Tc	40	1000	0.9	20		
<sup>118</sup> Te <sup>(2)</sup>	Tellurium (52)	0.2	5	0.2	5	
<sup>121</sup> Te <sup>m</sup>		5	100	5	100	
<sup>121</sup> Te		2	50	2	50	
<sup>123</sup> Te <sup>m</sup>		7	100	7	100	
<sup>125</sup> Te <sup>m</sup>		30	800	9	200	
<sup>127</sup> Te <sup>m(2)</sup>		20	500	0.5	10	

Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>	
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )
<sup>127</sup> Te	Thorium (90)	20	500	0.5	10
<sup>129</sup> Te <sup>m(2)</sup>		0.6	10	0.5	10
<sup>129</sup> Te		0.6	10	0.5	10
<sup>131</sup> Te <sup>m</sup>		0.7	10	0.5	10
<sup>132</sup> Te <sup>(2)</sup>		0.4	10	0.4	10
<sup>227</sup> Th		9	200	1 × 10 <sup>-2</sup>	2 × 10 <sup>-1</sup>
<sup>228</sup> Th <sup>(2)</sup>		0.3	8	4 × 10 <sup>-4</sup>	1 × 10 <sup>-2</sup>
<sup>229</sup> Th		0.3	8	3 × 10 <sup>-5</sup>	8 × 10 <sup>-4</sup>
<sup>230</sup> Th		2	50	2 × 10 <sup>-4</sup>	5 × 10 <sup>-3</sup>
<sup>231</sup> Th		40	1000	0.9	20
<sup>232</sup> Th		Unlimited		Unlimited	
<sup>234</sup> Th <sup>(2)</sup>		0.2	5	0.2	5
Th (natural)		Unlimited		Unlimited	
<sup>44</sup> Ti <sup>(2)</sup>		Titanium (22)	0.5	10	0.2
<sup>200</sup> Tl	Thallium (81)	0.8	20	0.8	20
<sup>201</sup> Tl		10	200	10	200
<sup>202</sup> Tl		2	50	2	50
<sup>204</sup> Tl		4	100	0.5	10
<sup>167</sup> Tm	Thulium (69)	7	100	7	100
<sup>168</sup> Tm		0.8	20	0.8	20
<sup>170</sup> Tm		4	100	0.5	10
<sup>171</sup> Tm		40	1000	10	200
<sup>230</sup> U	Uranium (92)	40	1000	1 × 10 <sup>-2</sup>	2 × 10 <sup>-1</sup>
<sup>232</sup> U		3	80	3 × 10 <sup>-4</sup>	8 × 10 <sup>-3</sup>
<sup>233</sup> U		10	200	1 × 10 <sup>-3</sup>	2 × 10 <sup>-2</sup>
<sup>234</sup> U		10	200	1 × 10 <sup>-3</sup>	2 × 10 <sup>-2</sup>
<sup>235</sup> U		Unlimited <sup>(3)</sup>		Unlimited <sup>(3)</sup>	
<sup>236</sup> U		10	200	1 × 10 <sup>-3</sup>	2 × 10 <sup>-2</sup>
<sup>238</sup> U		Unlimited		Unlimited	
U (natural)		Unlimited		Unlimited	
U (enriched 5% or less)		Unlimited <sup>(3)</sup>		Unlimited <sup>(3)</sup>	
U (enriched more than 5%)		10	200	1 × 10 <sup>-3</sup>	2 × 10 <sup>-2</sup>
U (depleted)	Unlimited		Unlimited		
<sup>48</sup> V	Vanadium (23)	0.3	8	0.3	8
<sup>49</sup> V		40	1000	40	1000
<sup>178</sup> W <sup>(2)</sup>	Tungsten (74)	1	20	1	20
<sup>181</sup> W		30	800	30	800
<sup>185</sup> W		40	1000	0.9	20
<sup>187</sup> W		2	50	0.5	10
<sup>188</sup> W <sup>(2)</sup>		0.2	5	0.2	5
<sup>122</sup> Xe <sup>(2)</sup>	Xenon (54)	0.2	5	0.2	5
<sup>123</sup> Xe		0.2	5	0.2	5
<sup>127</sup> Xe		4	100	4	100
<sup>131</sup> Xe <sup>m</sup>		40	1000	40	1000
<sup>133</sup> Xe		20	500	20	500
<sup>135</sup> Xe		4	100	4	100
<sup>87</sup> Y	Yttrium (39)	2	50	2	50
<sup>88</sup> Y		0.4	10	0.4	10
<sup>90</sup> Y		0.2	5	0.2	5
<sup>91</sup> Y <sup>m</sup>		2	50	2	50

Symbol of radionuclide	Element and atomic number	A <sub>1</sub>		A <sub>2</sub>	
		TBq	(Ci) (approx <sup>(1)</sup> )	TBq	(Ci) (approx <sup>(1)</sup> )
<sup>91</sup> Y	Ytterbium (70)	0.3	8	0.3	8
<sup>92</sup> Y		0.2	5	0.2	5
<sup>93</sup> Y		0.2	5	0.2	5
<sup>169</sup> Yb	Zinc (30)	3	80	3	80
<sup>175</sup> Yb		30	800	0.9	20
<sup>65</sup> Zn		2	50	2	50
<sup>69</sup> Zn <sup>m(2)</sup>	Zirconium (40)	2	50	0.5	10
<sup>69</sup> Zn		4	100	0.5	10
<sup>88</sup> Zr		3	80	3	80
<sup>93</sup> Zr		40	1000	0.2	5
<sup>95</sup> Zr		1	20	0.9	20
<sup>97</sup> Zr		0.3	8	0.3	8

<sup>(1)</sup> The curie values quoted are obtained by rounding down from the TBq figure after conversion to Ci.

<sup>(2)</sup> A<sub>1</sub> and/or A<sub>2</sub> value limited by daughter product decay.

<sup>(3)</sup> A<sub>1</sub> and A<sub>2</sub> are unlimited for radiation control purposes only. For nuclear criticality safety this material is subject to the control placed on fissile material.

#### Determination of A<sub>1</sub> and A<sub>2</sub>

1701

(1) For individual radionuclides whose identities are known, but which are not listed in Table I, the determination of the values of A<sub>1</sub> and A<sub>2</sub> shall require multilateral approval. Alternatively, the values of A<sub>1</sub> and A<sub>2</sub> in Table II may be used without obtaining competent authority approval.

Table II. General values for A<sub>1</sub> and A<sub>2</sub>

Contents	A <sub>1</sub>		A <sub>2</sub>	
	TBq	(Ci)*	TBq	(Ci)*
Only beta or gamma emitting nuclides are known to be present	0.2	5	0.02	0.5
Alpha emitting nuclides are known to be present or no relevant data are available	0.1	2	2 × 10 <sup>-5</sup>	5 × 10 <sup>-4</sup>

<sup>(\*)</sup> The curie values quoted are obtained by rounding down from the TBq figure after conversion to Ci.

(2) In the calculations of A<sub>1</sub> and A<sub>2</sub> for a radionuclide not in Table I, a single radioactive decay chain in which the radionuclides are present in their naturally occurring proportions and in which no daughter nuclide has a half-life either longer than 10 days or longer than that of the parent nuclide shall be considered as a single radionuclide, and the activity to be taken into account and the A<sub>1</sub> or A<sub>2</sub> value to be applied shall be those corresponding to the parent nuclide of that chain. In the case of radioactive decay chains in which any daughter nuclide has a half-life longer than 10 days or greater than that of the parent nuclide, the parent and such daughter nuclides shall be considered as mixtures of different nuclides.

(3) For mixtures of radionuclides whose identities and respective activities are known, the following conditions shall apply:

(a) For special form radioactive material:

$$\sum_i \frac{B(i)}{A_1(i)} \text{ less than or equal to } 1$$

(b) For other forms of radioactive material:

$$\sum_i \frac{B(i)}{A_2(i)} \text{ less than or equal to } 1$$

where B (i) is the activity of radionuclide i and A<sub>1</sub> (i) and A<sub>2</sub> (i) are the A<sub>1</sub> and A<sub>2</sub> values for radionuclide i, respectively.

Alternatively, an A<sub>2</sub> value for mixtures may be determined as follows:

$$A_2 \text{ for mixture} = \frac{1}{\sum_i \frac{f(i)}{A_2(i)}}$$

where f (i) is the fraction of activity of nuclide i in the mixture and A<sub>2</sub> (i) is the appropriate A<sub>2</sub> value for nuclide i.

(4) When the identity of each radionuclide is known but the individual activities of some of the radionuclides are not known, the radionuclides may be grouped and the lowest A<sub>1</sub> or A<sub>2</sub> value, as appropriate, for the radionuclides in each group may be used in applying the formulas in paragraph (3) above. Groups may be based on the total alpha activity and the total beta/gamma activity when these are known, using the lowest A<sub>1</sub> or A<sub>2</sub> values for the alpha emitters or beta/gamma emitters, respectively.

(5) For individual radionuclides or for mixtures of radionuclides for which relevant data are not available, the values shown in Table II shall be used.

*Contents limits for packages*

1702 The quantity of radioactive material in a package shall not exceed the relevant limits specified in this marginal.

(1) Excepted packages

(a) For radioactive material other than articles manufactured of natural uranium, depleted uranium or natural thorium, an excepted package shall not contain activities greater than the following:

(i) Where the radioactive material is enclosed in or forms a component part of an instrument or other manufactured article, such as a clock or electronic apparatus, the limits specified in marg. 1713 (4) for each individual item and each package, respectively; or

(ii) Where the radioactive material is not so enclosed or manufactured, the limits specified in marg. 1713 (5).

(b) For articles manufactured of natural uranium, depleted uranium or natural thorium, an excepted package may contain any quantity of such material provided that the outer surface of the uranium or thorium is enclosed in an inactive sheath made of metal or some other substantial material.

(2) Industrial packages

The total activity in a single package of LSA material or in a single package of SCO shall be so restricted that the radiation level specified in marg. 1714 (1) shall not be exceeded, and the activity in a single package shall also be so restricted that the activity limits for a wagon specified in marg. 1714 (6) shall not be exceeded.

(3) Type A packages

Type A packages shall not contain activities greater than the following:

(a) For special form radioactive material — A<sub>1</sub>; or

(b) For all other radioactive material —  $A_2$ .

Values for  $A_1$  and  $A_2$  are listed in Tables I and II of marg. 1700 and 1701 respectively.

(4) Type B packages

Type B packages shall not contain:

- (a) Activities greater than those authorised for the package design,
- (b) Radionuclides different from those authorised for the package design, or
- (c) Contents in a form, or a physical or chemical state different from those authorised for the package design,

as specified in their certificates of approval.

(5) Packagings containing fissile material

All packagings containing fissile material shall comply with the applicable activity limits for packages specified in paragraphs (1)-(4) above.

Packagings containing fissile material, other than those containing materials which comply with the provisions of marg. 1703 (1), shall not contain:

- (a) A mass of fissile material greater than that authorised for the package design,
- (b) Any radionuclide or fissile material different from those authorised for the package design, or
- (c) Contents in a form or physical or chemical state, or in a spatial arrangement, different from those authorised for the package design,

as specified in their certificates of approval.

1703

Packages meeting one of the conditions of this marginal shall be excepted from the provisions specified in marg. 1741 and from the other provisions of this Appendix that apply specifically to fissile material; such packages, however, shall be regulated as non-fissile radioactive material packages, as applicable, and shall still be subject to those provisions of this Appendix which pertain to their radioactive nature and properties.

- (a) Packages containing individually not more than 15 g of fissile material, provided that the smallest external dimension of each package is not less than 10 cm. For unpackaged material, the quantity limitation shall apply to the consignment being carried in or on the wagon.
- (b) Packages containing homogeneous hydrogenous solutions or mixtures satisfying the conditions listed in Table III. For unpackaged material, the quantity limitations in Table III shall apply to the consignment being carried in or on the wagon.
- (c) Packages containing uranium enriched in uranium-235 to a maximum of 1% by mass, and with a total plutonium and uranium-233 content not exceeding 1% of the mass of uranium-235, provided that the fissile material is distributed essentially homogeneously throughout the material. In addition, if uranium-235 is present in metallic, oxide, or carbide forms, it shall not form a lattice arrangement within the package.
- (d) Packages containing not more than 5 g of fissile material in any 10 litre volume, provided that the radioactive material is contained in packages which will maintain the limitations on fissile material distribution under conditions likely be encountered during routine transport.
- (e) Packages containing individually not more than 1 kg of total plutonium, of which not more than 20% by mass may consist of plutonium-239, plutonium-241, or any combination of those radionuclides.



- (f) Packages containing liquid solutions of uranyl nitrate enriched in uranium-235 to a maximum of 2% by mass, with a total plutonium and uranium-233 content not exceeding 0.1% of the mass of uranium-235, and with a minimum nitrogen to uranium atomic ratio ( $N/U$ ) of 2.

Table III. *Limitations on homogeneous hydrogenous solutions or mixtures of fissile material*

Parameters	Uranium-235 only	Any other fissile material (including mixtures)
Minimum $H/X$ <sup>(1)</sup>	5200	5200
Maximum concentration of fissile material (g/l)	5	5
Maximum mass of fissile material in a package or wagon (g)	800 <sup>(2)</sup>	500

<sup>(1)</sup> Where  $H/X$  is the ratio of the number of hydrogen atoms to the number of atoms of fissile nuclide.

<sup>(2)</sup> With a total plutonium and uranium-233 content of not more than 1% of the mass of uranium-235.

1704-  
1709

*Section II. Preparation provisions and controls for shipment and for storage in transit*

*Package inspection provisions*

1710

(1) Before the first shipment of any package, the following provisions shall be fulfilled:

- (a) If the design pressure of the containment system exceeds 35 kPa (0.35 bar) (gauge), it shall be ensured that the containment system of each package conforms to the approved design provisions relating to the capability of that system to maintain its integrity under pressure;
- (b) For each Type B package and for each packaging containing fissile material, it shall be ensured that the effectiveness of its shielding, containment system, and, where necessary, the heat transfer characteristics, are within the limits applicable to or specified for the approved design;
- (c) For each packaging containing fissile material, where neutron poisons are specifically included as components of the package, in order to comply with the provisions of marg. 1741, tests shall be performed to confirm the presence and distribution of those neutron poisons.

(2) Before each shipment of any package, the following provisions shall be fulfilled:

- (a) It shall be ensured that lifting attachments which do not meet the provisions of marg. 1732 have been removed or otherwise rendered incapable of being used for lifting the package;
- (b) For each Type B package and for each packaging containing fissile material, it shall be ensured that all the requirements specified in the approval certificates and the relevant provisions of this Appendix have been satisfied;
- (c) Each Type B package shall be held until equilibrium conditions have been approached closely enough to demonstrate compliance with the shipment provisions for temperature and pressure unless an exemption from these provisions has received unilateral approval;

- (d) For each Type B package, it shall be ensured by examination and/or appropriate tests that all closures, valves and other openings of the containment system through which the radioactive contents might escape are properly closed and, where appropriate, sealed in the manner for which the demonstrations of compliance with the provisions of marg. 1738 were made.

*Transport of other goods*

1711 (1) A package shall not contain any other items except such articles and documents as are necessary for the use of the radioactive material. This provision shall not preclude the transport of low specific activity material or surface contaminated objects with other items. The transport of such articles and documents in a package, or of low specific activity material or surface contaminated objects with other items may be permitted provided that there is no interaction between them and the packaging or its contents that would reduce the safety of the package.

(2) Tank wagons and tank-containers used for the transport of radioactive material shall not be used for the storage or transport of other goods.

(3) The carriage of other goods with consignments being transported under exclusive use shall be permitted provided the arrangements are controlled only by the consignor and it is not prohibited by other regulations.

(4) Consignments shall be segregated from other dangerous goods during transport and storage in accordance with the provisions of marg. 703 under heading 7.

(5) Radioactive material shall be sufficiently segregated from undeveloped photographic film. The basis for determining segregation distances for this purpose shall be that the radiation exposure of undeveloped photographic film due to the transport of radioactive material be limited to 0.1 mSv (10 mrem) per consignment of such film in accordance with marg. 711 (1).

*Requirements and controls for contamination and for leaking packages*

1712 (1) The non-fixed contamination on the external surfaces of a package shall be kept as low as practicable and, under conditions likely to be encountered in routine transport, shall not exceed the levels specified in Table IV.

(2) In the case of overpacks and containers, the level of non-fixed contamination on the external and the internal surfaces shall not exceed the limits specified in Table IV.

(3) If it is evident that a package is damaged or leaking, or if it is suspected that the package may have leaked or been damaged, access to the package shall be restricted and a qualified person shall, as soon as possible, assess the extent of contamination and the resultant radiation level of the package. The scope of the survey shall include the package, the wagon, the adjacent loading and unloading areas, and, if necessary, all other material which has been carried in the wagon. When necessary, additional steps for the protection of human health, in accordance with provisions established by the relevant competent authority, shall be taken to overcome and minimize the consequences of such leakage or damage.

(4) Packages leaking radioactive contents in excess of allowable limits for normal conditions of transport may be removed under supervision but shall not be forwarded until repaired or reconditioned and decontaminated.

(5) A wagon and equipment used routinely for the carriage of radioactive material shall be periodically checked to determine the level of contamination. The frequency of such checks shall be related to the likelihood of contamination and the extent to which radioactive material is carried.

Table IV. *Limits of non-fixed contamination on surfaces*

Type of package, overpack, container, tank-container, tank wagon or wagon and its equipment	Contaminant			
	Limit <sup>(1)</sup> of beta and gamma emitters and low toxicity alpha emitters		Limit <sup>(1)</sup> of all other alpha emitters	
	Bq/cm <sup>2</sup>	( $\mu$ Ci/cm <sup>2</sup> )	Bq/cm <sup>2</sup>	( $\mu$ Ci/cm <sup>2</sup> )
External surfaces of: Excepted packages	0.4	( $10^{-5}$ )	0.04	( $10^{-6}$ )
Other than excepted packages	4	( $10^{-4}$ )	0.4	( $10^{-5}$ )
External and internal surfaces of overpacks, containers, wagons and their equipment when carrying or being prepared to carry: Loads including excepted packages and/or non-radioactive goods	0.4	( $10^{-5}$ )	0.04	( $10^{-6}$ )
Loads consisting only of radioactive material in packages other than excepted packages	4	( $10^{-4}$ )	0.4	( $10^{-5}$ )
External surfaces of containers, tank-containers, tank wagons and wagons and their equipment used in the carriage of unpackaged radioactive material	4	( $10^{-4}$ )	0.4	( $10^{-5}$ )

<sup>(1)</sup> The limits are applicable when averaged over any area of 300 cm<sup>2</sup> of any part of the surface.

(6) Except as provided in paragraph (7) below, any wagon, equipment, or part thereof which has become contaminated above the limits specified in Table IV in the course of the carriage of radioactive material shall be decontaminated as soon as possible by a qualified person and shall not be re-used unless the non-fixed radioactive contamination does not exceed the levels specified in Table IV, and the radiation level resulting from the fixed contamination on surfaces after decontamination is less than 5  $\mu$ Sv/h (0.5 mrem/h).

(7) A wagon used for the transport of low specific activity material or surface contaminated objects under exclusive use shall be excepted from the provisions of paragraph (6) above, only for as long as it remains under that specific exclusive use.

*Requirements and controls for transport of excepted packages*

1713

(1) Excepted packages shall be subject only to the following provisions:

(a) In sections II, III and V, only the provisions specified in:

- (i) Paragraphs (2) to (6) of this marginal, as applicable, and marg. 1770 and
- (ii) The general provisions for all packagings and packages specified in marg. 1732.

(b) If the excepted package contains fissile material, the provisions of marg. 1703.

(c) The provision of marg. 705 (1).

(2) The radiation level at any point on the external surface of an excepted package shall not exceed 5  $\mu$ Sv/h (0.5 mrem/h).

(3) The non-fixed radioactive contamination on any external surface of an excepted package shall not exceed the levels specified in Table IV.

(4) Radioactive material which is enclosed in or forms a component part of an instrument or other manufactured article, with activity not exceeding the item and package limits specified in columns 2 and 3 respectively in Table V, may be transported in an excepted package provided that:

- (a) The radiation level at 10 cm from any point on the external surface of any unpackaged instrument or article is not greater than 0.1 mSv/h (10 mrem/h); and
- (b) Each instrument or article (except radioluminescent time-pieces or devices) bears the marking "Radioactive".

Table V. *Activity limits for excepted packages*

Physical state of contents	Instruments and articles		Material
	Item limits	Package limits	Package limits
<b>Solids:</b>			
Special form	$10^{-2} A_1$	$A_1$	$10^{-3} A_1$
Other forms	$10^{-2} A_2$	$A_2$	$10^{-3} A_2$
<b>Liquids:</b>	$10^{-3} A_2$	$10^{-1} A_2$	$10^{-4} A_2$
<b>Gases:</b>			
Tritium	$2 \times 10^{-2} A_2$	$2 \times 10^{-1} A_2$	$2 \times 10^{-2} A_2$
Special forms	$10^{-3} A_1$	$10^{-2} A_1$	$10^{-3} A_1$
Other forms	$10^{-3} A_2$	$10^{-2} A_2$	$10^{-3} A_2$

NOTE. For mixtures of radionuclides, see marg. 1701 (3) to (5).

(5) Radioactive material in forms other than as specified in paragraph (4) above, with an activity not exceeding the limit specified in column 4 of Table V, may be transported in an excepted package provided that:

- (a) The package retains its contents under conditions likely to be encountered in routine transport; and
- (b) The package bears the marking "Radioactive" on an internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package.

(6) A manufactured article in which the sole radioactive material is unirradiated natural uranium, unirradiated depleted uranium or unirradiated natural thorium may be transported as an excepted package provided that the outer surface of the uranium or thorium is enclosed in an inactive sheath made of metal or some other substantial material.

*Requirements and controls for transport of LSA material and SCO in industrial packages or unpackaged*

1714

(1) The quantity of LSA material or SCO in a single industrial package (IP-1, IP-2 or IP-3) or object or collection of objects, whichever is appropriate, shall be so restricted that the external radiation level at 3 m from the unshielded material or object or collection of objects does not exceed 10 mSv/h (1,000 mrem/h).

(2) LSA material and SCO which is or contains fissile material shall meet the applicable provisions of marg. 714 (2) and (3) and 1741.

(3) Packages, including tank wagons, tank-containers or containers, containing LSA material or SCO shall be subject to the provisions of marg. 1712 (1) and (2).

(4) LSA material and SCO in groups LSA-I and SCO-I may be transported unpackaged under the following conditions:

- (a) All unpackaged material other than ores containing only naturally occurring radionuclides shall be transported in such a manner that under conditions likely to be encountered in routine transport there will be no escape of the contents from the wagon nor will there be any loss of shielding.
- (b) Each wagon shall be under exclusive use, except when only transporting SCO-I on which the contamination on the accessible and the inaccessible surfaces is not greater than ten times the applicable level specified in marg. 700 (2).
- (c) For SCO-I where it is suspected that non-fixed contamination exists on inaccessible surfaces in excess of the values specified in marg. 700 (2), measures shall be taken to ensure that the radioactive material is not released into the wagon.

(5) LSA material and SCO, except as otherwise specified in paragraph (4) above, shall be packaged in accordance with the package integrity levels specified in Table VI in such a manner that, under conditions likely to be encountered in routine transport, there will be no escape of contents from packages, nor will there be any loss of shielding afforded by the packaging. LSA-II material, LSA-III material and SCO-II shall not be transported unpackaged.

Table VI. *Industrial package integrity provisions for LSA material and SCO*

Contents	Industrial package type <sup>(1)</sup>	
	Exclusive use	Not under exclusive use
LSA-I <sup>(2)</sup>		
Solid	IP-1	IP-1
Liquid	IP-1	IP-2
LSA-II		
Solid	IP-2	IP-2
Liquid and gas	IP-2	IP-3
LSA-III	IP-2	IP-3
SCO-I <sup>(2)</sup>	IP-1	IP-1
SCO-II	IP-2	IP-2

<sup>(1)</sup> See marg. 700 (2).

<sup>(2)</sup> Under the conditions specified in paragraph (4) above, LSA-I material and SCO-I may be transported unpackaged.

(6) The total activity of LSA material and SCO in any single wagon shall not exceed the limits shown in Table VII.

Table VII. *Wagon activity limits for LSA material and SCO in industrial packages or unpackaged*

Nature of material	Activity limit for wagon
LSA-I	No limit
LSA-II and LSA-III non-combustible solids	No limit
LSA-II and LSA-III combustible solids, and all liquids and gases	100 A <sub>2</sub>
SCO	100 A <sub>2</sub>

*Determination of transport index (TI)*

1715

(1) The transport index (TI) based on radiation exposure control for a package, overpack, tank wagon, tank-container or container, or for unpackaged LSA-I or SCO-I, shall be the number derived in accordance with the following procedure:

- (a) Determine the maximum radiation level at a distance of 1 m from the external surfaces of the package, overpack, tank wagon, tank-container or container, or unpackaged LSA-I and SCO-I. Where the radiation level is determined in units of millisievert per hour (mSv/h), the value determined shall be multiplied by 100. Where the radiation level is determined in units of millirem per hour (mrem/h), the value determined is not changed.

For uranium and thorium ores and concentrates, the maximum radiation dose rate at any point 1 m from the external surface of the load may be taken as:  
0.4 mSv/h (40 mrem/h) for the ores and physical concentrates of uranium and thorium,

0.3 mSv/h (30 mrem/h) for chemical concentrates of thorium,

0.02 mSv/h (2 mrem/h) for chemical concentrates of uranium, other than uranium hexafluoride.

- (b) For tank wagons, tank-containers and containers and unpackaged LSA-I and SCO-I, the value determined in step (a) above shall be multiplied by the appropriate factor from Table VIII.
- (c) The figure obtained in steps (a) and (b) above shall be rounded up to the first decimal place (e.g. 1.13 becomes 1.2), except that a value of 0.05 or less may be considered as zero.

Table VIII. *Multiplication factors for large dimension loads*

Size of load (largest cross-sectional area of the load being measured)	Multiplication factor
Size of load $\leq 1 \text{ m}^2$	1
$1 \text{ m}^2 < \text{size of load} \leq 5 \text{ m}^2$	2
$5 \text{ m}^2 < \text{size of load} \leq 20 \text{ m}^2$	3
$20 \text{ m}^2 < \text{size of load}$	10

(2) The transport index (TI) based on nuclear criticality control shall be obtained by dividing the number 50 by the value of N derived using the procedures specified in marg. 1741 (i.e. Transport Index = 50/N). The value of the transport index for nuclear criticality control may be zero, provided that an unlimited number of packages is subcritical (i.e. N is effectively equal to infinity).

(3) The transport index for each consignment shall be determined in accordance with Table IX.

Table IX. *Determination of transport index*

Item	Contents	Method of determining transport index (TI)
Packages	Non-fissile material	TI for radiation exposure control
	Fissile material	The larger of the TI for radiation exposure control and the TI for nuclear criticality control
Non-rigid overpacks	Packages	Sum of TIs of all packages contained
Rigid overpacks	Packages	The sum of the TIs of all packages contained, or, for the original consignor either the TI for radiation exposure control or the sum of the TIs of all the packages
Containers	Packages or Overpacks	Sum of the TIs of all packages and overpacks contained
	LSA material or SCO	Either the sum of the TIs or the larger of the TI for radiation exposure control and the TI for nuclear criticality control
Containers under exclusive use	Packages or Overpacks	Either the sum of the TIs or the larger of the TI for radiation exposure control and the TI for nuclear criticality control
Tank-containers, tank wagons	Non-fissile material	TI for radiation exposure control
	Fissile material	The larger of the TI for radiation exposure control and the TI for nuclear criticality control
Unpackaged	LSA-I and SCO-I	The TI for radiation exposure control

*Additional provisions for overpacks*

1716

The following additional provisions shall apply to overpacks:

- (a) Packages of fissile material for which the transport index for nuclear criticality control is 0 and packages of non-fissile radioactive material may be combined together in an overpack for transport, provided that each package contained therein meets the applicable provision of this Appendix.
- (b) Packages of fissile material for which the transport index for nuclear criticality control exceeds 0 shall not be carried in an overpack.
- (c) Only the original consignor of the packages contained within the overpacks shall be permitted to use the method of direct measurement of radiation level to determine the transport index of a rigid overpack.

*Limits on transport index and radiation level for packages and overpacks*

1717 (1) Except for consignments under exclusive use, the transport index of any individual package or overpack shall not exceed 10.

(2) Except for packages or overpacks transported under exclusive use under the conditions specified in marg. 713 (1) (a), the maximum radiation level at any point on any external surface of a package or overpack shall not exceed 2 mSv/h (200 mrem/h).

(3) The maximum radiation level at any point on any external surface of a package transported under exclusive use shall not exceed 10 mSv/h (1,000 mrem/h).

*Categories*

1718 Packages and overpacks shall be assigned to either category I-WHITE, II-YELLOW or III-YELLOW in accordance with the conditions specified in Tables X and XI, as applicable, and with the following provisions:

(a) For a package, both the transport index and the surface radiation level conditions shall be taken into account in determining which is the appropriate category. Where the transport index satisfies the condition for one category but the surface radiation level satisfies the condition for a different category, the package shall be assigned to the higher category of the two. For this purpose, category I-WHITE shall be regarded as the lowest category.

Table X. *Categories of packages*

Conditions		Category
Transport Index	Maximum radiation level at any point on external surface	
0 <sup>(1)</sup>	Not more than 0.005 mSv/h (0.5 mrem/h)	I-WHITE
More than 0 but not more than 1 <sup>(1)</sup>	More than 0.005 mSv/h (0.5 mrem/h) but not more than 0.5 mSv/h (50 mrem/h)	II-YELLOW
More than 1 but not more than 10	More than 0.5 mSv/h (50 mrem/h) but not more than 2 mSv/h (200 mrem/h)	III-YELLOW
More than 10	More than 2 mSv/h (200 mrem/h) but not more than 10 mSv/h (1,000 mrem/h)	III-YELLOW and also under exclusive use

<sup>(1)</sup> If the measured TI is not greater than 0.05, the value quoted may be zero in accordance with marg. 1715 (1) (c).

Table XI. *Categories of overpacks including containers when used as overpacks*

Transport Index	Category
0	I-WHITE
Greater than 0 but less than or equal to 1	II-YELLOW
Greater than 1	III-YELLOW



- (b) The transport index shall be determined following the procedures specified in marg. 1715 and subject to the limitation of marg. 1716 (c).
- (c) If the transport index is greater than 10, the package or overpack shall be transported under exclusive use.
- (d) If the surface radiation level is greater than 2 mSv/h (200 mrem/h), the package or overpack shall be transported under exclusive use and under the provisions of marg. 713 (1) (a).
- (e) A package transported under a special arrangement shall be assigned to category III-YELLOW.
- (f) An overpack which contains packages transported under special arrangement shall be assigned to category III-YELLOW.

*Notification of competent authorities*

1719

(1) Before the first shipment of any package requiring competent authority approval, the consignor shall ensure that copies of each applicable competent authority certificate applying to that package design have been submitted to the competent authority of each country through or into which the consignment is to be transported. The consignor is not required to await an acknowledgement from the competent authority, nor is the competent authority required to make such acknowledgement of receipt of the certificate.

(2) For each shipment listed in (a), (b) or (c) below, the consignor shall notify the competent authority of each country through or into which the consignment is to be transported. This notification shall be in the hands of each competent authority prior to the commencement of the shipment, and preferably at least 7 days in advance.

- (a) Type B(U) packages containing radioactive material with an activity greater than  $3 \times 10^3 A_1$  or  $3 \times 10^3 A_2$ , as appropriate, or 1,000 TBq (20 kCi), whichever is the lower.
- (b) Type B(M) packages.
- (c) Transport under special arrangement.

(3) The consignment notification shall include:

- (a) Sufficient information to enable the identification of the package including all applicable certificate numbers and identification marks;
- (b) Information on the date of shipment, the expected date of arrival and proposed routing;
- (c) The name of the radioactive material or nuclide;
- (d) A description of the physical and chemical form of the radioactive material, or whether it is special form radioactive material; and
- (e) The maximum activity of the radioactive contents during carriage expressed in units of becquerel (Bq) (and, if desired, curie (Ci)) with an appropriate SI prefix [see marg. 4 (1)]. For fissile material, the total mass of fissile material in units of gram (g), or multiples thereof, may be used in place of activity.

(4) The consignor is not required to send a separate notification if the required information has been included in the application for shipment approval. See marg. 1757 (3).

*Possession of certificates and operating instructions*

(5) The consignor shall have in his possession a copy of each certificate required under Section III of this appendix, and a copy of the instructions with

regard to the proper closing of the package and other preparations for shipment before making any shipment under the terms of the certificates.

1720-  
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*Section III. Provisions for radioactive material, for packaging and packages and test procedures*

NOTE. The provisions in Section III are the same as those prescribed in the 1985 Edition of IAEA Regulations for the Safe Transport of Radioactive Material and the 1988 Supplement. The paragraph numbers mentioned under marg. 1730 to 1742 are the numbers of the applicable paragraphs of the 1985 Edition.

- 1730 Provisions for LSA-III material  
Paragraph 501
- 1731 Provisions for special form radioactive material  
Paragraphs 502-504
- 1732 General provisions for all packagings and packages  
Paragraphs 505-514
- 1733 Provisions for industrial packages Type 1 (IP-1)  
Paragraph 518
- 1734 Additional provisions for industrial packages Type 2 (IP-2)  
Paragraph 519
- 1735 Additional provisions for industrial packages Type 3 (IP-3)  
Paragraph 520
- 1736 Alternative provisions for tank wagons, tank-containers and containers to qualify as IP-2 and IP-3  
Paragraphs 521-523
- 1737 Provisions for Type A packages  
Paragraphs 524-540
- 1738 Provisions for Type B packages  
Paragraphs 541-548
- 1739 Provisions for Type B(U) packages  
Paragraphs 549-556
- 1740 Provisions for Type B(M) packages  
Paragraphs 557-558
- 1741 Provisions for packages containing fissile material  
Paragraphs 559-568
- 1742 Test procedures  
Paragraphs 601-633
- 1743-  
1749

*Section IV. Approval and administrative provisions*

NOTE. Where the provisions in Section IV are the same as those prescribed in the 1985 Edition of the IAEA Regulations for the Safe Transport of Radioactive Material and the 1988 Supplement the numbers mentioned under marg. 1761 to 1764 are the numbers of the applicable paragraphs of the 1985 Edition.

*General*

- 1750 Competent authority approval shall be required for the following:
- (a) Special form radioactive material (see marg. 1751);
  - (b) All packages containing fissile material (see marg. 1754 and 1755);
  - (c) Type B packages — Type B(U) and Type B(M) (see marg. 1752, 1753 and 1755);
  - (d) Special arrangements (see marg. 1758);
  - (e) Certain shipments (see marg. 1757);
  - (f) Calculation of unlisted  $A_1$  and  $A_2$  values [see marg. 1701 (1)].

*Approval of special form radioactive material*

- 1751 (1) The design for special form radioactive material shall require unilateral approval. An application for approval shall include:
- (a) A detailed description of the radioactive material or, if a capsule, the contents; particular reference shall be made to both physical and chemical states;
  - (b) A detailed statement of the design of any capsule to be used; and
  - (c) A statement of the tests which have been done and their results, or evidence based on calculative methods to show that the radioactive material is capable of meeting the performance standards, or other evidence that the special form radioactive material meets the applicable provisions of this appendix.
  - (d) Evidence of a quality assurance programme.

(2) The competent authority shall issue an approval certificate stating that the approved design meets the provisions for special form radioactive material and shall allocate to that design an identification mark. The certificate shall specify the details of the special form radioactive material.

*Approval of package designs**Approval of Type B(U) package designs*

- 1752 (1) Any design of Type B(U) package originating in a country party to COTIF shall be approved by the competent authority of this country; if the country where the package has been designed is not a party to COTIF carriage is possible on condition that:

- (a) A certificate has been supplied by this country, proving that the package satisfies the technical provisions of RID, and that this certificate is countersigned by the competent authority of the first COTIF country reached by the consignment;
- (b) If no certificate has been supplied, the package design is approved by the competent authority of the first COTIF country reached by the consignment.

Any design of Type B(U) package for fissile material, which is also subject to marg. 1741, shall require multilateral approval.

(2) An application for approval shall include:

- (a) A detailed description of the proposed radioactive contents with particular reference to their physical and chemical states and the nature of the radiation emitted;
- (b) A detailed statement of the design, including complete engineering drawings and schedules of materials and methods of construction to be used;
- (c) A statement of the tests which have been done and their results, or evidence based on calculative methods or other evidence that the design is adequate to meet the applicable provisions;

- (d) The proposed operating and maintenance instructions for the use of the packaging;
- (e) If the package is designed to have a maximum normal operating pressure in excess of 100 kPa (1.0 bar) gauge, the application for approval shall, in particular, state, in respect of the materials of construction of the containment system, the specifications, the samples to be taken, and the tests to be made;
- (f) Where the proposed radioactive contents are irradiated fuel, the applicant shall state and justify any assumption in the safety analysis relating to the characteristics of the fuel;
- (g) Any special stowage provisions necessary to ensure the safe dissipation of heat from the package; consideration shall be given to the various modes of transport to be used and type of wagon or container;
- (h) A reproducible illustration not larger than 30 cm showing the make-up of the package; and
- (i) Evidence of a quality assurance programme.

(3) The competent authority shall issue an approval certificate stating that the design meets the provisions for Type B(U) packages.

*Approval of Type B(M) package designs*

1753 (1) Each Type B(M) package design, including those for fissile material which are also subject to marg. 1754, shall require multilateral approval.

(2) An application for approval of a Type B(M) package design shall include, in addition to the information required in marg. 1752 (2) for Type B(U) packages:

- (a) A list of the specific provisions for Type B(U) packages specified in marg. 1738-1739 with which the package does not conform;
- (b) Any proposed supplementary operational controls to be applied during transport not routinely provided for in this appendix, but which are necessary to ensure the safety of the package or to compensate for the deficiencies listed in (a) above, such as human intervention for temperature or pressure measurements or for periodic venting, taking into account the possibility of unexpected delay;
- (c) Particulars of any restrictions on the mode of transport and any special loading, carriage, unloading or handling procedures; and
- (d) The maximum and minimum ambient conditions (temperature, solar radiation) expected to be encountered during transport and which have been taken into account in the design.

(3) The competent authority shall issue an approval certificate stating that the design meets the applicable provisions for Type B(M) packages.

*Approval of package designs for fissile material*

1754 (1) Each package design for fissile material shall require multilateral approval.

(2) An application for approval shall include all information necessary to satisfy the competent authority that the design meets the provisions of marg. 1741 and evidence of a quality assurance programme.

(3) The competent authority shall issue an approval certificate stating that the design meets the applicable provisions of marg. 1741.

*Transitional arrangements*

1755 Packagings not fully conforming to the provisions of this appendix, but which nevertheless could be used in accordance with the provisions of RID applicable on 31 December 1989 for the corresponding material of Class 7 may still be used for a transitional period of 6 years until 31 December 1995 for the carriage of such material.

After this date,

- (a) Multilateral approval shall be required; and
- (b) A serial number according to the provisions of marginal 705 (3) shall be assigned to and marked on the outside of each packaging.

Changes in the design of the packaging or in the nature or quantity of the authorised radioactive contents which, as determined by the competent authority, would significantly affect safety shall meet the provisions of this appendix.

*Notification and registration of serial numbers*

1756 The competent authority of the country of origin of design approval shall be informed of the serial number of each packaging manufactured to a design approved under marg. 1752, 1753 (1), 1754 (1) and 1755. The competent authority shall maintain a register of such serial numbers.

*Approval of shipments*

1757 (1) Except as allowed in paragraph (2) below, multilateral approval shall be required for:

- (a) The shipment of Type B(M) packages especially designed to allow controlled intermittent venting;
- (b) The shipment of Type B(M) packages containing radioactive material with an activity greater than  $3 \times 10^3 A_1$  or  $3 \times 10^3 A_2$ , as appropriate, or 1,000 TBq (20 kCi), whichever is the lower;
- (c) The shipment of packages containing fissile material if the sum of the transport indexes of the individual packages exceeds 50 as provided in marg. 712 (4).

(2) A competent authority may authorize transport into or through its country without shipment approval, by a specific provision in its design approval (see marg. 1759).

(3) An application for shipment approval shall include:

- (a) The period of time for which the approval is sought;
- (b) The actual radioactive contents, the expected modes of transport, the type of wagon and the probable or proposed route; and
- (c) The details of how the special precautions and special administrative or operational controls, referred to in the package design approval certificates issued under marg. 1752 (3), 1753 (3) and 1754 (3), are to be put into effect.

(4) Upon approval of the shipment, the competent authority shall issue an approval certificate.

*Approval of shipment under special arrangement*

1758 (1) Each consignment shipped under special arrangement shall require multilateral approval.

(2) An application for approval of a shipment under special arrangement shall include all the information necessary to satisfy the competent authority that the overall level of safety in transport is at least equivalent to that which would be

provided if all the applicable provisions of this appendix had been met. The application shall include:

- (a) A statement of the respects in which, and of the reasons why, the consignment cannot be made in full accordance with the applicable provisions of this appendix; and
- (b) A statement of any special precautions or special administrative or operational controls which are to be employed during transport to compensate for the failure to meet the applicable provisions of this appendix.

(3) Upon approval of a shipment under special arrangement, the competent authority shall issue an approval certificate.

*Competent authority approval certificates*

1759 Four types of approval certificates may be issued: special form radioactive material, special arrangement, shipment and package design. The package design and shipment approval certificates may be combined into a single certificate.

*Competent authority identification marks*

1760 (1) Each approval certificate issued by a competent authority shall be assigned an identification mark. The mark shall be of the following generalized type:

Symbol of nationality of country/number/type code:

- (a) The symbol of nationality represents the distinguishing sign for motor vehicles in international traffic in the Vienna Convention on Road Traffic (1968).
- (b) The number shall be assigned by the competent authority, and shall be unique and specific with regard to the particular design or shipment.

The shipment approval identification mark shall be clearly related to the design approval identification mark.

- (c) The following type codes shall be used in the order listed to indicate the types of approval certificates issued:

- AF Type A package design for fissile material
- B(U) Type B(U) package design; B(U)F if for fissile material
- B(M) Type B(M) package design; B(M)F if for fissile material
- IF Industrial package design for fissile material
- S Special form radioactive material
- T Shipment
- X Special arrangement.

- (d) For package design approval certificates, other than those issued under the provisions of marg. 1755, the symbol “-85”<sup>(1)</sup> shall be added to the type code of the package design.

(2) These type codes shall be applied as follows:

- (a) Each certificate and each package shall bear the appropriate identification mark, comprising the symbols prescribed in paragraph (1) above, except that, for packages, only the applicable design type codes including, if applicable, the symbol “-85”<sup>(1)</sup> shall appear following the second stroke, that is, the “T” or “X” shall not appear in the identification marking on the package.

<sup>(1)</sup> This symbol denotes that the package design satisfies the provisions of the Regulations for the Safe Transport of Radioactive Material, Safety Series No. 6, 1985 Edition.

Where the design approval and shipment approval are combined, the applicable type codes do not need to be repeated. For example:

A/132/B(M)F-85: A Type B(M) package design approved for fissile material, requiring multilateral approval, for which the competent authority of Austria has assigned the design number 132 (to be marked on both the package and on the package design approval certificate);

A/132/B(M)F-85T: The shipment approval issued for a package bearing the identification mark elaborated above (to be marked on the certificate only);

A/137/X-85: A special arrangement approval issued by the competent authority of Austria, to which the number 137 has been assigned (to be marked on the certificate only);

A/139/IF-85: An industrial package design for fissile material approved by the competent authority of Austria, to which package design number 139 has been assigned (to be marked on both the package and on the package design approval certificate).

- (b) Where multilateral approval is effected by validation, only the identification mark issued by the country of origin of the design or shipment shall be used. Where multilateral approval is effected by issue of certificates by successive countries, each certificate shall bear the appropriate mark and the package whose design was so approved shall bear all appropriate identification marks. For example:

A/132/B(M)F-85

CH/28/B(M)F-85

would be the identification mark of a package which was originally approved by Austria and was subsequently approved, by separate certificate, by Switzerland. Additional identification marks would be displayed in a similar manner on the package.

- (c) The revision of a certificate shall be indicated by a parenthetical expression following the identification mark on the certificate. For example, A/132/B(M)F-85(Rev.2) would indicate revision 2 of the Austrian package design approval certificate; or A/132/B(M)F-85(Rev.0) would indicate the original issue of the Austrian package design approval certificate. For original issues, the parenthetical entry is optional and other words such as "original issue" may also be used in place of 'Rev.0'. Certificate revision numbers may only be issued by the country issuing the original approval certificate.
- (d) Additional symbols (as may be necessitated by national requirements) may be added in brackets to the end of the identification mark; for example, A/132/B(M)F-85(SP503).
- (e) It is not necessary to alter the identification mark on the packaging each time that a revision to the design certificate is made. Such re-marking shall be made only in those cases where the revision to the package design certificate involves a change in the letter type codes for the package design following the second stroke.

#### *Contents of approval certificates*

(See introductory note to this section)

- |      |  |
|------|--|
| 1761 | Special form radioactive material approval certificates<br>Paragraph 726 |
| 1762 | Special arrangement approval certificates<br>Paragraph 727               |

1763 Shipment approval certificates  
Paragraph 728

1764 Package design approval certificates  
Paragraph 729

*Validation of certificates*

1765 Multilateral approval may be by validation of the original certificate issued by the competent authority of the country of origin of the design or shipment.

Such validation may take the form of an endorsement on the original certificate or the issue of a separate endorsement, annex, supplement, etc., by the competent authority of the country through or into which the shipment is made.

*General provision for quality assurance programme*

1766 Quality assurance programmes shall be established for the design, manufacture, testing, documentation, use, maintenance and inspection of all packages and for transport and in-transit storage operations to ensure compliance with the relevant provisions of this appendix. Where competent authority approval for design or shipment is required, such approval shall take into account and be contingent upon the adequacy of the quality assurance programme. Certification that the design specification has been fully implemented shall be available to the competent authority. The manufacturer, consignor, or user of any package design shall be prepared to provide facilities for competent authority inspection of the packaging during construction and use and to demonstrate to any relevant competent authority that:

- (a) The construction methods and materials used for the construction of the packaging are in accordance with the approved design specifications; and
- (b) All packagings manufactured to an approved design are periodically inspected and, as necessary, repaired and maintained in good condition so that they continue to comply with all relevant provisions and specifications, even after repeated use.

1767-  
1769

*Section V. Radioactive Material Having Other Hazardous Properties*

1770 (1) Radioactive material having other hazardous properties shall be packaged:

- (a) In accordance with the provisions for Class 7; and
- (b) Unless carried as a Type A or Type B package, also in accordance with the provisions of the appropriate class.

(2) Pyrophoric radioactive material shall be packaged in Type A or Type B packages and shall also be suitably inerted.

(3) For radioactive material in excepted packages having other hazardous properties, see marg. 3 (5) and (6).

(4) Packagings for uranium hexafluoride shall be designed, constructed and used in accordance with the provisions of marg. 1771.

*Provisions for the packaging and carriage of uranium hexafluoride*

1771 (1) Packagings for uranium hexafluoride shall be designed as pressure vessels and manufactured from an appropriate carbon steel or other appropriate alloy steel.

- (2) (a) The packagings and their service equipment shall be designed for working temperatures of at least  $-40^{\circ}\text{C}$  up to  $121^{\circ}\text{C}$  and for a working pressure of 1.4 MPa (14 bar).



- (b) The packagings and their service and structural equipment shall be so designed as to prevent any leakage or permanent deformation when they are subjected for five minutes to a hydraulic test pressure of 2.8 MPa (28 bar).
  - (c) The packagings and their structural equipment (if this is permanently attached to the packaging) shall be so designed as to withstand an external gauge pressure of 150 kPa (1.5 bar) without permanent deformation.
  - (d) The packagings and their service equipment shall be so designed as to remain leakproof so that the limit specified in paragraph (4) (f) is observed.
  - (e) Pressure relief valves are not permitted and the number of openings shall be as few as possible.
  - (f) Packagings with a capacity of more than 450 l and their service and structural equipment (if this is permanently attached to the packaging) shall be so designed that they remain leakproof when they are subjected to the drop test specified in marg. 1742.
- (3) After manufacture, the inside of the pressure bearing parts shall be thoroughly cleaned of grease, oil, scale, slag and other foreign matter by an appropriate procedure.
- (4) (a) Every manufactured packaging and its service and structural equipment shall, either jointly or separately, undergo an inspection initially before being put into service and periodically thereafter. These inspections shall be performed and certified by agreement with the competent authority.
  - (b) The initial inspection shall consist of a check of the design characteristics, the strength test, the leakproofness test, the water capacity test and a check of satisfactory operation of the service equipment.
  - (c) The periodic inspections shall consist of a visual inspection, the strength test, the leakproofness test and a check of satisfactory operation of the service equipment. The interval for periodic inspections shall be not more than five years. Packagings which have not been inspected within this five-year period shall be examined before transport in accordance with a programme approved by the competent authority. They shall not be refilled before completion of the full programme for periodic inspections.
  - (d) The check of design characteristics shall demonstrate compliance with the design type specifications and the manufacturing programme.
  - (e) The strength test before first being put into service shall be conducted by means of a hydraulic test with an internal pressure of 2.8 MPa (28 bar). For the periodic inspections, any other equivalent non-destructive examination procedure recognized by the competent authority may be applied.
  - (f) The leakproofness test shall be performed in accordance with a procedure which is capable of indicating leakages in the containment system with a sensitivity of 0.1 Pa · l/s ( $10^{-6}$  bar · l/s).
  - (g) The water capacity of the packagings shall be established with an accuracy of  $\pm 0.25\%$  at a reference temperature of 15°C. The volume shall be stated on the plate described in paragraph (6).

(5) With the exception of packagings for less than 10 kg of uranium hexafluoride, the competent authority of the country of origin shall, for every design type of uranium hexafluoride package, confirm that it complies with the provisions of this marginal and issue an approval. This approval may be part of the approval for a Type B package and/or for a package with fissile contents in accordance with Section IV of this appendix.

(6) A plate made of non-corroding metal shall be durably attached to every packaging in a readily accessible place. The method of attaching the plate must not impair the strength of the packaging. The following particulars, at least, shall be marked on the plate by stamping or by any other equivalent method:

- Approval number;
- Manufacturer's serial number;
- Maximum working pressure (gauge pressure) 1.4 MPa (14 bar);
- Test pressure (gauge pressure) 2.8 MPa (28 bar);
- Contents: uranium hexafluoride;
- Capacity in litres;
- Maximum permissible filling mass of uranium hexafluoride;
- Tare mass;
- Date (month, year) of the initial test and the most recent periodic test;
- Stamp of the expert who performed the test.

(7) (a) The uranium hexafluoride must be in solid form when transported.

(b) The degree of filling shall only be such that the capacity is not more than 95% filled at 121°C.

(c) The cleaning of packagings shall be performed only by a suitable procedure.

(d) The execution of repairs is permissible only in accordance with design and manufacturing programmes laid down in writing. Otherwise, repair programmes require the prior approval of the competent authority.

(e) Uncleaned empty packagings shall be as tightly closed, during transport and intermediate storage, as when full.

(f) For maintenance, a programme approved by the competent authority shall be operated.

(8) Packagings constructed in accordance with the United States Standard ANSI N 14.1, 1982,<sup>(1)</sup> or equivalent, may be used, with the consent of the competent authority concerned, if the tests specified in these standards have been performed by the expert named therein and continue to be performed and certified in agreement with the competent authority in accordance with paragraph (4) (c).

1772-  
1799

<sup>(1)</sup> ANSI N 14.1, 1982 published in 1982 and obtainable from the American National Standards Institute, 10430 Broadway, New York, NY 10018.

## APPENDIX VIII

REQUIREMENTS RELATING TO THE MARKING OF TANK WAGONS  
AND TANK-CONTAINERS*Marking of tank wagons and tank-containers*

1800 (1) On each side of tank wagons, or tank-containers with a capacity of more than 3 m<sup>3</sup>, carrying a substance covered by marg. 1801, the sender shall affix vertically a non-reflectorized rectangular orange-coloured marking with a base of 40 cm and a height of not less than 30 cm. The marking shall have a black border of 15 mm. The marking shall be affixed by means of a plate, a self-adhesive sheet, paint or any other equivalent process, on condition that the material used for this purpose is weather-resistant and guarantees durable marking.

NOTE. The orange colour of the marking, in conditions of normal use, should have chromaticity co-ordinates lying within the area on the chromaticity diagram formed by joining the following co-ordinates:

Chromaticity co-ordinates of points at the corners of the area on the chromaticity diagram				
x	0.52	0.52	0.578	0.618
y	0.38	0.40	0.422	0.38

Luminance factor of non-reflectorized colour:  $\beta \geq 0.22$ .

Reference centre E, standard illuminant C, normal incidence 45° and viewed at 0°.

(2) Each marking shall bear the identification numbers allotted in the tables of marg. 1801 to the substance carried.

(3) The identification numbers shall be made up of black digits 100 mm high and of 15 mm stroke thickness. The hazard identification number shall appear in the upper part of the marking and the substance identification number in the lower part; they shall be separated by a horizontal line 15 mm thick extending from side to side of the marking at mid-height (see marg. 1802).

(4) When a number of different substances are carried in a tank wagon or tank-container in separate tanks or separate compartments of the same tank, the sender shall affix the orange-coloured marking as required in (1), bearing the appropriate numbers, on each side of the tanks or tank compartments, parallel to the longitudinal axis of the wagon or tank container and so as to be clearly visible.

(5) The requirements of (1) to (4) shall be valid also for empty tank wagons or tank-containers which have not been cleaned or de-gassed. Once the dangerous substances have been unloaded and the tanks cleaned and de-gassed, the orange markings shall no longer be visible.

*List of substances and identification numbers*

1801 (1) The hazard identification number consists of two or three figures. In general, the figures indicate the following hazards:

- 2 Emission of gas due to pressure or to chemical reaction
- 3 Inflammability of liquids (vapours) and gases
- 4 Inflammability of solids
- 5 Oxidizing (fire-intensifying) effect
- 6 Toxicity
- 7 Radioactivity
- 8 Corrosivity
- 9 Risk of spontaneous violent reaction

Doubling of a figure indicates an intensification of that particular hazard.

Where the hazard associated with a substance can be adequately indicated by a single figure, this is followed by a zero.

The following combinations of figures, however, have a special meaning: 22, 323, 333, 423, 44, 539 and 90 [see (2)].

If a hazard identification number is prefixed by the letter "X" this indicates that the substance will react dangerously with water. For such substances, water may not be used except with expert approval.

(2) The hazard identification numbers listed in paragraph (3) have the following meanings:

- 20 inert gas
- 22 refrigerated gas
- 223 refrigerated inflammable gas
- 225 refrigerated oxidizing (fire-intensifying) gas
- 23 inflammable gas
- 236 inflammable gas, toxic
- 239 inflammable gas, which can spontaneously lead to violent reaction
- 25 oxidizing (fire-intensifying) gas
- 26 toxic gas
- 265 toxic gas, oxidizing (fire-intensifying)
- 266 highly toxic gas
- 268 toxic gas, corrosive
- 286 corrosive gas, toxic
- 30 inflammable liquid (flash-point from 21°C to 100°C)
- X323 inflammable liquid which reacts dangerously with water, emitting inflammable gases\*\*
- 33 highly inflammable liquid (flash-point below 21°C)
- X333 spontaneously inflammable liquid, which reacts dangerously with water\*\*
- 336 highly inflammable liquid, toxic
- 338 highly inflammable liquid, corrosive
- X338 highly inflammable liquid, corrosive, which reacts dangerously with water\*\*
- 339 highly inflammable liquid which can spontaneously lead to violent reaction
- 39 inflammable liquid, which can spontaneously lead to violent reaction
- 40 inflammable solid
- X423 inflammable solid which reacts dangerously with water, emitting inflammable gases\*\*
- 44 inflammable solid, in the molten state at an elevated temperature
- 446 inflammable solid, toxic, in the molten state at an elevated temperature
- 46 inflammable solid, toxic
- 50 oxidizing (fire-intensifying) substance
- 539 inflammable organic peroxide
- 558 strongly oxidizing (fire-intensifying) substance, corrosive
- 559 strongly oxidizing (fire-intensifying) substance, which can spontaneously lead to violent reaction
- 589 oxidizing (fire-intensifying) substance, corrosive, which can spontaneously lead to violent reaction
- 60 toxic or harmful substance
- 63 toxic or harmful substance, inflammable (flash-point from 21° to 55°C)

\*\* Water may not be used except with the approval of an expert.

- 638 toxic or harmful substance, inflammable (flash-point from 21° to 55°C), corrosive
- 639 toxic or harmful substance, inflammable (flash-point between 21°C and 55°C), which can spontaneously lead to violent reaction
- 66 highly toxic substance
- 663 highly toxic substance, inflammable (flash-point not above 55°C)
- 68 toxic or harmful substance, corrosive
- 69 toxic or harmful substance, which can spontaneously lead to violent reaction
- 70 radioactive material
- 72 radioactive gas
- 723 radioactive gas, inflammable
- 73 radioactive liquid, inflammable (flash-point not above 55°C)
- 74 radioactive solid, inflammable
- 75 radioactive material, oxidizing
- 76 radioactive material, toxic
- 78 radioactive material, corrosive
- 80 corrosive or slightly corrosive substance
- X80 corrosive or slightly corrosive substance, which reacts dangerously with water\*\*
- 83 corrosive or slightly corrosive substance, inflammable (flash-point between 21° and 55°C)
- X83 corrosive or slightly corrosive substance, inflammable (flash-point between 21°C and 55°C) which reacts dangerously with water\*\*
- 839 corrosive or slightly corrosive substance, inflammable (flash-point between 21° and 55°C) which can spontaneously lead to violent reaction
- X839 corrosive or slightly corrosive substance, inflammable (flash-point between 21°C and 55°C), which can spontaneously lead to violent reaction and which reacts dangerously with water\*\*
- 85 corrosive or slightly corrosive substance, oxidizing (fire-intensifying)
- 856 corrosive or slightly corrosive substance, oxidizing (fire-intensifying) and toxic
- 86 corrosive or slightly corrosive substance, toxic
- 88 highly corrosive substance
- X88 highly corrosive substance, which reacts dangerously with water\*\*
- 883 highly corrosive substance, inflammable (flash-point from 21° to 55°C)
- 885 highly corrosive substance, oxidizing (fire-intensifying)
- 886 highly corrosive substance, toxic
- X886 highly corrosive substance, toxic, which reacts dangerously with water\*\*
- 89 corrosive or slightly corrosive substance, which can spontaneously lead to violent reaction
- 90 miscellaneous dangerous substances.

(3) The identification numbers referred to in marg. 1800 (2) are listed in Tables I and II below.

NOTE. The identification numbers to be shown on the orange plates should be looked for first in Table I. If in the case of substances of Classes 3, 6.1 and 8 the name of the substance to be carried or the collective heading which covers it is not listed in Table I, the identification numbers are to be taken from Table II.

\*\* Water may not be used except with the approval of an expert.

Table I

NOTE. For substances of Classes 3, 6.1 and 8 which are not listed in this table, see Table II.

List of substances designated by their chemical names and of collective headings, to which a specific "substance identification number" [column (d)] is assigned [for solutions and mixtures of substances (such as preparations and wastes), see also marg. 3 (3) and (4)]

This table also includes substances not mentioned in the class lists of substances, but which fall within the classes and item numbers shown in column (b).

Substances are given in alphabetical order.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Acetal (1,1-Diethoxyethane) . . . . .	3, 3(b)	33	1088	3
Acetaldehyde (Aldehyde) . . . . .	3, 1(a)	33	1089	3
Acetaldehyde oxime . . . . .	3, 31(c)	30	2332	3
Acetic acid, glacial and aqueous solutions of acetic acid containing more than 80% pure acid . . . . .	8, 32(b)	83	2789	8 + 3
Acetic acid containing from 50% to 80% pure acid . . . . .	8, 32(c)	80	2790	8
Acetic anhydride . . . . .	8, 32(b)	83	1715	8 + 3
Acetoin (Acetylmethylcarbinol) . . . . .	3, 31(c)	30	2621	3
Acetone . . . . .	3, 3(b)	33	1090	3
Acetone cyanohydrin . . . . .	6.1, 11(a)	66	1541	6.1
Acetonitrile . . . . .	3, 11(b)	336	1648	3 + 6.1
Acetyl acetone: see Pentan-2,4 -dione . . . . .				
Acetyl bromide . . . . .	8, 36(b)	80	1716	8
Acetyl chloride . . . . .	3, 25(b)	X338	1717	3 + 8
Acetylene tetrabromide: see 1,1,2,2-Tetrabromoethane . . . . .				
Acetylene tetrachloride: see 1,1,2,2-Tetrachloroethane . . . . .				
Acetyl iodide . . . . .	8, 36(b)	80	1898	8
Acetylmethylcarbinol: see Acetoin . . . . .				
Acrolein . . . . .	3, 17(a)	336	1092	3 + 6.1
Acrolein dimer . . . . .	3, 31(c)	39	2607	3
Acrylamide . . . . .	6.1, 12(c)	60	2074	6.1A
Acrylamide, solutions of . . . . .	6.1, 12(c)	60	2074	6.1A
Acrylic acid . . . . .	8, 32(b)	89	2218	8
Acrylonitrile . . . . .	3, 11(a)	336	1093	3 + 6.1
Actinolite: see White asbestos . . . . .				
Adhesives . . . . .				
- with a flash-point below 21°C . . . . .	3, 5	33	1133	3
- with a flash-point between 21°C and 55°C . . . . .	3, 31(c)*	30	1133	3
- with a flash-point above 55°C . . . . .	3, 32(c)*	30	1133	-
Adiponitrile . . . . .	6.1, 12(c)	60	2205	6.1A
Air, deeply-refrigerated . . . . .	2, 8(a)	225	1003	5 + 13

\* See, however, Note under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Alcohols, liquid, non-toxic, pure or in mixtures, not otherwise specified in this appendix . . . . .				
- having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	1987	3
- having a flash-point above 55°C . . . . .	3, 32(c)	30	1987	-
Aldehyde: see Acetaldehyde . . . . .				
Aldehydes, not otherwise specified in this appendix . . . . .				
- having a flash-point below 21°C . . . . .	3, 3(b)	33	1989	3
- having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	1989	3
- having a flash-point above 55°C . . . . .	3, 32(c)	30	1989	-
Aldol (beta-Hydroxybutyraldehyde) . . . . .	6.1, 13(b)	60	2839	6.1
Alkaline inorganic substances, solutions of, not otherwise specified in this appendix . . . . .				
- corrosive . . . . .	8, 42(b)	80	1719	8
- slightly corrosive . . . . .	8, 42(c)	80	1719	8
Alkylamines and polyamines, not otherwise specified in this appendix . . . . .				
- with a flash-point below 21°C, highly corrosive . . . . .	3, 22(a)	338	2733	3 + 8
- with a flash-point below 21°C, corrosive . . . . .	3, 22(b)	338	2733	3 + 8
- with a flash-point below 21°C, slightly corrosive . . . . .	3, 3(b)	33	2733	3
- with a flash-point between 21°C and 55°C, corrosive . . . . .	8, 53(b)	83	2734	8 + 3
- with a flash-point between 21°C and 55°C, slightly corrosive . . . . .	8, 53(c)	83	2734	8 + 3
- with a flash-point above 55°C, corrosive . . . . .	8, 53(b)	80	2735	8
- with a flash-point above 55°C, slightly corrosive . . . . .	8, 53(c)	80	2735	8
- solid . . . . .	8, 52(c)	80	2735	8
Alkyl phenols, with C <sub>2</sub> -C <sub>8</sub> chains, not otherwise specified in this appendix . . . . .	6.1, 14(c)	60	2430	6.1A
Alkyl sulphonic acids, not otherwise specified in this appendix . . . . .				
- containing more than 5% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) . . . . .	8, 1(b)	80	2584	8
- containing not more than 5% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ), corrosive . . . . .	8, 34(b)	80	2586	8
- containing not more than 5% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ), slightly corrosive . . . . .	8, 34(c)	80	2586	8
Alloys of sodium and potassium: see Sodium potassium alloys . . . . .				
Allyl acetate . . . . .	3, 17(b)	336	2333	3 + 6.1
Allyl alcohol . . . . .	6.1, 13(a)	663	1098	6.1 + 3
Allylamine . . . . .	3, 15(a)	336	2334	3 + 6.1
Allyl bromide . . . . .	3, 16(a)	336	1099	3 + 6.1
Allyl chloride . . . . .	3, 16(a)	336	1100	3 + 6.1
Allyl chloroformate . . . . .	8, 64(a)	88	1722	8
Allyl ethyl ether . . . . .	3, 17(b)	336	2335	3 + 6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Allyl formate .....	3, 17(a)	336	2336	3 + 6.1
Allyl glycidyl ether (1-Allyloxy-2, 3-epoxy- propane) .....	3, 31(c)	30	2219	3
Allyl iodide .....	3, 25(a)	338	1723	3 + 8
Allyl isothiocyanate .....	6.1, 20(b)	69	1545	6.1
1-Allyloxy-2, 3-epoxypropane: see Allyl glycidyl ether .....				
Allyl trichlorosilane .....	8, 37(b)	X839	1724	8 + 3
Aluminium alkyls, liable to spontaneous combustion .....	4.2, 3	X333	3051	4.2 + 4.3 + 13
Aluminium alkyls, which give off inflam- mable gases on contact with water .....	4.3, 2(e)	X323	2813	4.3
Aluminium alkyl halides, liable to sponta- neous combustion .....	4.2, 3	X333	3052	4.2 + 4.3 + 13
Aluminium alkyl halides, which give off inflammable gases on contact with water ..	4.3, 2(e)	X323	2813	4.3
Aluminium alkyl hydrides, liable to spontaneous combustion .....	4.2, 3	X333	3050	4.2 + 4.3 + 13
Aluminium alkyl hydrides, which give off inflammable gases on contact with water ..	4.3, 2(e)	X323	2813	4.3
Aluminium bromide, anhydrous (AlBr <sub>3</sub> ) .....	8, 22(b)	80	1725	8
Aluminium bromide, aqueous solutions of ...	8, 5(c)	80	2580	8
Aluminium chloride, anhydrous (AlCl <sub>3</sub> ) .....	8, 22(b)	80	1726	8
Aluminium chloride, aqueous solutions of ...	8, 5(c)	80	2581	8
2-Amino-5-diethylaminopentane .....	6.1, 12(c)	60	2946	6.1A
2-(2-Aminoethoxy) ethanol .....	8, 54(c)	80	3055	8
N-Aminoethylpiperazine .....	8, 53(c)	80	2815	8
Aminophenols .....	6.1, 12(c)	60	2512	6.1A
Ammonia .....	2, 3(at)	268	1005	6.1 + 13
Ammonia dissolved in water with more than 40% but not more than 50% ammonia (NH <sub>3</sub> ) .....	2, 9(at)	268	2073	13
Ammonia dissolved in water with more than 35% but not more than 40% ammonia (NH <sub>3</sub> ) .....	2, 9(at)	268	2073	13
Ammonia solutions containing not less than 10% and not more than 35% ammonia (NH <sub>3</sub> ) .....	8, 43(c)	80	2672	8
Ammonium bifluoride .....	8, 26(b)	80	1727	8 + 6.1
Ammonium bifluoride, solutions of .....	8, 26(b)	80	2817	8 + 6.1
Ammonium bisulphate containing not less than 3% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) .....	8, 23(b)	80	2506	8
Ammonium fluoride .....	6.1, 65(c)	60	2505	6.1A
Ammonium nitrate, hot concentrated aqueous solutions of .....	5.1, 6(a)	589	2426	5
Ammonium polysulphide, solutions of .....	8, 45(b)	86	2818	8
Ammonium silicofluoride .....	6.1, 66(c)	60	2854	6.1A
Ammonium sulphide, solutions of .....	8, 45(b)	86	2683	8
Amosite: see Brown asbestos .....				



Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Amyl acetates . . . . .	3, 31(c)	30	1104	3
Amyl acid phosphate . . . . .	8, 38(c)	80	2819	8
n-Amyl alcohol . . . . .	3, 31(c)	30	1105	3
sec-Amyl alcohol . . . . .	3, 31(c)	30	1105	3
Amyl alcohol, tertiary . . . . .	3, 3(b)	33	1105	3
n-Amylamine . . . . .	3, 22(b)	338	1106	3 + 8
Amyl butyrates . . . . .	3, 31(c)	30	2620	3
Amyl chloride . . . . .	3, 3(b)	33	1107	3
Amylene, normal (1-Pentene) . . . . .	3, 1(a)	33	1108	3
Amyl mercaptan . . . . .	3, 3(b)	33	1111	3
Amyl methyl ketone . . . . .	3, 31(c)	30	1110	3
Amyl nitrate . . . . .	3, 31(c)	30	1112	3
Amyl nitrite . . . . .	3, 3(b)	33	1113	3
Amyltrichlorosilane . . . . .	8, 37(b)	X80	1728	8
Aniline . . . . .	6.1, 11(b)	60	1547	6.1
Anisidines . . . . .	6.1, 12(c)	60	2431	6.1A
Anisole: see Phenyl methyl ether . . . . .				
Anisoyl chloride . . . . .	8, 35(b)	80	1729	8
Anthophyllite: see White asbestos . . . . .				
Antimony pentachloride (SbCl <sub>5</sub> ) . . . . .	8, 21(b)	80	1730	8
Antimony pentachloride, non aqueous solu- tions of . . . . .	8, 21(b)	80	1731	8
Antimony pentafluoride . . . . .	8, 26(b)	86	1732	8 + 6.1
Antimony trichloride (SbCl <sub>3</sub> ) . . . . .	8, 22(b)	80	1733	8
Argon, deeply-refrigerated . . . . .	2, 7 (a)	22	1951	13
Arsenic acid, liquid . . . . .	6.1, 51(a)	66	1553	6.1
Arsenic acid, solid . . . . .	6.1, 51(b)	60	1554	6.1
Arsenical compounds, liquid, inorganic, not otherwise specified in this appendix . . . . .	6.1, 51(a)	66	1556	6.1
Arsenic bromide . . . . .	6.1, 51(b)	60	1555	6.1
Arsenic chloride . . . . .	6.1, 51(a)	66	1560	6.1
Arsenic pentoxide . . . . .	6.1, 51(b)	60	1559	6.1
Arsenic trioxide (White arsenic) . . . . .	6.1, 51(b)	60	1561	6.1
Aryl sulphonic acids, not otherwise specified in this appendix				
– containing more than 5% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) . . . . .	8, 1(b)	80	2584	8
– containing not more than 5% free sulphu- ric acid (H <sub>2</sub> SO <sub>4</sub> ), corrosive . . . . .	8, 34(b)	80	2586	8
– containing not more than 5% free sulphu- ric acid (H <sub>2</sub> SO <sub>4</sub> ), slightly corrosive . . . . .	8,34(c)	80	2586	8
Barium carbonate . . . . .	6.1, 60(c)	60	1564	6.1A
Barium oxide . . . . .	6.1, 60(c)	60	1884	6.1A
Benzene . . . . .	3, 3 (b)	33	1114	3
Benzene sulphonyl chloride . . . . .	8, 36(c)	80	2225	8
Benzonitrile . . . . .	6.1, 11(b)	60	2224	6.1
Benzoquinone . . . . .	6.1, 14(b)	60	2587	6.1
Benzotrichloride (Trichloromethylbenzene) . . . . .	8, 66(b)	80	2226	8
Benzotrifluoride . . . . .	3, 3(b)	33	2338	3
Benzoyl chloride . . . . .	8, 36(b)	80	1736	8
Benzyl bromide . . . . .	6.1, 15(b)	60	1737	6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Benzyl chloride.....	6.1, 15(b)	68	1738	6.1
Benzyl chloroformate.....	8, 64(a)	88	1739	8
Benzyl cyanide (Phenylacetonitrile).....	6.1, 12(c)	60	2470	6.1A
Benzyl dimethylamine.....	8, 53(b)	83	2619	8 + 3
Benzylidene chloride.....	6.1, 17(b)	68	1886	6.1
Benzyl iodide.....	6.1, 17(b)	60	2653	6.1
Bisaminopropylamine (Dipropylenetriamine, 3,3'-Imino-bis-propylamine).....	8, 53(c)	80	2269	8
1,2-Bis (dimethylamino) ethane (Tetramethylethylenediamine).....	3, 31(c)	30	2372	3
Bisulphites, inorganic, aqueous solutions of ..	8, 27(c)	80	2693	8
Blue asbestos (Crocidolite).....	9, 1(b)	90	2212	9
Boron alkyls, liable to spontaneous combus- tion.....	4.2, 3	X333	2003	4.2 + 4.3 + 13
Boron alkyls, which give off inflammable gases on contact with water.....	4.3, 2(e)	X323	2813	4.3
Boron tribromide (Boron bromide) (BBr <sub>3</sub> ) ...	8, 21(a)	X88	2692	8
Boron trifluoride acetic acid complex.....	8, 33(b)	80	1742	8
Boron trifluoride ether complex.....	8, 33(b)	83	2604	8 + 3
Boron trifluoride propionic acid complex.....	8, 33(b)	80	1743	8
Boron trifluoride dihydrate.....	8, 33(b)	80	2851	8
Bromine.....	8, 24	886	1744	8 + 6.1
Bromine pentafluoride.....	8, 26(a)	856	1745	8 + 6.1
Bromine trifluoride.....	8, 26(a)	856	1746	8 + 6.1
Bromoacetic acid.....	8, 31(b)	80	1938	8
Bromoacetone.....	6.1, 16(b)	60	1569	6.1
o-nega-Bromoacetophenone: see Phenacyl bromide.....				
Bromoacetyl bromide.....	8, 36(b)	X80	2513	8
Bromobenzene.....	3, 31(c)	30	2514	3
alpha-Bromobenzyl cyanide.....	6.1, 17(a)	66	1694	6.1
2-Bromobutane.....	3, 3(b)	33	2339	3
Bromochlorodifluoromethane (R 12B1).....	2, 3(a)	20	1974	13
Bromochloromethane.....	6.1, 15(b)	60	1887	6.1
1-Bromo-3-chloropropane.....	6.1, 15(c)	60	2688	6.1A
2-Bromoethyl ethyl ether.....	3, 3(b)	33	2340	3
Bromoform.....	6.1, 15(c)	60	2515	6.1A
1-Bromo-3-methylbutane.....	3, 31(c)	30	2341	3
Bromomethylpropanes.....	3, 3(b)	33	2342	3
2-Bromopentane.....	3, 3(b)	33	2343	3
2-Bromopropane.....	3, 3(b)	33	2344	3
3-Bromopropyne.....	3, 3(b)	33	2345	3
Bromotrifluoromethane (R 13B1).....	2, 5(a)	20	1009	13
Brown asbestos (Amosite or miosorite).....	9, 1 (b)	90	2212	9
Butadienes.....	2, 3(c)	239	1010	3 + 13
Butane, mixture of gases: see Mixtures of hydrocarbons (liquefied gas) (Mixtures A, A O).....				
Butane, technically pure.....	2, 3(b)	23	1011	3 + 13
Butanedione (Diacetyl).....	3, 3(b)	33	2346	3
Butanol: see n-Butyl alcohol.....				
n-Butanol-2: see sec-Butyl alcohol.....				

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Butanol, tertiary (tertiary Butyl alcohol) . . . . .	3, 3(b)	33	1120	3
1-Butene: see 1-Butylene . . . . .				
cis-2-Butene: see cis-2-Butylene . . . . .				
trans-2-Butene: see trans-2-Butylene . . . . .				
Butoxyl (Methoxybutyl acetate) . . . . .	3, 31(c)	30	2708	3
n-Butyl acetate . . . . .	3, 31(c)	30	1123	3
Butyl acetate, secondary . . . . .	3, 3(b)	33	1123	3
Butyl acide phosphate . . . . .	8, 38(c)	80	1718	8
n-Butyl acrylate . . . . .	3, 31(c)	39	2348	3
n-Butyl alcohol (Butanol) . . . . .	3, 31(c)	30	1120	3
sec-Butyl alcohol (n-Butanol-2) . . . . .	3, 31(c)	30	1120	3
Butyl alcohol, tertiary: see Butanol, tertiary . . . . .				
n-Butylamine . . . . .	3, 22(b)	338	1125	3 + 8
N-Butylanilines . . . . .	6.1, 12(b)	60	2738	6.1
Butyl benzenes . . . . .	3, 31(c)	30	2709	3
Butyl bromide, normal . . . . .	3, 3(b)	33	1126	3
Butyl chlorides (Chlorobutanes) . . . . .	3, 3(b)	33	1127	3
n-Butylchloroformate . . . . .	6.1, 16(b)	638	2743	6.1 + 8
tert-Butylcyclohexylchloroformate . . . . .	6.1, 17(c)	68	2747	6.1A + 8
1-Butylene (1-Butene) . . . . .	2, 3(b)	23	1012	3 + 13
cis-2-Butylene (cis-2-Butene) . . . . .	2, 3(b)	23	1012	3 + 13
trans-2-Butylene (trans-2-Butene) . . . . .	2, 3(b)	23	1012	3 + 13
1,2-Butylene oxide . . . . .	3, 3(b)	339	3022	3
n-Butyl ether: see Di-n-butyl ether . . . . .				
n-Butyl formate . . . . .	3, 3(b)	33	1128	3
N, n-Butyl imidazole . . . . .	6.1, 12(b)	60	2690	6.1
Butyl isocyanate, normal . . . . .	3, 14(b)	336	2485	3 + 6.1
Butyl isocyanate, tertiary . . . . .	3, 14(a)	336	2484	3 + 6.1
Butyl mercaptan . . . . .	3, 3(b)	33	2347	3
n-Butyl methacrylate . . . . .	3, 31(c)	39	2227	3
Butyl methyl ether . . . . .	3, 3(b)	33	2350	3
Butyl nitrites . . . . .	3, 3(b)	33	2351	3
Butylphenols, in the molten state . . . . .	6.1, 14(c)	60	2229	6.1A
Butylphenols, liquid . . . . .	6.1, 14(c)	60	2228	6.1A
Butyl propionate . . . . .	3, 31(c)	30	1914	3
Butyl toluenes . . . . .	3, 32(c)	30	2667	—
Butyltrichlorosilane . . . . .	8, 37(b)	X83	1747	8 + 3
Butyl vinyl ether . . . . .	3, 3(b)	339	2352	3
2-Butyne: see Crotonylene . . . . .				
Butyraldehyde . . . . .	3, 3(b)	33	1129	3
Butyraldoxime . . . . .	3, 32(c)	30	2840	—
n-Butyric acid . . . . .	8, 32(c)	80	2820	8
Butyric anhydride . . . . .	8, 32(c)	80	2739	8
Butyronitrile . . . . .	3, 11(b)	336	2411	3 + 6.1
Butyryl chloride . . . . .	3, 25(b)	338	2353	3 + 8
Caesium hydroxide . . . . .	8, 41(b)	80	2682	8
Caesium hydroxide, aqueous solutions of . . . . .	8, 42(b)	80	2681	8
Calcium arsenate . . . . .	6.1, 51(b)	60	1573	6.1
Calcium chlorate, solutions of . . . . .	5.1, 4(a)	50	2429	5
Camphor oil . . . . .	3, 31(c)	30	1130	3
Caproic acid . . . . .	8, 32(c)	80	2829	8

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Carbon dioxide . . . . .	2, 5(a)	20	1013	13
Carbon dioxide, deeply refrigerated . . . . .	2, 7(a)	22	2187	13
Carbon dioxide containing not more than 6% ethylene oxide by mass . . . . .	2, 6(c)	239	1952	3 + 13
Carbon dioxide containing more than 6% but not more than 35% ethylene oxide by mass . . . . .	2, 6(c)	239	1041	3 + 13
Carbon dioxide containing not less than 1% and not more than 10% oxygen by mass . . . . .	2, 6(a)	20	1014	13
Carbon disulphide . . . . .	3, 18(a)	336	1131	3 + 6.1
Carbon tetrabromide . . . . .	6.1, 15(c)	60	2516	6.1A
Carbon tetrachloride . . . . .	6.1, 15(b)	60	1846	6.1
Caustic potash: see Potassium hydroxide . . . . .				
Caustic soda: see Sodium hydroxide . . . . .				
Chloral: see Trichloroacetaldehyde . . . . .				
Chlorine . . . . .	2, 3(at)	266	1017	6.1 + 13
Chloroacetaldehyde . . . . .	6.1, 16(b)	60	2232	6.1
Chloroacetic acid (Monochloroacetic acid), solid . . . . .	8, 31(b)	80	1751	8
Chloroacetic acid (Monochloroacetic acid), in the molten state . . . . .	8, 31(b)	80	1750	8
Chloroacetic acids, mixtures of . . . . .	8, 32(b)	80	1750	8
Chloroacetic acid (Monochloroacetic acid), solutions of . . . . .	8, 32(b)	80	1750	8
Chloroacetone . . . . .	6.1, 16(b)	60	1695	6.1
omega-Chloroacetophenone: see Phenacyl chloride . . . . .				
Chloroacetyl chloride . . . . .	8, 36(b)	X80	1752	8
Chloroanisidines . . . . .	6.1, 17(c)	60	2233	6.1A
Chlorobenzene (Phenyl chloride) . . . . .	3, 31(c)	30	1134	3
Chlorobenzotrifluorides . . . . .	3, 31(c)	30	2234	3
Chlorobenzyl chlorides . . . . .	6.1, 17(c)	60	2235	6.1A
Chlorobutanes: see Butyl chlorides . . . . .				
Chlorocresols . . . . .	6.1, 14(b)	60	2669	6.1
1-Chloro-1,1-difluoroethane (R 142b) . . . . .	2, 3(b)	23	2517	3 + 13
Chlorodifluoromethane (R 22) . . . . .	2, 3(a)	20	1018	13
Chlorodinitrobenzene . . . . .	6.1, 12(b)	60	1577	6.1
2-Chloroethanol: see Ethylene chlorohydrin . . . . .				
Chloroform . . . . .	6.1, 15(b)	60	1888	6.1
Chloromethylchloroformate . . . . .	6.1, 16(b)	638	2745	6.1 + 8
Chloromethyl ethyl ether . . . . .	3, 16(b)	336	2354	3 + 6.1
3-Chloro-4-methylphenyl isocyanate . . . . .	6.1, 19(b)	60	2236	6.1
Chloronitroanilines . . . . .	6.1, 17(c)	60	2237	6.1A
Chloronitrobenzenes . . . . .	6.1, 12(b)	60	1578	6.1
Chloronitrotoluenes . . . . .	6.1, 17(c)	60	2433	6.1A
Chloropentafluoroethane (R 115) . . . . .	2, 3(a)	20	1020	13
2-Chlorophenol . . . . .	6.1, 16(c)	68	2021	6.1A
3-Chlorophenol . . . . .	6.1, 17(c)	60	2020	6.1A
4-Chlorophenol . . . . .	6.1, 17(c)	60	2020	6.1A
Chlorophenyl trichlorosilane . . . . .	8, 37(b)	X80	1753	8
Chloropicrin . . . . .	6.1, 16(a)	66	1580	6.1
Chloroprene . . . . .	3, 16(a)	336	1991	3 + 6.1
1-Chloropropane (Propyl chloride) . . . . .	3, 2(b)	33	1278	3

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
2-Chloropropane (Isopropyl chloride) . . . . .	3, 2(b)	33	2356	3
3-Chloropropane-1,2-diol: see Glycerol alpha-monochlorohydrin . . . . .				
3-Chloro-1-propanol . . . . .	6.1, 16(c)	60	2849	6.1A
1-Chloro-2-propanol . . . . .	6.1, 16(b)	63	2611	6.1 + 3
2-Chloropropene . . . . .	3, 1(a)	33	2456	3
2-Chloropropionic acid . . . . .	8, 32(c)	80	2511	8
2-Chloropyridine . . . . .	6.1, 11(b)	60	2822	6.1
Chlorosilanes which do not give off inflammable gases on contact with water, not otherwise specified in this appendix				
– having a flash-point below 21°C . . . . .	3, 21(a)	X338	2985	3 + 8
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	8, 37(b)	X83	2986	8 + 3
– having a flash-point above 55°C . . . . .	8, 37(b)	X80	2987	8
Chlorosulphonic acid (SO <sub>2</sub> (OH)Cl) . . . . .	8, 21(a)	88	1754	8
Chlorotoluenes . . . . .	3, 31(c)	30	2238	3
Chlorotoluidines . . . . .	6.1, 17(c)	60	2239	6.1A
1-Chloro-2,2,2-trifluoroethane (R 133a) . . . . .	2, 3(a)	20	1983	13
Chlorotrifluoromethane (R 13) . . . . .	2, 5(a)	20	1022	13
Chromic acid, solutions of . . . . .	8, 11(b)	80	1755	8
Chromic fluoride . . . . .	8, 26(b)	80	1756	8 + 6.1
Chromic fluoride, solutions of . . . . .	8, 26(b)	80	1757	8 + 6.1
Chromium oxychloride: see Chromyl chloride				
Chromosulphuric acid . . . . .	8, 1(a)	88	2240	8
Chromyl chloride (Chromium oxychloride) (CrO <sub>2</sub> Cl <sub>2</sub> ) . . . . .	8, 21(a)	88	1758	8
Chrysotile: see White asbestos . . . . .				
Coating solution				
– with a flash-point below 21°C . . . . .	3, 3(b)	33	1139	3
– with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	1139	3
– with a flash-point above 55°C . . . . .	3, 32(c)	30	1139	–
Collodions, semi-collodions, solutions of, and other nitrocellulose solutions, containing 20% or less nitrocellulose:				
– having a flash-point below 21°C . . . . .	3, 5	33	1263	3
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 33(c)*	30	1263	3
– having a flash-point above 55°C . . . . .	3, 34(c)*	30	1263	–
Collodions, semi-collodions, solutions of, and other nitrocellulose solutions containing more than 20% but not more than 55% nitrocellulose,				
– having a flash-point below 21°C and a boiling point not more than 35°C . . . . .	3, 4(a)	33	2059	3
– having a flash-point below 21°C and a boiling point higher than 35°C . . . . .	3, 4(b)	33	2059	3
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 33(c)	30	2060	3
– having a flash-point above 55°C . . . . .	3, 34(c)	30	2060	–

\* See, however, Note under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Cresols . . . . .	6.1, 14(b)	60	2076	6.1
Cresylic acid . . . . .	6.1, 14(b)	60	2022	6.1
Crocidolite: see Blue asbestos . . . . .				
Crotonic aldehyde (Crotonaldehyde) . . . . .	3, 3(b)	33	1143	3
Crotonylene (2-Butyne) . . . . .	3, 1(a)	339	1144	3
Cumene (Isopropylbenzene) . . . . .	3, 31(c)	30	1918	3
Cumyl hydroperoxide: see alpha, alpha- Dimethylbenzyl hydroperoxide . . . . .				
Cupriethylenediamine, solutions of . . . . .	8, 53(b)	86	1761	8
Cyanides, inorganic solutions of . . . . .	6.1, 41(a)	66	1935	6.1
Cyanuric chloride . . . . .	8, 27(c)	80	2670	8
Cyclobutylchloroformate . . . . .	6., 1, 16(b)	638	2744	6.1 + 8
1,5,9-Cyclododecatriene . . . . .	6.1, 24(c)	60	2518	6.1A
Cycloheptane . . . . .	3, 3(b)	33	2241	3
Cycloheptatriene . . . . .	3, 20(b)	336	2603	3 + 6.1
Cycloheptene . . . . .	3, 3(b)	33	2242	3
Cyclohexane . . . . .	3, 3(b)	33	1145	3
Cyclohexanone . . . . .	3, 31(c)	30	1915	3
Cyclohexene . . . . .	3, 3(b)	33	2256	3
Cyclohexenyltrichlorosilane . . . . .	8, 37(b)	X80	1762	8
Cyclohexyl acetate . . . . .	3, 32(c)	30	2243	—
Cyclohexylamine . . . . .	8, 53(b)	83	2357	8 + 3
Cyclohexyl isocyanate . . . . .	6.1, 18(b)	63	2488	6.1 + 3
Cyclohexyl mercaptan . . . . .	3, 31(c)	30	3054	3
Cyclohexyltrichlorosilane . . . . .	8, 37(b)	X80	1763	8
Cyclooctadiene . . . . .	3, 31(c)	30	2520	3
Cyclooctatetraene . . . . .	3, 31(c)	30	2358	3
Cyclopentane . . . . .	3, 3(b)	33	1146	3
Cyclopentanol . . . . .	3, 31(c)	30	2244	3
Cyclopentanone . . . . .	3, 31(c)	30	2245	3
Cyclopentene . . . . .	3, 2(b)	33	2246	3
Cyclopropane . . . . .	2, 3(b)	23	1027	3 + 13
Cymenes (Methyl isopropyl benzenes) . . . . .	3, 31(c)	30	2046	3
Decahydronaphthalene (Decalin) . . . . .	3, 32(c)	30	1147	—
n-Decane . . . . .	3, 31(c)	30	2247	3
Diacetone alcohol, chemically pure . . . . .	3, 31(c)	30	1148	3
Diacetone alcohol, technical . . . . .	3, 3(b)	33	1148	3
Diacetyl: see Butanedione . . . . .				
Diallylamine . . . . .	3, 22(b)	338	2359	3 + 8
Diallyl ether . . . . .	3, 17(b)	336	2360	3 + 6.1
Diaminodiphenyl methane, in the molten state . . . . .	6.1, 12(c)	60	2651	6.1A
Di-n-amylamine . . . . .	6.1, 12(c)	60	2841	6.1A
Dibenzylchlorosilane . . . . .	8, 37(b)	X80	2434	8
Dibromobenzenes . . . . .	3, 32(c)	30	2711	—
1,2-Dibromobutan-3-one . . . . .	6.1, 16(b)	60	2648	6.1
1,2-Dibromo-3-chloropropane . . . . .	6.1, 15(c)	60	2872	6.1A
sym.-Dibromoethane: see Ethylene dibromide				
Dibromomethane: see Methylene bromide				
Di-(n-butyl) amine . . . . .	8, 53(b)	83	2248	8 + 3
Dibutylaminoethanol . . . . .	6.1, 12(c)	60	2873	6.1A
Di-n-butyl ether (n-Butyl ether) . . . . .	3, 31(c)	30	1149	3

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Dichloroacetic acid . . . . .	8, 32(b)	80	1764	8
sym.-Dichloroacetone . . . . .	6.1, 16(b)	63	2649	6.1 + 3
Dichloroacetyl chloride . . . . .	8, 36(b)	X80	1765	8
Dichloroanilines . . . . .	6.1, 12(b)	60	1590	6.1
1,2-Dichlorobenzene . . . . .	6.1, 15(c)	60	1591	6.1A
2,2'-Dichloroethyl ether . . . . .	6.1, 16(b)	63	1916	6.1 + 3
Dichlorodifluoromethane (R 12) . . . . .	2, 3(a)	20	1028	13
1,1-Dichloroethane (Ethylidene chloride) . . . . .	3, 3(b)	33	2362	3
1,2-Dichloroethane (Ethylene dichloride) . . . . .	3, 16(b)	336	1184	3 + 6.1
1,2-Dichloroethylene . . . . .	3, 3(b)	33	1150	3
Dichlorofluoromethane (R 21) . . . . .	2, 3(a)	20	1029	13
1,3-Dichlorohydrin (1, 3-Dichloro-2-propanol) . . . . .	6.1, 16(b)	60	2750	6.1
Dichloroisopropyl ether . . . . .	6.1, 16(b)	60	2490	6.1
Dichloromethane: see Methylene chloride . . . . .				
1,1-Dichloro-1-nitroethane . . . . .	6.1, 16(b)	60	2650	6.1
Dichloropentanes . . . . .	3, 31(c)	30	1152	3
Dichlorophenols . . . . .	6.1, 17(c)	60	2021	6.1A
3,4-Dichlorophenyl isocyanate . . . . .	6.1, 19(b)	60	2250	6.1
Dichlorophenyl trichlorosilane . . . . .	8, 37(b)	X80	1766	8
1,3-Dichloro-2-propanol, see 1,3-Dichlorohydrin . . . . .				
1,3-Dichloropropene . . . . .	3, 31(c)	30	2047	3
1,2-Dichloro-1,1,2,2-tetrafluoroethane (R 114) . . . . .	2, 3(a)	20	1958	13
Dicycloheptadiene: see 2,5-Norbornadiene . . . . .				
Dicyclohexylamine . . . . .	8, 53(c)	80	2565	8
Dicyclopentadiene . . . . .	3, 31(c)	30	2048	3
Diesel oil: see Hydrocarbons, liquid . . . . .				
1,1-Diethoxyethane: see Acetal . . . . .				
1,2-Diethoxyethane (Ethylene glycol diethyl ether) . . . . .	3, 31(c)	30	1153	3
Diethoxymethane . . . . .	3, 3(b)	33	2373	3
3,3-Diethoxypropene . . . . .	3, 3(b)	33	2374	3
Diethylamine . . . . .	3, 22(b)	338	1154	3 + 8
Diethylaminoethanol (N,N-Diethyl ethanolamine) . . . . .	3, 32(c)	30	2686	—
Diethylaminopropylamine . . . . .	8, 53(c)	80	2684	8
N,N-Diethylaniline . . . . .	6.1, 12(c)	60	2432	6.1A
Diethyl benzenes . . . . .	3, 32(c)	30	2049	—
Diethyl carbonate (Ethyl carbonate) . . . . .	3, 31(c)	30	2366	3
Diethyldichlorosilane . . . . .	8, 37(b)	X83	1767	8 + 3
Diethylenediamine (Piperazine) . . . . .	8, 52(c)	80	2579	8
Diethylenetriamine . . . . .	8, 53(b)	80	2079	8
N,N-Diethyl ethanolamine: see Diethylaminoethanol . . . . .				
N,N-Diethylethylenediamine . . . . .	8, 53(b)	83	2685	8 + 3
Diethyl ketone . . . . .	3, 3(b)	33	1156	3
Diethyl sulphate . . . . .	6.1, 14(b)	60	1594	6.1
Diethyl thiophosphoryl chloride . . . . .	8, 36(b)	80	2751	8
Diethylzinc, liable to spontaneous combustion . . . . .	4.2, 3	X333	1366	4.2 + 4.3 + 13
1,1-Difluoroethane (R 152a) . . . . .	2, 3(b)	23	1030	3 + 13
1,1-Difluoroethylene (Vinylidene fluoride) . . . . .	2, 5(c)	239	1959	3 + 13

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Difluorophosphoric acid, anhydrous . . . . .	8, 10(b)	80	1768	8
2,3-Dihydropyran . . . . .	3, 3(b)	33	2376	3
Diisobutylamine . . . . .	3, 31(c)	30	2361	3
Diisobutylenes . . . . .	3, 3(b)	33	2050	3
Diisobutyl ketone . . . . .	3, 31(c)	30	1157	3
Diisooctyl acid phosphate . . . . .	8, 38(c)	80	1902	8
Diisopropylamine . . . . .	3, 22(b)	338	1158	3 + 8
Diisopropylbenzene hydroperoxide (Isopropyl cumyl hydroperoxide) with 45% of a mixture of alcohol and ketone . . . . .	5,2, 18	539	2171	5
Diisopropyl ether . . . . .	3, 3(b)	33	1159	3
Diketene . . . . .	3, 31(c)	39	2521	3
1,1-Dimethoxyethane . . . . .	3, 3(b)	33	2377	3
1,2-Dimethoxyethane . . . . .	3, 3(b)	33	2252	3
Dimethoxymethane (Methylal) . . . . .	3, 2(b)	33	1234	3
Dimethylamine, anhydrous . . . . .	2, 3(b)	236	1032	3 + 6.1 + 13
Dimethylamine, aqueous solutions of . . . . .				
– having a boiling-point of not more than 35°C . . . . .	3, 22(a)	338	1160	3 + 8
– having a boiling-point higher than 35°C . . . . .	3, 22(b)	338	1160	3 + 8
Dimethylaminoacetonitrile . . . . .	6.1, 11(b)	63	2378	6.1 + 3
Dimethylaminoethanol: see Dimethyl ethanolamine . . . . .				
Dimethylaminoethyl methacrylate . . . . .	6.1, 11(b)	69	2522	6.1
N,N-Dimethylaniline . . . . .	6.1, 11(b)	60	2253	6.1
Dinethylbenzenes: see Xylenes . . . . .				
alpha, alpha-Dimethylbenzyl hydroperoxide (Cumyl hydroperoxide) with a peroxide content not exceeding 95% . . . . .	5,2, 10	539	2116	5
2,3-Dimethylbutane . . . . .	3, 3(b)	33	2457	3
1,3-Dimethylbutylamine . . . . .	3, 3(b)	33	2379	3
N,N-Dimethylcarbamoyl chloride . . . . .	8, 36(b)	80	2262	8
Dimethyl carbonate . . . . .	3, 3(b)	33	1161	3
Dimethylcyclohexanes . . . . .	3, 3(b)	33	2263	3
N,N-Dimethylcyclohexylamine . . . . .	8, 53(b)	83	2264	8 + 3
Dimethyldichlorosilane . . . . .	3, 21(a)	X338	1162	3 + 8
Dimethyldiethoxysilane . . . . .	3, 3(b)	33	2380	3
Dimethyldioxanes . . . . .				
– having a flash-point below 21°C . . . . .	3, 3(b)	33	2707	3
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	2707	3
– having a flash-point above 55°C . . . . .	3, 32(c)	30	2707	–
Dimethyl disulphide . . . . .	3, 3(b)	33	2381	3
Dinethyl ethanolamine (Dimethylaminoethanol) . . . . .	3, 31(c)	30	2051	3
Dimethyl ether . . . . .	2, 3(b)	23	1033	3 + 13
N,N-Dimethylformamide . . . . .	3, 32(c)	30	2265	–
1,1-Dimethylhydrazine . . . . .	3, 23(a)	338	1163	3 + 8
1,2-Dimethylhydrazine . . . . .	3, 15(a)	336	2382	3 + 6.1
Dimethyl-N-propylamine . . . . .	3, 22(b)	338	2266	3 + 8



Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Dimethyl sulphate .....	6.1, 13(a)	66	1595	6.1
Dimethyl sulphide .....	3, 2(b)	33	1164	3
Dimethyl thiophosphoryl chloride .....	8, 36(c)	80	2267	8
Dimethylzinc, liable to spontaneous combustion .....	4.2, 3	X333	1370	4.2 + 4.3 + 13
Dinitroanilines .....	6.1, 12(b)	60	1596	6.1
Dinitrobenzenes .....	6.1, 12(b)	60	1597	6.1
Dinitro-orthocresol .....	6.1, 75(b)	60	1598	6.1
Dinitrotoluenes .....	6.1, 12(b)	60	2038	6.1
Dinitrotoluenes, molten .....	6.1, 12(b)	60	1600	6.1
Dioxane .....	3, 3(b)	33	1165	3
Dioxolane .....	3, 3(b)	33	1166	3
Dipentene .....	3, 31(c)	30	2052	3
Diphenyldichlorosilane .....	8, 37(b)	X80	1769	8
4,4'-Diphenylmethane diisocyanate .....	6.1, 19(c)	60	2489	6.1A
Diphenylmethyl bromide .....	8, 65(b)	80	1770	8
Dipropylamine .....	3, 22(b)	338	2383	3 + 8
Dipropylentriamine: see Bisaminopropylamine .....				
Dipropyl ether .....	3, 3(b)	33	2384	3
Dipropylketone .....	3, 31(c)	30	2710	3
Disulphur dichloride (S <sub>2</sub> Cl <sub>2</sub> ) .....	8, 21(a)	88	1828	8
Ditertiary butyl peroxide .....	5.2, 1	539	2102	5
Divinyl ether .....	3, 2(b)	339	1167	3
Dodecyltrichlorosilane .....	8, 37(b)	X80	1771	8
Dyes and intermediates - inorganic, corrosive .....	8, 46(b)	80	2801	8
- inorganic, slightly corrosive .....	8, 46(c)	80	2801	8
- organic, corrosive .....	8, 55(b)	80	2801	8
- organic, slightly corrosive .....	8, 55(c)	80	2801	8
Enamels - having a flash-point below 21°C .....	3, 5	33	1263	3
- having a flash-point between 21°C and 55°C (limit values included) .....	3, 31(e)*	30	1263	3
- having a flash-point above 55°C .....	3, 32(e)*	30	1263	-
Epibromohydrin .....	6.1, 16(a)	66	2558	6.1
Epichlorohydrin .....	6.1, 16(b)	63	2023	6.1 + 3
1,2-Epoxy-3-ethoxypropane .....	3, 31(c)	30	2752	3
Ethane .....	2, 5(b)	23	1035	3 + 13
Ethane, deeply-refrigerated .....	2, 7(b)	223	1961	3 + 13
Ethanol (Ethyl alcohol) and its aqueous solutions containing more than 70% alcohol .....	3, 3(b)	33	1170	3
Ethanol (Ethyl alcohol), aqueous solutions of, in a concentration above 24% but not exceeding 70% .....	3, 31(c)	30	1170	3

\* See, however, Note under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Ethanolamine and its solutions . . . . .	8, 54(c)	80	2491	8
2-Ethoxyethanol (Ethylene glycol monoethyl ether) . . . . .	3, 31(c)	30	1171	3
2-Ethoxyethyl acetate (Ethylene glycol monoethyl ether acetate) . . . . .	3, 31(c)	30	1172	3
Ethyl acetate . . . . .	3, 3(b)	33	1173	3
Ethyl acrylate . . . . .	3, 3(b)	339	1917	3
Ethyl alcohol: see Ethanol . . . . .				
Ethylamine, anhydrous . . . . .	2, 3(bt)	236	1036	3 + 6.1 + 13
Ethylamine, aqueous solutions of . . . . .				
- having a boiling point not more than 35°C	3, 22(a)	338	2270	3 + 8
- having a boiling point higher than 35°C . .	3, 22(b)	338	2270	3 + 8
Ethyl amyl ketone . . . . .	3, 31(c)	30	2271	3
2-Ethylaniline . . . . .	6.1, 12(c)	60	2273	6.1A
N-Ethylaniline . . . . .	6.1, 12(c)	60	2272	6.1A
Ethylbenzene, technical . . . . .	3, 3(b)	33	1175	3
N-Ethyl-N-benzylaniline . . . . .	6.1, 12(c)	60	2274	6.1A
N-Ethylbenzyltoluidines . . . . .	6.1, 12(c)	60	2753	6.1A
Ethyl bromide . . . . .	6.1, 15(b)	60	1891	6.1
Ethyl bromoacetate . . . . .	6.1, 16(b)	63	1603	6.1 + 3
2-Ethylbutanol . . . . .	3, 32(c)	30	2275	-
2-Ethylbutyl acetate . . . . .	3, 31(c)	30	1177	3
Ethyl butyl ether . . . . .	3, 3(b)	33	1179	3
2-Ethylbutyraldehyde . . . . .	3, 3(b)	33	1178	3
Ethyl butyrate . . . . .	3, 31(c)	30	1180	3
Ethyl carbonate: see Diethyl carbonate . . . . .				
Ethyl chloride . . . . .	2, 3(bt)	236	1037	3 + 13
Ethyl chloroacetate . . . . .	6.1, 16(b)	63	1181	6.1 + 3
Ethyl chloroformate . . . . .	3, 16(a)	336	1182	3 + 6.1
Ethyl 2-chloropropionate . . . . .	3, 31(c)	30	2935	3
Ethylchlorothioformate . . . . .	8, 64(b)	80	2826	8
Ethyl crotonate . . . . .	3, 3(b)	33	1862	3
Ethyl cyanoacetate . . . . .	6.1, 12(c)	60	2666	6.1A
Ethylchloroarsine . . . . .	6.1, 34(a)	66	1892	6.1
Ethylchlorosilane . . . . .	4.3, 4(b)	X338	1183	4.3 + 3 + 8
Ethylene . . . . .	2, 5(b)	23	1962	3 + 13
Ethylene, deeply-refrigerated . . . . .	2, 7(b)	223	1038	3 + 13
Ethylene chlorhydrin (2-Chloroethanol) . . . . .	6.1, 16(b)	60	1135	6.1
Ethylenediamine . . . . .	8, 53(b)	83	1604	8 + 3
Ethylene dibromide (sym.-Dibromoethane) . . . . .	6.1, 15(b)	60	1605	6.1
Ethylene dichloride: see 1,2-Dichloroethane . . . . .				
Ethylene glycol monobutyl ether . . . . .	6.1, 13(c)	60	2369	6.1A
Ethylene glycol diethyl ether: see 1,2-Diethoxyethane . . . . .				
Ethylene glycol monoethyl ether: see 2-Ethoxyethanol . . . . .				
Ethylene glycol monoethyl ether acetate: see 2-Ethoxyethyl acetate . . . . .				
Ethylene glycol monomethyl ether acetate . . . . .	3, 31(c)	30	1189	3
Ethyleneimine . . . . .	3, 12	336	1185	3 + 6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Ethylene oxide and propylene oxide mixtures, containing not more than 30% ethylene oxide . . . . .	3, 17(a)	336	2983	3 + 6.1
Ethylene oxide containing not more than 10% carbon dioxide by mass . . . . .	2, 4(ct)	236	1041	3 + 6.1 + 13
Ethylene oxide containing more than 10% but not more than 50% carbon dioxide by mass Ethylene oxide containing carbon dioxide: see also Carbon dioxide containing ethylene oxide. . . . .	2, 6(ct)	236	1041	13
Ethylene oxide with nitrogen . . . . .	2, 4(ct)	236	1040	3 + 6.1 + 13
Ethyl ether . . . . .	3, 2(a)	33	1155	3
Ethyl fluid . . . . .	6.1, 31(a)	66	1649	6.1
Ethyl formate . . . . .	3, 3(b)	33	1190	3
2-Ethyl hexaldehyde . . . . .	3, 31(c)	30	1191	3
2-Ethylhexylamine . . . . .	8, 53(c)	83	2276	8 + 3
2-Ethylhexyl chloroformate . . . . .	6.1, 16(b)	68	2748	6.1 + 8
Ethylidene chloride: see 1,1-Dichloroethane . .				
Ethyl isobutyrate . . . . .	3, 3(b)	33	2385	3
Ethyl lactate . . . . .	3, 31(c)	30	1192	3
Ethyl mercaptan . . . . .	3, 18(b)	336	2363	3 + 6.1
Ethyl methacrylate . . . . .	3, 3(b)	339	2277	3
Ethyl methyl ketone . . . . .	3, 3(b)	33	1193	3
Ethyl orthoformate . . . . .	3, 31(c)	30	2524	3
Ethyl oxalate . . . . .	6.1, 13(c)	60	2525	6.1A
Ethylphenyldichlorosilane . . . . .	8, 37(b)	X80	2435	8
1-Ethylpiperidine . . . . .	3, 3(b)	33	2386	3
Ethyl propionate . . . . .	3, 3(b)	33	1195	3
Ethyl propyl ether . . . . .	3, 3(b)	33	2615	3
Ethyl sulphide . . . . .	3, 18(b)	336	2375	3 + 6.1
Ethylsulphuric acid . . . . .	8, 34(b)	80	2571	8
Ethyltoluidines . . . . .	6.1, 12(b)	60	2754	6.1
Ethyltrichlorosilane . . . . .	3, 21(a)	X338	1196	3 + 8
Extracts, aromatic . . . . .				
- with a flash-point below 21°C . . . . .	3, 3(b)	33	1169	3
- with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	1169	3
- with a flash-point above 55°C . . . . .	3, 32(c)	30	1169	-
Extracts, flavourings . . . . .				
- with a flash-point below 21°C . . . . .	3, 3(b)	33	1197	3
- with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	1197	3
- with a flash-point above 55°C . . . . .	3, 32(c)	30	1197	-
Ferric chloride (Iron trichloride), anhydrous (FeCl <sub>3</sub> ) . . . . .	8, 22(c)	80	1773	8
Ferric chloride (Iron trichloride), aqueous solutions of . . . . .	8, 5(c)	80	2582	8
Fluoboric acid, aqueous solutions of, contain- ing not more than 78% pure acid (HBF <sub>4</sub> ) . . . . .	8, 8(b)	80	1775	8
Fluoroanilines . . . . .	6.1, 11(c)	60	2941	6.1A
Fluorobenzene . . . . .	3, 3(b)	33	2387	3

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Fluorophosphoric acid, anhydrous . . . . .	8, 10(b)	80	1776	8
Fluorosulphonic acid . . . . .	8, 10(a)	88	1777	8
Fluorotoluenes . . . . .				
– with a flash-point below 21°C . . . . .	3, 3(b)	33	2388	3
– with a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	2388	3
Fluosilicic acid (Hydrofluosilicic acid) (H <sub>2</sub> SiF <sub>6</sub> ) . . . . .	8, 9(b)	80	1778	8
Formaldehyde, aqueous solutions of (e.g. Formalin), containing not less than 5% formaldehyde, also containing not more than 35% methanol . . . . .				
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	8, 63(c)	83	1198	8 + 3
– having a flash-point above 55°C . . . . .	8, 63(c)	80	2209	8
Formic acid containing more than 70% pure acid . . . . .	8, 32(b)	80	1779	8
Formic acid containing from 50% to 70% pure acid . . . . .	8, 32(c)	80	1779	8
Fumaryl chloride . . . . .	8, 36(b)	80	1780	8
Furan . . . . .	3, 1(a)	33	2389	3
Furfural (Furfuraldehyde) . . . . .	3, 32(c)	30	1199	–
Furfurylamine . . . . .	3, 31(c)	30	2526	3
Furfuryl alcohol . . . . .	6.1, 13(c)	60	2874	6.1A
Fusel oil . . . . .				
– with a flash-point below 21°C . . . . .	3, 3(b)	33	1201	3
– with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	1201	3
– with a flash-point above 55°C . . . . .	3, 32(c)	30	1201	–
Gallium alkyls, liable to spontaneous combustion . . . . .	4.2, 3	X333	2003	4.2 + 4.3 + 13
Gallium alkyls, which give off inflammable gases on contact with water . . . . .	4.3, 2(e)	X323	2813	4.3
Gas mixture R 500 . . . . .	2, 4(a)	20	2602	13
Gas mixture R 502 . . . . .	2, 4(a)	20	1973	13
Gas mixture R 503 . . . . .	2, 6(a)	20	2599	13
Gas oil, for heating and for diesel engines: see Hydrocarbons, liquid . . . . .				
Glycerol alpha-monochlorohydrin (3-Chloropropane-1, 2-diol) . . . . .	6.1, 17(c)	60	2689	6.1A
Glycidaldehyde . . . . .	6.1, 13(b)	63	2622	6.1 + 3
Heating oil: see Hydrocarbons, liquid . . . . .				
Helium, deeply-refrigerated . . . . .	2, 7(a)	22	1963	13
n-Heptaldehyde . . . . .	3, 31(c)	30	3056	3
Heptanes . . . . .	3, 3(b)	33	1206	3
Heptenes . . . . .	3, 3(b)	33	2278	3
Hexachloroacetone . . . . .	6.1, 17(c)	60	2661	6.1A
Hexachlorobenzene . . . . .	6.1, 17(c)	60	2729	6.1A
Hexachlorobutadiene . . . . .	6.1, 17(c)	60	2279	6.1A
Hexachlorocyclopentadiene . . . . .	6.1, 17(a)	66	2646	6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Hexadecyltrichlorosilane . . . . .	8, 37(b)	X80	1781	8
Hexadienes . . . . .	3, 3(b)	33	2458	3
Hexafluoroacetone hydrate . . . . .	6.1, 17(b)	60	2552	6.1
Hexafluoroethane (R 116) . . . . .	2, 5(a)	20	2193	13
Hexafluorophosphoric acid . . . . .	8, 10(b)	80	1782	8
Hexafluoropropylene (R 1216) . . . . .	2, 3(at)	26	1858	13
Hexaldehyde . . . . .	3, 31(c)	30	1207	3
Hexamethylenediamine . . . . .	8, 52(c)	80	2280	8
Hexamethylenediamine, solutions of . . . . .	8, 53(b)	80	1783	8
Hexamethylene diisocyanate . . . . .	6.1, 19(b)	60	2281	6.1
Hexamethylencimine . . . . .	3, 22(b)	338	2493	3 + 8
Hexanes . . . . .	3, 3(b)	33	1208	3
Hexanoic acid: see Caproic acid . . . . .				
Hexanols . . . . .				
— with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	2282	3
— with a flash-point above 55°C . . . . .	3, 32(c)	30	2282	—
1-Hexene . . . . .	3, 3(b)	33	2370	3
Hexyltrichlorosilane . . . . .	8, 37(b)	X80	1784	8
Hydrazine, aqueous solutions of, containing not more than 64% hydrazine (N <sub>2</sub> H <sub>4</sub> ) . . . . .	8, 44(b)	86	2030	8 + 6.1
Hydriodic acid, solutions of . . . . .	8, 5(b)	80	1787	8
Hydrobromic acid, solutions of . . . . .	8, 5(b)	80	1788	8
Hydrocarbons, liquid, pure or in mixtures, not otherwise specified in this appendix . . . . .				
— having a flash-point below 21°C . . . . .	3, 1 to 3	33	1203	3
— having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	1223	3
— having a flash-point above 55°C . . . . .	3, 32(c)	30	1202	—
Hydrochloric acid, solutions of . . . . .	8, 5(b)	80	1789	8
Hydrocyanic acid, aqueous solutions of, containing not more than 20% pure acid (HCN) . . . . .	6.1, 2	663	1613	6.1 + 3
Hydrofluoric acid and sulphuric acid mixtures . . . . .	8, 7(a)	886	1786	8 + 6.1
Hydrofluoric acid, anhydrous (Hydrogen fluoride) . . . . .	8, 6	886	1052	8 + 6.1
Hydrofluoric acid, aqueous solutions of, containing more than 85% anhydrous hydrofluoric acid . . . . .	8, 6	886	1790	8 + 6.1
Hydrofluoric acid, aqueous solutions of, containing more than 60% but not more than 85% anhydrous hydrofluoric acid . . . . .	8, 7(a)	886	1790	8 + 6.1
Hydrofluoric acid, aqueous solutions of, containing not more than 60% anhydrous hydrofluoric acid . . . . .	8, 7(b)	886	1790	8 + 6.1
Hydrofluosilicic acid: see Fluosilicic acid . . . . .				
Hydrogen, deeply-refrigerated . . . . .	2, 7(b)	223	1966	3 + 13
Hydrogen bromide . . . . .	2, 3(at)	286	1048	8 + 6.1 + 13
Hydrogen chloride . . . . .	2, 5(at)	286	1050	8 + 6.1 + 13
Hydrogen fluoride: see Hydrofluoric acid, anhydrous . . . . .				

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Hydrogen peroxide, stabilized and in aqueous solutions containing more than 60% hydrogen peroxide, stabilized . . . . .	5.1, 1	559	2015	5
Hydrogen peroxide, aqueous solutions of, containing not less than 20% but not more than 60% hydrogen peroxide . . . . .	8, 62(b)	85	2014	8 + 5
Hydrogen peroxide, aqueous solutions of, containing not less than 8% but less than 20% hydrogen peroxide . . . . .	8, 62(c)	85	2984	8 + 5
Hydrogen sulphide . . . . .	2, 3(bt)	236	1053	3 + 6.1 + 13
Hydrogen sulphides, aqueous solutions of, not otherwise specified in this appendix . . . . .	8, 45(c)	80	1719	8
Hydroquinone . . . . .	6.1, 14(c)	60	2662	6.1A
beta-Hydroxybutyraldehyde: see Aldol . . . . .				
Hydroxylamine sulphate . . . . .	8, 27(c)	80	2865	8
Hypochlorite solutions containing not less than 16% available chlorine . . . . .	8, 61(b)	85	1791	8
Hypochlorite solutions containing more than 5% but less than 16% available chlorine . . . . .	8, 61(c)	85	1791	8
3,3'-Imino-bis propylamine: see Bisaminopropylamine . . . . .				
Iodine monochloride . . . . .	8, 21(b)	80	1792	8
2-Iodobutane . . . . .	3, 3(b)	33	2390	3
Iodomethylpropanes . . . . .	3, 3(b)	33	2391	3
Iodopropanes . . . . .	3, 31(c)	30	2392	3
Iron pentacarbonyl . . . . .	6.1, 3	663	1994	6.1 + 3
Iron trichloride: see Ferric chloride . . . . .				
Isoamyl formate . . . . .	3, 31(c)	30	1109	3
Isobutane . . . . .	2, 3(b)	23	1969	3 + 13
Isobutanol: see Isobutyl alcohol . . . . .				
Isobutene: see Isobutylene . . . . .				
Isobutyl acetate . . . . .	3, 3(b)	33	1213	3
Isobutyl acrylate . . . . .	3, 31(c)	39	2527	3
Isobutyl alcohol (Isobutanol) . . . . .	3, 31(c)	30	1212	3
Isobutylamine . . . . .	3, 22(b)	338	1214	3 + 8
Isobutylene (Isobutene) . . . . .	2, 3(b)	23	1055	3 + 13
Isobutylene trimer: see Triisobutylene . . . . .				
Isobutyl formate . . . . .	3, 3(b)	33	2393	3
Isobutyl isobutyrate . . . . .	3, 31(c)	30	2528	3
Isobutyl isocyanate . . . . .	3, 14(b)	336	2486	3 + 6.1
Isobutyl methacrylate . . . . .	3, 31(c)	39	2283	3
Isobutylpropionate . . . . .	3, 31(c)	30	2394	3
Isobutyraldehyde . . . . .	3, 3(b)	33	2045	3
Isobutyric acid . . . . .	8, 32(c)	80	2529	8
Isobutyric anhydride . . . . .	8, 32(c)	80	2530	8
Isobutyronitrile . . . . .	3, 11(b)	336	2284	3 + 6.1
Isobutyryl chloride . . . . .	3, 25(b)	338	2395	3 + 8
Isocyanates, solutions of, having a flash-point below 21°C . . . . .	3, 14(b)	336	2478	3 + 6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Isocyanates, not otherwise specified in this appendix				
– with a flash-point between 21°C and 55°C and a boiling point below 200°C	6.1, 18(b)	63	2206	6.1 + 3
– with a flash-point between 21°C and 55°C and a boiling point between 200°C and 300°C	6.1, 19(b)	63	2206	6.1 + 3
– with a flash-point above 55°C and a boiling point below 200°C	6.1, 18(b)	60	2206	6.1
– with a flash-point above 55°C and a boiling point between 200°C and 300°C	6.1, 19(b)	60	2206	6.1
Isocyanatobenzotrifluorides	6.1, 18(b)	60	2285	6.1
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate: see Isophorone diisocyanate				
Isododecane: see Pentamethylheptane				
Isooctene	3, 3(b)	33	1216	3
Isopentane	3, 1(a)	33	1265	3
Isophoronediamine	8, 53(c)	80	2289	8
Isophorone diisocyanate(3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate)	6.1, 19(c)	60	2290	6.1A
Isoprene	3, 2(a)	339	1218	3
Isopropanol (Isopropyl alcohol)	3, 3(b)	33	1219	3
Isopropenyl acetate	3, 3(b)	33	2403	3
Isopropyl acetate	3, 3(b)	33	1220	3
Isopropyl acid phosphate	8, 38(c)	80	1793	8
Isopropyl alcohol: see Isopropanol				
Isopropylamine	3, 22(a)	338	1221	3 + 8
Isopropylbenzene: see Cumene				
Isopropyl butyrate	3, 31(c)	30	2405	3
Isopropyl chloride: see 2-Chloropropane				
Isopropyl chloroacetate	3, 32(c)	30	2947	–
Isopropyl 2-chloropropionate	3, 31(c)	30	2934	3
Isopropyl cumyl hydroperoxide: see Diisopropylbenzene hydroperoxide				
Isopropylethylene: see 3-Methyl-1-butene				
Isopropyl isobutyrate	3, 3(b)	33	2406	3
Isopropyl isocyanate	3, 14(a)	336	2483	3 + 6.1
Isopropyl nitrate	3, 3(b)	33	1222	3
Isopropyl propionate	3, 3(b)	33	2409	3
Kerosene: see Hydrocarbons, liquid				
Ketones, liquid, not otherwise specified in this appendix				
– with a flash-point below 21°C	3, 3(b)	33	1224	3
– with a flash-point between 21°C and 55°C	3, 31(c)	30	1224	3
– with a flash-point above 55°C	3, 32(c)	30	1224	–
Krypton, deeply-refrigerated	2, 7(a)	22	1970	13
Lead acetate	6.1, 62(c)	60	1616	6.1A
Lead alkyls with halogenated organic compounds, mixtures of	6.1, 31(a)	66	1649	6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Lead compounds, not otherwise specified in this appendix . . . . .	6.1, 62(c)	60	2291	6.1A
Lead sulphate containing not less than 3% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) . . . . .	8, 23(b)	80	1794	8
Lithium alkyls, liable to spontaneous combustion . . . . .	4.2, 3	X333	2445	4.2 + 4.3 + 13
Lithium alkyls, which give off inflammable gases on contact with water . . . . .	4.3, 2(e)	X323	2813	4.3
Lithium hydroxide . . . . .	8, 41(b)	80	2680	8
Lithium hydroxide, solutions of . . . . .	8, 42(b)	80	2679	8
LPG: see Mixtures of hydrocarbons (liquefied gas) (Mixtures A, A0, A1, B and C) . . . . .				
Magnesium alkyls, liable to spontaneous combustion . . . . .	4.2, 3	X333	3053	4.2 + 4.3 + 13
Magnesium alkyls, which give off inflammable gases on contact with water . . . . .	4.3, 2(e)	X323	2813	4.3
Magnesium arsenate . . . . .	6.1, 51(b)	60	1622	6.1
Maleic anhydride . . . . .	8, 31(c)	80	2215	8
Malononitrile . . . . .	6.1, 12(b)	60	2647	6.1
p-Menthanyl hydroperoxide with a peroxide content not exceeding 95% . . . . .	5.2, 14	539	2125	5
Mercaptans, not otherwise specified in this appendix . . . . .				
– with a flash-point below 21°C, highly toxic . . . . .	3, 18(a)	336	1228	3 + 6.1
– with a flash-point below 21°C, toxic . . . . .	3, 18(b)	336	1228	3 + 6.1
– with a flash-point below 21°C, harmful or non-toxic . . . . .	3, 3(b)	33	1228	3
– with a flash-point between 21°C and 55°C, highly toxic . . . . .	6.1, 20(a)	663	3071	6.1 + 3
– with a flash-point between 21°C and 55°C, toxic . . . . .	6.1, 20(b)	63	3071	6.1 + 3
– with a flash-point between 21°C and 55°C, harmful . . . . .	6.1, 20(c)	63	3071	6.1A + 3
Mercaptoethanol (Thioglycol) . . . . .	6.1, 20(b)	60	2966	6.1
Mercuric chloride . . . . .	6.1, 52(b)	60	1624	6.1
Mercury acetate . . . . .	6.1, 52(b)	60	1629	6.1
Mesitylene (1,3,5-Trimethylbenzene) . . . . .	3, 31(c)	30	2325	3
Mesityl oxide . . . . .	3, 31(c)	30	1229	3
Methacrylaldehyde . . . . .	3, 17(b)	336	2396	3 + 6.1
Methacrylic acid . . . . .	8, 32(c)	89	2531	8
Methallyl alcohol . . . . .	3, 31(c)	30	2614	3
Methane, deeply-refrigerated . . . . .	2, 7(b)	223	1972	3 + 13
Methanol (Methyl alcohol) . . . . .	3, 17(b)	336	1230	3 + 6.1
Methoxybutyl acetate: see Butoxyl . . . . .				
Methoxyethanol . . . . .	3, 31(c)	30	1188	3
Methoxymethyl isocyanate . . . . .	3, 14(a)	336	2605	3 + 6.1
4-Methoxy-4-methylpentan-2-one . . . . .	3, 31(c)	30	2293	3
Methyl acetate . . . . .	3, 3(b)	33	1231	3



Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Methyl acrylate . . . . .	3, 3(b)	339	1919	3
Methylal: see Dimethoxymethane . . . . .				
Methyl alcohol: see Methanol . . . . .				
Methyl allyl chloride . . . . .	3, 3(b)	33	2554	3
Methylamine, anhydrous . . . . .	2, 3(bt)	236	1061	3 + 6.1 + 13
Methylamine, aqueous solutions of . . . . .				
– having a boiling point not more than 35°C . . . . .	3, 22(a)	338	1235	3 + 8
– having a boiling point higher than 35°C . . . . .	3, 22(b)	338	1235	3 + 8
Methyl amyl acetate . . . . .	3, 31(c)	30	1233	3
Methyl amyl alcohol (Methyl isobutyl carbinol) . . . . .	3, 31(c)	30	2053	3
N-Methylaniline . . . . .	6.1, 11(c)	60	2294	6.1A
Methyl benzoate . . . . .	6.1, 13(c)	60	2938	6.1A
alpha-Methylbenzyl alcohol . . . . .	6.1, 14(c)	60	2937	6.1A
Methyl bromide . . . . .	2, 3(at)	26	1062	6.1 + 13
Methyl bromoacetate . . . . .	6.1, 16(b)	63	2643	6.1 + 3
3-Methyl butan-2-one . . . . .	3, 3(b)	33	2397	3
2-Methyl-1-butene . . . . .	3, 1(a)	33	2459	3
3-Methyl-1-butene (Isopropylethylene) . . . . .	3, 1(a)	33	2561	3
2-Methyl-2-butene . . . . .	3, 2(b)	33	2460	3
N-Methylbutylamine . . . . .	3, 22(b)	338	2945	3 + 8
Methyl tert-butyl ether . . . . .	3, 3(b)	33	2398	3
Methyl butyrate . . . . .	3, 3(b)	33	1237	3
Methyl chloride . . . . .	2, 3(bt)	236	1063	3 + 6.1 + 13
Methyl chloroacetate . . . . .	6.1, 16(b)	63	2295	6.1 + 3
Methyl chloroformate . . . . .	3, 16(a)	336	1238	3 + 6.1
Methylchloromethyl ether . . . . .	3, 16(b)	336	1239	3 + 6.1
Methyl 2-chloropropionate . . . . .	3, 31(c)	30	2933	3
Methylcyclohexane . . . . .	3, 3(b)	33	2296	3
Methyl cyclohexanols . . . . .				
– with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	2617	3
– with a flash-point above 55°C . . . . .	3, 32(c)	30	2617	–
Methylcyclohexanone . . . . .	3, 31(c)	30	2297	3
Methylcyclopentane . . . . .	3, 3(b)	33	2298	3
Methyl dichloroacetate . . . . .	6.1, 16(c)	60	2299	6.1A
Methyldichlorosilane . . . . .	4.3, 4(b)	X338	1242	4.3 + 3 + 8
Methylene bromide (Dibromomethane) . . . . .	6.1, 15(c)	60	2664	6.1A
Methylene chloride (Dichloromethane) . . . . .	6.1, 15(c)	60	1593	6.1A
2-Methyl-5-ethyl pyridine . . . . .	6.1, 11(c)	60	2300	6.1A
Methyl formate . . . . .	3, 1(a)	33	1243	3
2-Methylfuran . . . . .	3, 3(b)	33	2301	3
5-Methylhexan-2-one . . . . .	3, 31(c)	30	2302	3
Methylhydrazine . . . . .	3, 23(a)	338	1244	3 + 8
Methyl iodide . . . . .	6.1, 15(b)	60	2644	6.1
Methyl isobutyl carbinol: see Methyl amyl alcohol . . . . .				
Methyl isobutyl ketone . . . . .	3, 3(b)	33	1245	3
Methyl isopropenyl ketone . . . . .	3, 3(b)	339	1246	3
Methyl isopropyl benzenes: see Cymenes . . . . .				

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Methyl isothiocyanate . . . . .	6.1, 20(c)	63	2477	6.1A + 3
Methyl isovalerate . . . . .	3, 3(b)	33	2400	3
Methyl mercaptan . . . . .	2, 3(bt)	236	1064	3 + 6.1 + 13
Methyl methacrylate . . . . .	3, 3(b)	339	1247	3
Methylmorpholines . . . . .				
- having a flash-point below 21°C . . . . .	3, 22(b)	338	2535	3 + 8
- having a flash-point of 21°C or over . . . . .	8, 53(b)	83	2535	8 + 3
Methyl orthosilicate (Tetramethoxysilane) . . . . .	3, 17(a)	336	2606	3 + 6.1
Methylpentadienes . . . . .	3, 3(b)	33	2461	3
2-Methylpentan-2-ol . . . . .	3, 31(c)	30	2560	3
3-Methyl-2-pentene-4-yne-1-ol: see 1 Pentol . . . . .				
Methylphenyldichlorosilane . . . . .	8, 37(b)	X80	2437	8
1-Methyl piperidine . . . . .	3, 3(b)	33	2399	3
Methyl propionate . . . . .	3, 3(b)	33	1248	3
Methyl propyl ether . . . . .	3, 2(b)	33	2612	3
Methyl propyl ketone . . . . .	3, 3(b)	33	1249	3
Methylpyridines: see Picolines . . . . .				
alpha-Methylstyrene . . . . .	3, 31(c)	30	2303	3
Methyltetrahydrofuran . . . . .	3, 3(b)	33	2536	3
Methyl trichloroacetate . . . . .	6.1, 16(c)	60	2533	6.1A
Methyltrichlorosilane . . . . .	3, 21(a)	X338	1250	3 + 8
2-Methyl valeraldehyde . . . . .	3, 3(b)	33	2367	3
Methyl vinyl ether . . . . .	2, 3(ct)	236	1087	3 + 6.1 + 13
Methyl vinyl ketone . . . . .	3, 3(b)	339	1251	3
Mixtures F 1, F 2 and F 3 . . . . .	2, 4(a)	20	1078	13
Mixtures of 1,3-butadiene and hydrocarbons . . . . .	2, 4(c)	239	1010	13 + 13
Mixtures of caustic soda and quicklime: see Soda lime . . . . .				
Mixtures of hydrocarbons (liquefied gases) (Mixtures A, A 0, A 1, B and C) . . . . .	2, 4(b)	23	1965	3 + 13
Mixtures of methylacetylene and propadiene with hydrocarbons (Mixtures P 1 and P 2) . . . . .	2, 4(c)	239	1060	3 + 13
Mixtures of methyl bromide and chloropicrin (liquefied gas) . . . . .	2, 4(at)	26	1581	13
Mixtures of methyl chloride and chloropicrin (liquefied gas) . . . . .	2, 4(bt)	236	1582	13
Mixtures of methyl chloride and methylene chloride (liquefied gas) . . . . .	2, 4(bt)	236	1912	13
Mixtures of sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) and more than 30% pure nitric acid (HNO <sub>3</sub> ) . . . . .	8, 3(a)	885	1796	8
Mixtures of sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) and not more than 30% pure nitric acid (HNO <sub>3</sub> ) . . . . .	8, 3(b)	88	1796	8
Molybdenum pentachloride (MoCl <sub>5</sub> ) . . . . .	8, 22(c)	80	2508	8
Monochloroacetic acid: see Chloroacetic acid . . . . .				
Monochloroacetonitrile . . . . .	6.1, 11(b)	60	2668	6.1
Monochloroanilines, liquid . . . . .	6.1, 12(b)	60	2019	6.1
Monochloroanilines, solid . . . . .	6.1, 12(b)	60	2018	6.1
Mononitroanilines . . . . .	6.1, 12(b)	60	1661	6.1
Mononitrotoluenes . . . . .	6.1, 12(b)	60	1664	6.1

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Morpholine . . . . .	3, 31(c)	30	2054	3
Mysorite: see Brown asbestos . . . . .				
Naphtha, solvent: see Hydrocarbons, liquid. . .				
Naphthalene in the molten state . . . . .	4.1, 11(c)	44	2304	4.1
beta-Naphthylamine . . . . .	6.1, 12(b)	60	1650	6.1
Natural gas, condensation products of: see Hydrocarbons, liquid . . . . .				
Natural gas, deeply, refrigerated . . . . .	2, 8(b)	223	1972	3 + 13
Neon, deeply-refrigerated . . . . .	2, 7(a)	22	1913	13
Nickel tetracarbonyl . . . . .	6.1, 3	663	1259	6.1 + 3
Nicotine sulphate . . . . .	6.1, 77(b)	60	1658	6.1
Nitrating acid mixtures, spent . . . . .	8, 3(b)	80	1826	8
Nitric acid, red fuming . . . . .	8, 2(a)	856	2032	8
Nitric acid containing more than 70% pure acid (HNO <sub>3</sub> ) . . . . .	8, 2(a)	885	2032	8
Nitric acid containing not more than 70% pure acid (HNO <sub>3</sub> ) . . . . .	8, 2(b)	80	2031	8
Nitric acid, mixtures with sulphuric acid: see Mixtures of sulphuric acid and nitric acid . .				
Nitroanisoles . . . . .	6.1, 12(c)	60	2730	6.1A
Nitrobenzene . . . . .	6.1, 12(b)	60	1662	6.1
Nitrobenzenesulphonic acid . . . . .	8, 34(b)	80	2305	8
Nitrobenzotrifluorides . . . . .	6.1, 12(b)	60	2306	6.1
Nitrobromobenzenes . . . . .	6.1, 12(c)	60	2732	6.1A
Nitrocellulose solutions: see Collodions, solutions of . . . . .				
3-Nitro-4-chlorobenzotrifluoride . . . . .	6.1, 12(b)	60	2307	6.1
Nitrocresols . . . . .	6.1, 12(c)	60	2446	6.1A
Nitroethane . . . . .	3, 31(c)	30	2842	3
Nitrogen, deeply-refrigerated . . . . .	2, 7(a)	22	1977	13
Nitrogen dioxide NO <sub>2</sub> (Nitrogen peroxide, Nitrogen tetroxide NO <sub>2</sub> O <sub>4</sub> ) . . . . .	2, 3(at)	265	1067	6.1 + 5 + 13
Nitrophenols . . . . .	6.1, 12(c)	60	1663	6.1A
Nitropropanes . . . . .	3, 31(c)	30	2608	3
Nitrosylsulphuric acid . . . . .	8, 1(b)	88	2308	8
Nitrous oxide N <sub>2</sub> O . . . . .	2, 5(a)	25	1070	5 + 13
Nitrous oxide N <sub>2</sub> O, deeply-refrigerated . . . . .	2, 7(a)	225	2201	5 + 13
Nitroxylenes . . . . .	6.1, 12(b)	60	1665	6.1
Nonane . . . . .	3, 31(c)	30	1920	3
Nonyltrichlorosilane . . . . .	8, 37(b)	X80	1799	8
2,5-Norbormadiene (Dicycloheptadiene) . . . . .	3, 3(b)	33	2251	3
Octadecyltrichlorosilane . . . . .	8, 37(b)	X80	1800	8
Octadienes – having a flash-point below 21°C . . . . .	3, 3(b)	33	2309	3
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	2309	3

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Octafluorocyclobutane (RC 318) . . . . .	2, 3(a)	20	1976	13
Octanes . . . . .	3, 3(b)	33	1262	3
tert-Octylmercaptan . . . . .	6.1, 20(b)	63	3023	6.1 + 3
Octyltrichlorosilane . . . . .	8, 37(b)	X83	1801	8 + 3
Oleum (Fuming sulphuric acid) . . . . .	8, 1(a)	X886	1831	8 + 6.1
Oxalates, soluble in water . . . . .	6.1, 67(c)	60	2449	6.1A
Oxygen, deeply-refrigerated . . . . .	2, 7(a)	225	1073	5 + 13
Paints . . . . .				
– having a flash-point below 21°C . . . . .	3, 5	33	1263	3
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)*	30	1263	3
– having a flash-point above 55°C . . . . .	3, 32(c)*	30	1263	–
Paraldehyde . . . . .	3, 31(c)	30	1264	3
Pentachloroethane . . . . .	6.1, 15(b)	60	1669	6.1
Pentamethylheptane (Isododecane) . . . . .	3, 31(c)	30	2286	3
Pentan-2, 4-dione (Acetyl acetone) . . . . .	3, 31(c)	30	2310	3
Pentane, normal . . . . .	3, 2(b)	33	1265	3
1-Pentene: see Amylene, normal . . . . .				
1-Pentol (3-Methyl-2-pentene-4-yne-1-ol) . . . . .	8, 66(b)	80	2705	8
Perchloric acid, aqueous solutions of, containing more than 50% but not more than 72.5% pure acid (HClO <sub>4</sub> ) . . . . .	5.1, 3	558	1873	5
Perchloric acid, aqueous solutions of, containing not more than 50% pure acid (HClO <sub>4</sub> ) . . . . .	8, 4(b)	85	1802	8
Perchloroethylene: see Tetrachloroethylene . . . . .				
Perchloromethylmercaptan . . . . .	6.1, 16(a)	66	1670	6.1
Perfunery products . . . . .				
– with a flash-point below 21°C . . . . .	3, 3(b)	33	1266	3
– with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	1266	3
– with a flash-point above 55°C . . . . .	3, 32(c)	30	1266	–
Pesticides, benzoic derivatives . . . . .				
– solid . . . . .	6.1, 83(b)	60	2769	6.1
83(c) . . . . .	60	2769	6.1A	
– liquid, with a flash-point below 21°C . . . . .	3, 19	336	2770	3 + 6.1
6 . . . . .	33	2770	3 + 6.1A	
– liquid, with a flash-point between 21°C and 55°C . . . . .	6.1, 83(a)	663	3003	6.1 + 3
83(b) . . . . .	63	3003	6.1 + 3	
83(c) . . . . .	63	3003	6.1 + 3	
– liquid, non-inflammable or with a flash- point above 55°C . . . . .	6.1, 83(a)	66	3004	6.1
83(b) . . . . .	60	3004	6.1	
83(c) . . . . .	60	3004	6.1A	
Pesticides, carbamates . . . . .				
– solid . . . . .	6.1, 76(b)	60	2757	6.1
76(c) . . . . .	60	2757	6.1A	
– liquid, having a flash-point below 21°C . . . . .	3, 19	336	2758	3 + 6.1
6 . . . . .	33	2758	3 + 6.1A	

\* See, however, Note 1 under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
– liquid, having a flash-point between 21°C and 55°C .....	6.1, 76(a)	663	2991	6.1 + 3
	76(b)	63	2991	6.1 + 3
	76(c)	63	2991	6.1A + 3
– liquid, not inflammable or having a flash- point above 55°C .....	6.1, 76(a)	66	2992	6.1
	76(b)	60	2992	6.1
	76(c)	60	2992	6.1A
<b>Pesticides, chlorinated hydrocarbons</b>				
– solid .....	6.1, 72(b)	60	2761	6.1
	72(c)	60	2761	6.1A
– liquid, having a flash-point below 21°C ..	3, 19	336	2762	3 + 6.1
	6	33	2762	3 + 6.1A
– liquid, having a flash-point between 21°C and 55°C .....	6.1, 72(a)	663	2995	6.1 + 3
	72(b)	63	2995	6.1 + 3
	72(c)	63	2995	6.1A + 3
– liquid, not inflammable or having a flash- point above 55°C .....	6.1, 72(a)	66	2996	6.1
	72(b)	60	2996	6.1
	72(c)	60	2996	6.1A
<b>Pesticides, chloro-phenoxyacetic derivatives</b>				
– solid .....	6.1, 73(b)	60	2765	6.1
	73(c)	60	2765	6.1A
– liquid, having a flash-point below 21°C ..	3, 19	336	2766	3 + 6.1
	6	33	2766	3 + 6.1A
– liquid, having a flash-point between 21°C and 55°C .....	6.1, 73(a)	663	2999	6.1 + 3
	73(b)	63	2999	6.1 + 3
	73(c)	63	2999	6.1A + 3
– liquid, not inflammable or having a flash- point above 55°C .....	6.1, 73(a)	66	3000	6.1
	73(b)	60	3000	6.1
	73(c)	60	3000	6.1A
<b>Pesticides, derivatives of bipyridyl</b>				
– solid .....	6.1, 82(b)	60	2781	6.1
	82(c)	60	2781	6.1A
– liquid, having a flash-point below 21°C ..	3, 19	336	2782	3 + 6.1
	6	33	2782	3 + 6.1A
– liquid, having a flash-point between 21°C and 55°C .....	6.1, 82(a)	663	3015	6.1 + 3
	82(b)	63	3015	6.1 + 3
	82(c)	63	3015	6.1A + 3
– liquid, not inflammable or having a flash- point above 55°C .....	6.1, 82(a)	66	3016	6.1
	82(b)	60	3016	6.1
	82(c)	60	3016	6.1A
<b>Pesticides, inorganic compounds of arsenic</b>				
– solid .....	6.1, 84(b)	60	2759	6.1
	84(c)	60	2759	6.1A
– liquid, having a flash-point below 21°C ..	3, 19	336	2760	3 + 6.1
	6	33	2760	3 + 6.1A

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
- liquid, having a flash-point between 21°C and 55°C.....	6.1, 84(a)	663	2993	6.1 + 3
	84(b)	63	2993	6.1 + 3
	84(c)	63	2993	6.1A + 3
- liquid, not inflammable or having a flash- point above 55°C.....	6.1, 84(a)	66	2994	6.1
	84(b)	60	2994	6.1
	84(c)	60	2994	6.1A
<b>Pesticides, inorganic compounds of copper</b>				
- solid.....	6.1, 87(b)	60	2775	6.1
	87(c)	60	2775	6.1A
- liquid, having a flash-point below 21°C..	3, 19	336	2776	3 + 6.1
	6	33	2776	3 + 6.1A
- liquid, having a flash-point between 21°C and 55°C.....	6.1, 87(a)	663	3009	6.1 + 3
	87(b)	63	3009	6.1 + 3
	87(c)	63	3009	6.1A + 3
- liquid, not inflammable or having a flash- point above 55°C.....	6.1, 87(a)	66	3010	6.1
	87(b)	60	3010	6.1
	87(c)	60	3010	6.1A
<b>Pesticides, inorganic compounds of mercury</b>				
- solid.....	6.1, 86(b)	60	2777	6.1
	86(c)	60	2777	6.1A
- liquid, having a flash-point below 21°C..	3, 19	336	2778	3 + 6.1
	6	33	2778	3 + 6.1A
- liquid, having a flash-point between 21°C and 55°C.....	6.1, 86(a)	663	3011	6.1 + 3
	86(b)	63	3011	6.1 + 3
	86(c)	63	3011	6.1A + 3
- liquid, not inflammable or having a flash- point above 55°C.....	6.1, 86(a)	66	3012	6.1
	86(b)	60	3012	6.1
	86(c)	60	3012	6.1A
<b>Pesticides, organo-phosphorus compounds</b>				
- solid.....	6.1, 71(b)	60	2783	6.1
	71(c)	60	2783	6.1A
- liquid, having a flash-point below 21°C..	3, 19	336	2784	3 + 6.1
	6	33	2784	3 + 6.1A
- liquid, having a flash-point between 21°C and 55°C.....	6.1, 71(a)	663	3017	6.1 + 3
	71(b)	63	3017	6.1 + 3
	71(c)	63	3017	6.1A + 3
- liquid, not inflammable or having a flash- point above 55°C.....	6.1, 71(a)	66	3018	6.1
	71(b)	60	3018	6.1
	71(c)	60	3018	6.1A
<b>Pesticides, organotin compounds</b>				
- solid.....	6.1, 79(b)	60	2786	6.1
	79(c)	60	2786	6.1A
- liquid, having a flash-point below 21°C..	3, 19	336	2787	3 + 6.1
	6	33	2787	3 + 6.1A

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
– liquid, having a flash-point between 21°C and 55°C .....	6.1, 79(a)	663	3019	6.1 + 3
	79(b)	63	3019	6.1 + 3
	79(c)	63	3019	6.1A + 3
– liquid, not inflammable or having a flash- point above 55°C .....	6.1, 79(a)	66	3020	6.1
	79(b)	60	3020	6.1
	79(c)	60	3020	6.1A
<b>Pesticides, phenyl urea derivatives</b>				
– solid .....	6.1, 75(b)	60	2767	6.1
	75(c)	60	2767	6.1A
– liquid, with a flash-point below 21°C ....	3, 19	336	2768	3 + 6.1
	6	33	2768	3 + 6.1A
– liquid, with a flash-point between 21°C and 55°C .....	6.1, 75(a)	663	3001	6.1 + 3
	75(b)	63	3001	6.1 + 3
	75(c)	63	3001	6.1A + 3
– liquid, non-inflammable or with a flash- point above 55°C .....	6.1, 75(a)	66	3002	6.1
	75(b)	60	3002	6.1
	75(c)	60	3002	6.1A
<b>Pesticides, phthalimide derivatives</b>				
– solid .....	6.1, 75(b)	60	2773	6.1
	75(c)	60	2773	6.1A
– liquid, with a flash-point below 21°C ....	3, 19	336	2774	3 + 6.1
	6	33	2774	3 + 6.1A
– liquid, with a flash-point between 21°C and 55°C .....	6.1, 75(a)	663	3007	6.1 + 3
	75(b)	63	3007	6.1 + 3
	75(c)	63	3007	6.1A + 3
– liquid, non-inflammable or with a flash- point above 55°C .....	6.1, 75(a)	66	3008	6.1
	75(b)	60	3008	6.1
	75(c)	60	3008	6.1A
<b>Pesticides, thiocarbamates</b>				
– solid .....	6.1, 76(b)	60	2771	6.1
	76(c)	60	2771	6.1A
– liquid, having a flash-point below 21°C ..	3, 19	336	2772	3 + 6.1
	6	33	2772	3 + 6.1A
– liquid, having a flash-point between 21°C and 55°C .....	6.1, 76(a)	663	3005	6.1 + 3
	76(b)	63	3005	6.1 + 3
	76(c)	63	3005	6.1A + 3
– liquid, not inflammable or having a flash- point above 55°C .....	6.1, 76(a)	66	3006	6.1
	76(b)	60	3006	6.1
	76(c)	60	3006	6.1A
<b>Pesticides, triazine derivatives</b>				
– solid .....	6.1, 75(b)	60	2763	6.1
	75(c)	60	2763	6.1A
– liquid, with a flash-point below 21°C ....	3, 19	336	2764	3 + 6.1
	6	33	2764	3 + 6.1A

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
- liquid, with a flash-point between 21°C and 55°C .....	6.1, 75(a)	663	2997	6.1 + 3
	75(b)	63	2997	6.1 + 3
	75(c)	63	2997	6.1A + 3
- liquid, non-inflammable or with a flash- point above 55°C .....	6.1, 75(a)	66	2998	6.1
	75(b)	60	2998	6.1
	75(c)	60	2998	6.1A
<b>Pesticides, with substituted nitrophenol</b>				
- solid .....	6.1, 75(b)	60	2779	6.1
	75(c)	60	2779	6.1A
- liquid, with a flash-point below 21°C ....	3, 19	336	2780	3 + 6.1
	6	33	2780	3 + 6.1A
- liquid, with a flash-point between 21°C and 55°C .....	6.1, 75(a)	663	3013	6.1 + 3
	75(b)	63	3013	6.1 + 3
	75(c)	63	3013	6.1A + 3
- liquid, non-inflammable or with a flash- point above 55°C .....	6.1, 75(a)	66	3014	6.1
	75(b)	60	3014	6.1
	75(c)	60	3014	6.1A
Petroleum: see Hydrocarbons, liquid .....				
Petroleum, crude: see Hydrocarbons, liquid ..				
Petroleum, ether: see Hydrocarbons, liquid ...				
Petrols: see Hydrocarbons, liquid .....				
Phenacyl bromide				
(omega-Bromoacetophenone) .....	6.1, 17(b)	60	2645	6.1
Phenacyl chloride				
(omega-Chloroacetophenone) .....	6.1, 17(b)	60	1697	6.1
Phenetidines .....	6.1, 12(c)	60	2311	6.1A
Phenol, molten .....	6.1, 13(b)	68	2312	6.1
Phenol, solutions of .....	6.1, 13(b)	68	2821	6.1
Phenolsulphonic acid, liquid .....	8, 34(b)	80	1803	8
Phenylacetonitrile: see Benzyl cyanide .....				
Phenylacetyl chloride .....	8, 36(b)	80	2577	8
Phenylcarbylamine chloride .....	6.1, 17(a)	66	1672	6.1
Phenyl chloride: see Chlorobenzene .....				
Phenylchloroformate .....	6.1, 16(b)	68	2746	6.1 + 8
Phenylenediamines .....	6.1, 12(c)	60	1673	6.1A
Phenylhydrazine .....	6.1, 12(b)	60	2572	6.1
Phenyl isocyanate .....	6.1, 18(b)	63	2487	6.1 + 3
Phenyl methyl ether (Anisole) .....	3, 31(c)	30	2222	3
Phenyl phosphorus dichloride .....	8, 36 (b)	80	2798	8
Phenylthiophosphoryl dichloride .....	8, 36(b)	80	2799	8
Phenyltrichlorosilane .....	8, 37(b)	X80	1804	8
Phosgene .....	2, 3(at)	266	1076	5 + 6.1 + 13
Phosphoric acid .....	8, 11(c)	80	1805	8
Phosphoric acid, anhydrous: see Phosphorus pentoxide .....				
Phosphorous acid, ortho .....	8, 11(c)	80	2834	8



Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Phosphorus, white or yellow				
– in the molten state . . . . .	4.2, 1	446	2447	4.2
– solid . . . . .	4.2, 1	46	1381	4.2
Phosphorus oxybromide (POBr <sub>3</sub> ) . . . . .	8, 22(b)	80	1939	8
Phosphorus oxybromide (POBr <sub>3</sub> ) molten . . . . .	8, 22(b)	80	2576	8
Phosphorus oxychloride (Phosphoryl chloride) (POCl <sub>3</sub> ) . . . . .	8, 21(b)	80	1810	8
Phosphorus pentachloride (PCl <sub>5</sub> ) . . . . .	8, 22(b)	80	1806	8
Phosphorus pentasulphide . . . . .	4.1, 8	40	1340	4.1
Phosphorus pentoxide (Phosphoric acid, anhydrous) . . . . .	8, 27(b)	80	1807	8
Phosphorus sesquisulphide . . . . .	4.1, 8	40	1341	4.1
Phosphorus tribromide (PBr <sub>3</sub> ) . . . . .	8, 21(b)	80	1808	8
Phosphorus trichloride (PCl <sub>3</sub> ) . . . . .	8, 21(b)	80	1809	8
Phosphoryl chloride: see Phosphorus oxychloride . . . . .				
Phthalic anhydride . . . . .	8, 31(c)	80	2214	8
Picolines (Methylpyridines) . . . . .	3, 31(c)	30	2313	3
Pinane hydroperoxide (Pimanyl hydroperoxide): see 2,6,6-Triethyl norpinanyl hydroperoxide . . . . .				
alpha-Pinene . . . . .	3, 31(c)	30	2368	3
Pine oil . . . . .	3, 32(c)	30	1272	–
Piperazine: see Diethylenediamine . . . . .				
Piperidine . . . . .	3, 22(b)	338	2401	3 + 8
Pivaloyl chloride (Trimethyl acetyl chloride) . . . . .	8, 36(b)	83	2438	8 + 3
Polychlorinated biphenyls . . . . .	9, 2(b)	90	2315	9
Potash lye: see Potassium hydroxide, solutions of . . . . .				
Potassium . . . . .	4.3, 1(a)	X423	2257	4.3
Potassium arsenate . . . . .	6.1, 51(b)	60	1677	6.1
Potassium arsenite . . . . .	6.1, 51(b)	60	1678	6.1
Potassium bifluoride . . . . .	8, 26(b)	80	1811	8 + 6.1
Potassium bisulphate containing not less than 3% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> ) . . . . .	8, 23(b)	80	2509	8
Potassium chlorate, solutions of . . . . .	5.1, 4(a)	50	2427	5
Potassium fluoride . . . . .	6.1, 65(c)	60	1812	6.1A
Potassium hydroxide (Caustic potash) . . . . .	8, 41(b)	80	1813	8
Potassium hydroxide, solutions of (Potash lye) . . . . .	8, 42(b)	80	1814	8
Potassium oxide . . . . .	8, 41(b)	80	2033	8
Potassium sodium alloys . . . . .	4.3, 1(a)	X423	1422	4.3
Potassium sulphide containing not less than 30% water of crystallization . . . . .	8, 45(b)	80	1847	8
Potassium sulphide, aqueous solutions of . . . . .	8, 45(c)	80	1847	8
Printers inks				
– having a flash-point below 21°C . . . . .	3, 5	33	1210	3
– having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)*	30	1210	3
– having a flash-point above 55°C . . . . .	3, 32(c)*	30	1210	–

\* See, however, Note 1 under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Propane, mixture of gases: see Mixtures of hydrocarbons (liquefied gas) (Mixture C) . . .				
Propane, technically pure . . . . .	2, 3(b)	23	1978	3 + 13
n-Propanol, technical . . . . .	3, 3(b)	33	1274	3
Propionaldehyde . . . . .	3, 3(b)	33	1275	3
Propionic acid containing not less than 50% pure acid . . . . .	8, 32(c)	80	1848	8
Propionic anhydride . . . . .	8, 32(c)	80	2496	8
Propionitrile . . . . .	3, 11(b)	336	2404	3 + 6.1
Propionyl chloride . . . . .	3, 25(b)	338	1815	3 + 8
n-Propyl acetate . . . . .	3, 3(b)	33	1276	3
n-Propylamine . . . . .	3, 22(b)	338	1277	3 + 8
n-Propylbenzene . . . . .	3, 31(c)	30	2364	3
Propyl chloride: see 1-Chloropropane . . . . .				
Propylene . . . . .	2, 3(b)	23	1077	3 + 13
Propylenediamine . . . . .	8, 53(b)	83	2258	8 + 3
Propylene dichloride . . . . .	3, 3(b)	33	1279	3
Propyleneimine . . . . .	3, 12	336	1921	3 + 6.1
Propylene oxide . . . . .	3, 2(a)	33	1280	3
Propylene tetramer: see Tetrapropylene . . . . .				
Propylene trimer: see Tripropylene . . . . .				
Propyl formates . . . . .	3, 3(b)	33	1281	3
Propyl isocyanate, normal . . . . .	3, 14(a)	336	2482	3 + 6.1
Propyl mercaptan . . . . .	3, 3(b)	33	2402	3
Propyltrichlorosilane . . . . .	8, 37(b)	X83	1816	8 + 3
Pyridine . . . . .	3, 15(b)	336	1282	3 + 6.1
Pyrosulphuryl chloride (S <sub>2</sub> O <sub>5</sub> Cl <sub>2</sub> ) . . . . .	8, 21(b)	80	1817	8
Pyrolidine . . . . .	3, 22(b)	338	1922	3 + 8
Quinoline . . . . .	6.1, 12(c)	60	2656	6.1A
R 12: see Dichlorodifluoromethane				
R 12B1: see Bromochlorodifluoromethane				
R 13: see Chlorotrifluoromethane				
R 13B1: see Bromotrifluoromethane				
R 21: see Dichlorofluoromethane				
R 22: see Chlorodifluoromethane				
R 23: see Trifluoromethane				
R 114: see 1,2-Dichloro-1,1,2,2-tetrafluoroethane				
R 115: see Chloropentafluoroethane				
R 116: see Hexafluoroethane				
R 133a: see 1-Chloro-2,2,2-trifluoroethane				
R 142b: see 1-Chloro-1-difluoroethane				
R 152a: see 1,1-Difluoroethane				
R 500: see Gas mixture R 500				
R 502: see Gas mixture R 502				
R 503: see Gas mixture R 503				
R 1113: see Trifluorochloroethylene				
R 1216: see Hexafluoropropylene				
RC 318: see Octafluorocyclobutane				

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Radioactive material, low specific activity (LSA), not otherwise specified in this Appendix .....	7, Sch 5 or 6	70	2912	7A, 7B or 7C
– gas .....		72	2912	7A, 7B or 7C
– gas, inflammable .....		723	2912	7A, 7B or 7C + 3
– liquid, inflammable having a flash-point below 55°C .....		73	2912	7A, 7B or 7C + 3
– solid, inflammable .....		74	2912	7A, 7B or 7C + 4.1
– oxidizing .....		75	2912	7A, 7B or 7C + 5
– toxic .....		76	2912	7A, 7B or 7C + 6.1
– harmful .....		70	2912	7A, 7B or 7C + 6.1A
– corrosive .....		78	2912	7A, 7B or 7C + 8
Radioactive material, not otherwise specified in this appendix .....	7, Sch 1 5, 6, 9, 10 and 11	70	2982	7A, 7B or 7C
– gas .....		72	2982	7A, 7B or 7C
– gas, inflammable .....		723	2982	7A, 7B or 7C + 3
– liquid, inflammable, having a flash-point below 55°C .....		73	2982	7A, 7B or 7C + 3
– solid, inflammable .....		74	2982	7A, 7B or 7C + 4.1
– oxidizing .....		75	2982	7A, 7B or 7C + 5
– toxic .....		76	2982	7A, 7B or 7C + 6.1
– harmful .....		70	2982	7A, 7B or 7C + 6.1A
– corrosive .....		78	2982	7A, 7B or 7C + 8
Resins in solution in inflammable liquids				
– having a flash-point below 21°C .....	3, 5	33	1866	3
– having a flash-point between 21°C and 55°C (limit values included) .....	3, 31(c)*	30	1866	3
– having a flash-point above 55°C .....	3, 32(c)*	30	1866	–
Resorcinol .....	6.1, 14(c)	60	2876	6.1A
Rosin oil .....	3, 31(c)	30	1286	3

\* See, however, Note 1 under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Rubber solution				
– with a flash-point below 21°C	3, 3(b)	33	1287	3
– with a flash-point between 21°C and 55°C	3, 31(c)	30	1287	3
– with a flash-point above 55°C	3, 32(c)	30	1287	–
Rubidium hydroxide, solutions of	8, 42(b)	80	2677	8
Selenates, selenites, solutions of	6.1, 55(a)	66	2630	6.1
Selenic acid, solutions of	8, 11(a)	88	1905	8
Selenium disulphide	6.1, 55(b)	60	2657	6.1
Selenium metal	6.1, 55(c)	60	2658	6.1A
Selenium oxychloride	8, 21(a)	886	2879	8
Silicochloroform: see Trichlorosilane				
Silicon tetrachloride (SiCl <sub>4</sub> )	8, 21(b)	80	1818	8
Soda lime (Mixture of caustic soda and quicklime)	8, 41(c)	80	1907	8
Soda lye: see Sodium hydroxide, solutions of				
Sodium	4, 3 1(a)	X423	1428	4.3
Sodium aluminate, solutions of	8, 42(b)	80	1819	8
Sodium arsenate	6.1, 51(b)	60	1685	6.1
Sodium arsenite, solid	6.1, 51(b)	60	2027	6.1
Sodium arsenite, aqueous solutions of				
– toxic	6.1, 51(b)	60	1686	6.1
– harmful	6.1, 51(c)	60	1686	6.1A
Sodium bifluoride	8, 26(b)	80	2439	8 + 6.1
Sodium bisulphate, aqueous solutions of	8, 1(b)	80	2837	8
Sodium bisulphate containing not less than 3% free sulphuric acid (H <sub>2</sub> SO <sub>4</sub> )	8, 23(b)	80	1821	8
Sodium chlorate, solid	5.1, 4(a)	50	1495	5
Sodium chlorate, solutions of	5.1, 4(a)	50	2428	5
Sodium chlorite, solutions of	5.1, 4(c)	50	1908	5
Sodium cuprocyanide, solutions of	6.1, 41(a)	66	2317	6.1
Sodium fluoride	6.1, 65(c)	60	1690	6.1A
Sodium hydrogen sulphide containing not less than 25% water of crystallization	8, 45(b)	80	2949	8
Sodium hydrogen sulphide, aqueous solution of	8, 45(c)	80	2949	8
Sodium hydroxide (Caustic soda)	8, 41(b)	80	1823	8
Sodium hydroxide, solutions of (Soda lye)	8, 42(b)	80	1824	8
Sodium methylate, alcoholic solutions of	3, 24(b)	338	1289	3 + 8
Sodium oxide	8, 41(b)	80	1825	8
Sodium pentachlorophenate	6.1, 17(b)	60	2567	6.1
Sodium potassium alloys	4.3, 1(a)	X423	1422	4.3
Sodium sulphide containing not less than 30% water of crystallization	8, 45(b)	80	1849	8
Sodium sulphide, aqueous solutions of	8, 45(c)	80	1849	8
Stannic chloride, anhydrous (SnCl <sub>4</sub> )	8, 21(b)	80	1827	8
Stannic chloride pentahydrate (SnCl <sub>4</sub> .5H <sub>2</sub> O)	8, 22(c)	80	2440	8
Styrene (Vinylbenzene)	3, 31(c)	39	2055	3
Sulphides, aqueous solutions of, not otherwise specified in this appendix	8, 45(c)	80	1719	8
Sulphur	4.1, 2(a)	40	1350	–

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Sulphur in the molten state . . . . .	4.1, 2(b)	44	2448	4.1
Sulphur dichloride (SCl <sub>2</sub> ) . . . . .	8, 21(a)	X88	1828	8
Sulphur dioxide . . . . .	2, 3(at)	26	1079	6.1 + 13
Sulphur hexafluoride . . . . .	2, 5(a)	20	1080	13
Sulphuric acid . . . . .	8, 1(b)	80	1830	8
Sulphuric acid, fuming: see Oleum . . . . .				
Sulphuric acid, mixtures with nitric acid: see Mixtures of sulphuric acid and nitric acid . . . . .				
Sulphuric acid, waste . . . . .	8, 1(b)	80	1832	8
Sulphurous acid . . . . .	8, 1(b)	80	1833	8
Sulphur trioxide . . . . .	8, 1(a)	X88	1829	8
Sulphuryl chloride (SO <sub>2</sub> Cl <sub>2</sub> ) . . . . .	8, 21(a)	X88	1834	8
Tars, liquid . . . . .	3, 32(c)	30	1999	—
Terpene hydrocarbons, not otherwise specified in this appendix				
— having a flash-point between 21°C and 55°C (limit values included) . . . . .	3, 31(c)	30	2319	3
— having a flash-point above 55°C . . . . .	3, 32(c)	30	2319	—
Terpinolene . . . . .	3, 31(c)	30	2541	3
1,1,2,2-Tetrabromoethane (Acetylene tetrabromide) . . . . .	6.1, 17(c)	60	2504	6.1A
1,1,2,2-Tetrachloroethane (Acetylene tetrachloride) . . . . .	6.1, 15(b)	60	1702	6.1
Tetrachloroethylene (Perchloroethylene) . . . . .	6.1, 15(c)	60	1897	6.1A
Tetrachlorophenols . . . . .	6.1, 17(c)	60	2020	6.1A
Tetraethylenepentamine . . . . .	8, 53(c)	80	2320	8
Tetraethyl lead . . . . .	6.1, 31(a)	66	1649	6.1
Tetraethyl silicate . . . . .	3, 31(c)	30	1292	3
1,2,3,6-Tetrahydrobenzaldehyde . . . . .	3, 32(c)	30	2498	—
Tetrahydrofuran . . . . .	3, 3(b)	33	2056	3
Tetrahydrofurfurylamine . . . . .	3, 31(c)	30	2943	3
Tetrahydrophthalic anhydride . . . . .	8, 31(c)	80	2698	8
1,2,3,6-Tetrahydropyridine . . . . .	3, 3(b)	33	2410	3
Tetrahydrothiophene . . . . .	3, 3(b)	33	2412	3
Tetramethoxysilane: see Methyl orthosilicate . . . . .				
Tetramethylammonium hydroxide . . . . .	8, 51(b)	80	1835	8
Tetramethylethylenediamine: see 1,2-Bis (dimethylamino) ethane . . . . .				
Tetramethyl lead . . . . .	6.1, 31(a)	663	1649	6.1 + 3
Tetramethylsilane . . . . .	3, 1(a)	33	2749	3
Tetranitromethane, free from combustible impurities . . . . .	5.1, 2	559	1510	5
Tetrapropylene (Propylene tetramer) . . . . .	3, 32(c)	30	2850	—
Tetrapropylorthotitanate . . . . .	3, 31(c)	30	2413	3
4-Thia-pentanal . . . . .	6.1, 20(c)	60	2785	6.1A
Thioacetic acid . . . . .	3, 3(b)	33	2436	3
Thioglycol: see Mercaptoethanol . . . . .				
Thioglycolic acid . . . . .	8, 32(b)	80	1940	8
Thiolactic acid . . . . .	6.1, 21(b)	60	2936	6.1
Thionyl chloride (SOCl <sub>2</sub> ) . . . . .	8, 21(a)	X88	1836	8

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Thiophene	3, 3(b)	33	2414	3
Thiophenol	6.1, 20(a)	663	2337	6.1 + 3
Thiophosgene	6.1, 20(b)	60	2474	6.1
Thiophosphoryl chloride (PSCl <sub>3</sub> )	8, 21(b)	80	1837	8
Tinctures, medicinal				
- with a flash-point below 21°C	3, 3(b)	33	1293	3
- with a flash-point between 21°C and 55°C	3, 31(c)	30	1293	3
- with a flash-point above 55°C	3, 32(c)	30	1293	-
Titanium tetrachloride (TiCl <sub>4</sub> )	8, 21(b)	80	1838	8
Titanium trichloride, mixtures of, non-pyrophoric	8, 22(b)	80	2869	8
Toluene	3, 3(b)	33	1294	3
Toluene sulphonic acids, solid	8, 34(c)	80	2585	8
Toluene sulphonic acids, solutions of	8, 34(c)	80	2586	8
Toluidines	6.1, 12(b)	60	1708	6.1
2,4-Toluylenediamine	6.1, 12(c)	60	1709	6.1A
2,4-Toluylene diisocyanate and isomeric mixtures	6.1, 19(b)	60	2078	6.1
Trenolite: see White asbestos				
Triallylamine	3, 31(c)	30	2610	3
Triallyl borate	6.1, 13(c)	60	2609	6.1A
Tributylamine	8, 53(c)	80	2542	8
Trichloroacetaldehyde (Chloral)	6.1, 16(b)	60	2075	6.1
Trichloroacetic acid	8, 31(b)	80	1839	8
Trichloroacetic acid, solutions of	8, 32(b)	80	2564	8
Trichloroacetyl chloride	8, 36(b)	X80	2442	8
Trichlorobenzenes	6.1, 17(c)	60	2321	6.1A
Trichlorobutene	6.1, 17(b)	60	2322	6.1
1,1,1-Trichloroethane	6.1, 15(c)	60	2831	6.1A
Trichloroethylene	6.1, 15(c)	60	1710	6.1A
Trichloromethylbenzene: see Benzotrichloride				
Trichlorophenols	6.1, 17(c)	60	2020	6.1A
Trichlorosilane (Silicochloroform)	4.3, 4(a)	X338	1295	4.3 + 3 + 8
Tricresylphosphate with more than 3% ortho isomer	6.1, 23(b)	60	2574	6.1
Triethylamine	3, 22(b)	338	1296	3 + 8
Triethyl borate	3, 3(b)	33	1176	3
Triethylenetetramine	8, 53(b)	80	2259	8
Triethyl phosphite	3, 31(c)	30	2323	3
Trifluoroacetic acid	8, 32(a)	88	2699	8
Trifluorochloroethylene (R 1113)	2, 3(ct)	236	1082	13
1,1,1-Trifluoroethane	2, 3(b)	23	2035	3 + 13
Trifluoromethane (R 23)	2, 5(a)	20	1984	13
2-Trifluoromethylaniline	6.1, 16(c)	60	2942	6.1A
3-Trifluoromethylaniline	6.1, 16(b)	60	2948	6.1
Triisobutylene (Isobutylene trimer)	3, 31(c)	30	2324	3
Triisocyanatoisocyanurate of isophoronediiisocyanate	3, 31(c)	30	2906	3
Triisopropyl borate, pure	3, 31(c)	30	2616	3
Triisopropyl borate, technical	3, 3(b)	33	2616	3

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Trimethyl acetyl chloride: see Pivaloyl chloride.....				
Trimethylamine, anhydrous.....	2, 3(bt)	236	1083	3 + 6.1 + 13
Trimethylamine, aqueous solutions of				
- having a boiling point not more than 35°C	3, 22(a)	338	1297	3 + 8
- having a boiling point higher than 35°C ..	3, 22(b)	338	1297	3 + 8
1,3,5-Trimethylbenzene: see Mesitylene.....				
Trimethyl borate.....	3, 3(b)	33	2416	3
Trimethylchlorosilane.....	3, 21(a)	X338	1298	3 + 8
Trimethylcyclohexylamine.....	8, 53(c)	80	2326	8
Trimethylhexamethylenediamine.....	8, 53(c)	80	2327	8
Trimethylhexamethylene diisocyanate and isomeric mixtures.....	6.1, 19(c)	60	2328	6.1A
2,6,6-Trimethyl norpinanyl hydroperoxide (Pinanyl hydroperoxide; Pinane hydroperoxide) with a peroxide content not exceeding 95%.....	5.2, 15	539	2162	5
Trimethyl phosphite.....	3, 31(c)	30	2329	3
Tripropylamine.....	8, 53(b)	83	2260	8 + 3
Tripropylene (Propylene trimer).....	3, 31(c)	30	2057	3
Turpentine.....	3, 31(c)	30	1299	3
Turpentine substitute: see Hydrocarbons, liquid.....				
Undecane.....	3, 32(c)	30	2330	-
Uranyl nitrate hexahydrate solution.....	7, Sch 5 or 6	78	2980	7A, 7B or 7C + 8
Valeraldehyde.....	3, 3(b)	33	2058	3
Valeryl chloride.....	8, 36(b)	80	2502	8
Vanadium oxytrichloride (VOCl <sub>3</sub> ).....	8, 21(b)	80	2443	8
Vanadium oxytrichloride (VOCl <sub>3</sub> ), aqueous solutions of.....	8, 5(b)	80	2443	8
Vanadium pentoxide.....	6.1, 58(b)	60	2862	6.1
Vanadium tetrachloride (VCl <sub>4</sub> ).....	8, 21(a)	88	2444	8
Vanadium trichloride (VCl <sub>3</sub> ).....	8, 22(c)	80	2475	8
Varnishes				
- having a flash-point below 21°C.....	3, 5	33	1263	3
- having a flash-point between 21°C and 55°C (limit values included).....	3, 31(c)*	30	1263	3
- having a flash-point above 55°C.....	3, 32(c)*	30	1263	-
Vinyl acetate.....	3, 3(b)	339	1301	3
Vinylbenzene: see Styrene.....				
Vinyl bromide.....	2, 3(ct)	236	1085	3 + 6.1 + 13

\* See, however, Note I under section D of marginal 301.

Name of substance (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Vinyl butyrate . . . . .	3, 3(b)	339	2838	3
Vinyl chloride . . . . .	2, 3(c)	239	1086	3 + 13
Vinyl chloroacetate . . . . .	6.1, 16(b)	60	2589	6.1
Vinyl ethyl ether . . . . .	3, 2(b)	339	1302	3
Vinyl fluoride . . . . .	2, 5(c)	239	1860	3 + 13
Vinylidene chloride . . . . .	3, 1(a)	339	1303	3
Vinylidene fluoride: see 1,1-Difluoroethylene.				
Vinyl isobutyl ether . . . . .	3, 3(b)	339	1304	3
Vinyl pyridines . . . . .	6.1, 11(b)	639	3073	6.1 + 3
Vinyl toluene, mixed isomers . . . . .	3, 31(c)	39	2618	3
Vinyltrichlorosilane . . . . .	3, 21(a)	X338	1305	3 + 8
White arsenic: see Arsenic trioxide . . . . .				
White asbestos (Actinolite, Anthophyllite, Chrysotile or Tremolite) . . . . .	9, 1(c)	90	2590	9
White spirit: see Hydrocarbons, liquid . . . . .				
Wood preservatives . . . . .				
– with a flash-point below 21°C . . . . .	3, 3(b)	33	1306	3
– with a flash-point between 21°C and 55°C . . . . .	3, 31(c)	30	1306	3
– with a flash-point above 55°C . . . . .	3, 32(c)	30	1306	–
Xenon . . . . .	2, 5(a)	20	2036	13
Xenon, deeply refrigerated . . . . .	2, 7(a)	22	2591	13
Xylenes (Dimethylbenzenes) . . . . .	3, 31(c)	30	1307	3
Xylenols . . . . .	6.1, 14(b)	60	2261	6.1
Xylidines . . . . .	6.1, 12(b)	60	1711	6.1
Xylyl bromide . . . . .	6.1, 17(b)	60	1701	6.1
Zinc alkyls, liable to spontaneous combustion, not otherwise specified in this appendix . . . . .	4.2, 3	X333	2003	4.2 + 4.3 + 13
Zinc alkyls, which give off inflammable gases on contact with water . . . . .	4.3, 2(e)	X323	2813	4.3
Zinc chloride (ZnCl <sub>2</sub> ) . . . . .	8, 22(c)	80	2331	8
Zinc chloride (ZnCl <sub>2</sub> ), aqueous solutions of . . . . .	8, 5(c)	80	1840	8
Zirconium tetrachloride (ZrCl <sub>4</sub> ) . . . . .	8, 22(c)	80	2503	8



Table II. *List for substances of Classes 3, 6.1 and 8 which are not listed by name in Table I and do not come under a collective heading given in that table, but which nevertheless must be assigned to those classes, and to which no specific "substance identification number" has been allocated*

Substances are grouped by class and item number, according to the hazards which they present during carriage.

NOTE. This table applies only to substances of Classes 3, 6.1 and 8 which are not given in Table I.

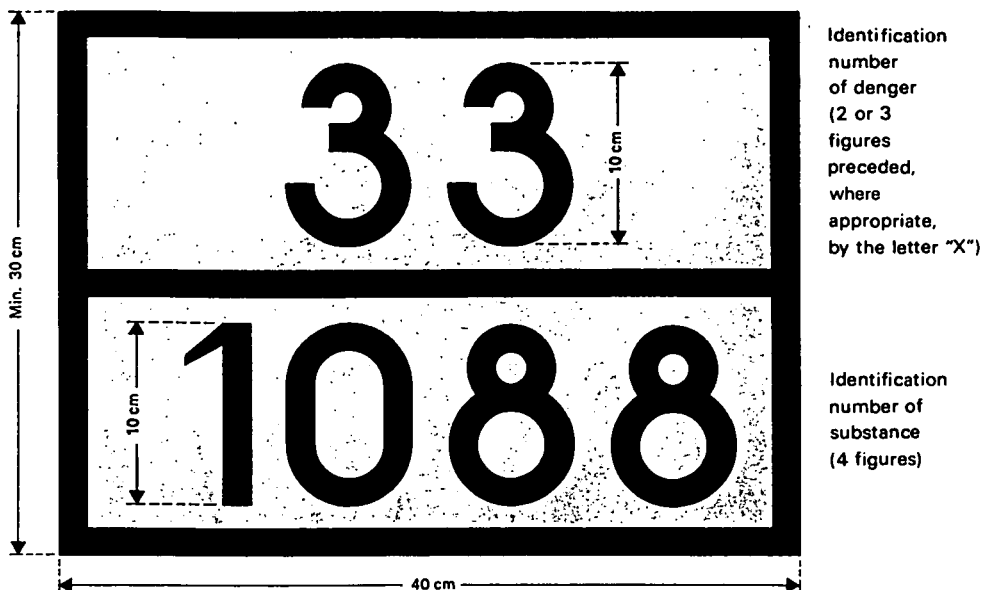
Group of substances (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Inflammable liquids having a flash-point below 21°C, not toxic and not corrosive . . . . .	3, 1-5	33	1993	3
Inflammable liquid substances and preparations used as pesticides, having a flash-point below 21°C, harmful . . . . .	3, 6	33	3021	3 + 6.1A
Inflammable liquids having a flash-point below 21°C, toxic . . . . .	3, 11, 14-18, 20	336	1992	3 + 6.1
Inflammable liquid substances and preparations used as pesticides, having a flash-point below 21°C, highly toxic or toxic . . . . .	3, 19	336	3021	3 + 6.1
Inflammable liquids having a flash-point below 21°C, corrosive . . . . .	3, 22-26	338	2924	3 + 8
Inflammable liquids having a flash-point between 21°C and 100°C, not toxic and not corrosive . . . . .	3, 31	30	1993	3
	3, 32	30	1993	—
Highly toxic liquids, inflammable, having a flash-point between 21°C and 55°C . . . . .	6.1, letter (a) of items 11, 13, 15, 16, 18, 20, 22, 24, 68	663	2929	6.1 + 3
Toxic liquids, inflammable, having a flash-point between 21°C and 55°C	6.1, letter (b) of items 11, 13, 15, 16, 18, 20, 22, 24, 68	63	2929	6.1 + 3
Harmful liquids, inflammable, having a flash-point between 21°C and 55°C . . . . .	6.1, letter (c) of items 11, 13, 15, 16, 18, 20, 22, 24, 68	63	2929	6.1A + 3

Group of substances (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Highly toxic liquids, non-inflam- mable or having a flash-point above 55°C .....	6.1, letter (a) of items 11-24, 55, 68	66	2810	6.1
Toxic liquids, non-inflammable or having a flash-point above 55°C. . .	6.1, letter (b) of items 11-24, 51-55, 57-61, 63-66, 68	60	2810	6.1
Harmful liquids, non-inflammable or having a flash-point above 55°C. . .	6.1, letter (c) of items 11-24, 51-55, 57-61, 63-66, 68	60	2810	6.1
Toxic solids, combustible. ....	6.1, letter (b) of items 11-24, 68	60	2930	6.1
Harmful solids, combustible. ....	6.1, letter (c) of items 11-24, 68	60	2930	6.1A
Toxic solids, not combustible. ....	6.1, letter (b) of items 24, 51- 55, 57-61, 63- 66, 68	60	2811	6.1
Harmful solids, not combustible . . .	6.1, letter (c) of items 24, 51- 55, 57-61, 63- 66, 68	60	2811	6.1A
Highly toxic liquid substances and preparations used as pesticides, inflammable, having a flash-point between 21°C and 55°C .....	6.1, letter (a) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	663	2903	6.1 + 3
Toxic liquid substances and prepara- tions used as pesticides, inflam- mable, having a flash-point be- tween 21°C and 55°C .....	6.1, letter (b) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	63	2903	6.1 + 3
Harmful liquid substances and prep- arations used as pesticides, inflammable, having a flash-point between 21°C and 55°C .....	6.1, letter (c) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	63	2903	6.1A + 3

Group of substances (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Highly toxic liquid substances and preparations used as pesticides, non-inflammable or having a flash-point above 55°C .....	6.1, letter (a) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	66	2902	6.1
Toxic liquid substances and preparations used as pesticides, non-inflammable or having a flash-point above 55°C .....	6.1, letter (b) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	60	2902	6.1
Harmful liquid substances and preparations used as pesticides, non-inflammable or having a flash-point above 55°C .....	6.1, letter (c) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	60	2902	6.1A
Toxic solid substances and preparations used as pesticides .....	6.1, letter (b) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	60	2588	6.1
Harmful solid substances and preparations used as pesticides .....	6.1, letter (c) of items 74, 75, 77, 78, 80, 81, 83, 85, 88	60	2588	6.1A
Highly toxic halogenated liquids, irritant, with a flash-point between 21°C and 55°C .....	6.1, letter (a) of items 15 and 16	663	1610	6.1 + 3
Toxic halogenated liquids, irritant, with a flash-point between 21°C and 55°C .....	6.1, letter (b) of items 15 and 16	63	1610	6.1 + 3
Highly toxic halogenated liquids, irritant, non-inflammable or with a flash-point above 55°C .....	6.1, letter (a) of items 15-17	66	1610	6.1
Toxic halogenated liquids, irritant, non-inflammable or with a flash-point above 55°C .....	6.1, letter (b) of items 15-17	60	1610	6.1

Group of substances (a)	Class and item number (b)	Hazard identi- fication number (upper part) (c)	Substance identi- fication number (lower part) (d)	Danger label Model Nos. (e)
Highly corrosive liquids, inflamma- ble, having a flash-point between 21°C and 55°C .....	8, letter (a) of items 27, 32, 33, 36, 37, 39, 46, 55, 64, 66	883	2920	8 + 3
Corrosive or slightly corrosive liquids, inflammable, having a flash-point between 21°C and 55°C .....	8, letters (b) and (c) of items 27, 32, 33, 36, 38, 39, 46, 51, 53- 55, 64, 66	83	2920	8 + 3
Highly corrosive liquids, non-inflam- mable or having a flash-point above 55°C .....	8, letter (a) of items 1, 3, 10, 11, 21, 27, 32, 33, 36, 37, 39, 46, 55, 64, 66	88	1760	8
Corrosive or slightly corrosive liquids, non-inflammable or having a flash-point above 55°C .....	8, 26 (a)	88	1760	8 + 6.1
Corrosive or slightly corrosive liquids, non-inflammable or having a flash-point above 55°C .....	8, letters (b) and (c) of items 1, 3, 5, 10, 11, 21, 23, 27, 32, 33, 36, 38, 39, 46, 51, 53-55, 64, 66	80	1760	8
Corrosive or slightly corrosive solids, combustible .....	8, 26 (b) or (c)	80	1760	8 + 6.1
Corrosive or slightly corrosive solids, not combustible .....	8, letters (b) and (c) of items 27, 31, 33, 35, 38, 39, 46, 51, 52, 54, 55, 64, 65	80	2921	8
Corrosive or slightly corrosive solids, not combustible .....	8, letters (b) and (c) of items 11, 22, 27, 31, 33, 35, 38, 39, 41, 45, 46, 55, 65	80	1759	8
	8, 26 (b) or (c)	80	1759	8 + 6.1

1802 Identification numbers shall be shown as follows:



Background: orange;  
Border, horizontal line and figures: black,  
15mm thickness

1803-  
1899

## APPENDIX IX

### 1. REQUIREMENTS RELATING TO DANGER LABELS

NOTE. For packages, see also marg. 14.

1900 (1) For packages, labels Nos. 1, 1.4, 1.5, 3, 4.1, 4.2, 4.3, 5, 6.1, 6.1A, 7A, 7B, 7C, 8 and 9 shall take the form of a diamond-shaped square each side of which measures 100 mm.

If the size of a package so requires, the dimensions of the labels may be reduced, provided that they remain clearly visible.

For wagons, labels Nos. 1, 1.4, 1.5, 3, 4.1, 4.2, 4.3, 5, 6.1, 6.1A, 7D, 8 and 9 shall take the form of a diamond-shaped square each side of which measures at least 150 mm. This also applies to labels Nos. 7A, 7B or 7C when these are used instead of label No. 7D.

Danger labels shall be affixed to wagons in such a way that they remain clearly visible during carriage.

Danger labels for tank-containers of more than 3 m<sup>3</sup> capacity or large containers shall measure at least 250 × 250 mm. This also applies to labels Nos. 7A, 7B or 7C when these are used instead of label No. 7D.

(2) Labels Nos. 10, 11 and 12 shall be rectangular, of standard format A5 (148 × 210 mm). If the size of a package so requires, the dimensions of the labels may be reduced, provided that they remain clearly visible.

(3) Label No. 13 shall have the shape of a rectangle not smaller than A7 format (74 mm × 105 mm).

(4) An inscription, in figures or letters, concerning the nature of the danger may be placed on the lower part of the labels.

(5) Inscriptions on danger labels shall be clearly legible and indelible.

1901

(1) Danger labels shall be stuck on packages, on wagons and tank-wagons, on tank containers and on small containers or affixed in some other suitable manner. Only in the case where the external state of a package will not allow this, should they be stuck on cards or tablets securely attached to the package. In place of labels, consignors may affix on packing cases, on wagons and tank-wagons, on tank containers and on private small containers indelible danger markings corresponding exactly to the prescribed models. However, where an indelible marking conforming to model No. 13 is affixed to wagons and tank-wagons, this may simply consist of the red triangle with a black exclamation mark (at least 100 mm base by 70 mm height).

(2) It is the consignor's duty to affix the labels:

(a) On packages whether handed over for carriage in full wagon loads or otherwise;

(b) On all containers;

(c) On wagons carrying full wagon loads;

(d) On wagons containing packages loaded by the sender.

(3) In all other cases, it is the duty of the railway to label the wagons.

(4) In addition to the danger labels prescribed in RID, danger labels conforming to the requirements of other modes of transport may be affixed on packages, small containers, large containers and tank-containers containing dangerous goods which are carried at the beginning and end of the journey by rail and whose labelling shall comply with the provisions of the said requirements.

(5) After all dangerous goods have been unloaded and, where necessary, after the wagon, tank wagon, tank-container or container has been cleaned, the labels shall be removed or covered up.

## 2. EXPLANATION OF THE DIAGRAMS

1902

The danger labels prescribed for substances and articles of Classes 1 to 9 (see illustrations pages [559-560] denote:

No. 1 Black on orange background; liable to explosion, divisions bomb blast in upper half; appropriate division number and compatibility group letter in lower half; figure "1" in bottom corner: 1.1, 1.2 and 1.3;

No. 1.4 Black on orange background; liable to explosion, division number "1.4" filling most of the upper half; appropriate compatibility group letter in the lower half; figure "1" in bottom corner: division 1.4;

No. 1.5 Black on orange background; liable to explosion, division number "1.5" filling most of division 1.5;

	the upper half; appropriate compatibility group letter in the lower half; figure "1" in bottom corner:	
No. 3	Black or white flame on red background:	danger of fire (inflammable liquid);
No. 4.1	Black flame on background consisting of equidistant vertical stripes alternately red and white:	danger of fire (inflammable solid);
No. 4.2	Black flame on white background, the lower triangle of the label being red:	liable to spontaneous combustion;
No. 4.3	Black or white flame on blue background:	danger of release of inflammable gases on contact with water;
No. 5	Flame above a circle, black on yellow background:	oxidizing substance or organic peroxide;
No. 6.1	Skull and cross bones, black on white background:	toxic substance; to be kept apart in wagons and goods depots from foodstuffs or other articles for consumption;
No. 6.1A	St. Andrew's Cross on ear of corn, black on white background:	harmful substance; to be kept apart in wagons and goods depots from foodstuffs or other articles for consumption;
No. 7A	Stylised trefoil, inscription "RADIOACTIVE" followed by a vertical stripe in the lower half, with the following text: Contents. . . Activity. . . Small figure "7" in bottom corner; Symbol and inscription black on white background, vertical stripe red:	radioactive material in packages of Category I-WHITE; in the event of damage to packages, danger to health by ingestion or inhalation of, or contact with, spilled contents;
No. 7B	As above, but with two vertical stripes in the lower half, with the following text: Contents. . . Activity. . . Transport Index. . . (in the rectangular black-bordered box); small figure "7" in bottom corner; symbol and inscription black; upper half of background: yellow; lower half of background white: red vertical stripes:	radioactive material in packages of Category II-YELLOW; packages to be kept away from packages bearing a label with the word "FOTO" [see marg. 711 (1)]; in the event of damage to packages, danger to health by ingestion, or inhalation of, or contact with, spilled contents, as well as risk from external radiation at a distance;

\* The text must be printed in an official language of the country of origin and, in addition, in French, German, Italian or in English unless international tariffs or agreements concluded between railway administrations arrange otherwise.

- |        |   |   |
|--------|---|---|
| No. 7C | As above, but with three vertical stripes in the lower half:  | radioactive material in packages of Category III-YELLOW; packages to be kept away from packages bearing a label with the word "FOTO" [see marg. 711 (1)]; in the event of damage to packages, danger to health by ingestion or inhalation of, or contact with, spilled contents, as well as risk from external radiation at a distance; |
| No. 7D | Stylised trefoil, inscription "RADIOACTIVE" and figure "7"; black symbol and inscription; upper half of background: yellow; lower half of background: white. Instead of the word "RADIOACTIVE", the substance identification number may appear in the lower half: | radioactive material presenting the dangers described under 7A, 7B or 7C;   |
| No. 8  | Drops falling from a test-tube on to a plate and from another test-tube on to a hand; black on white background, the lower half of the label being black with a white border:   | corrosive substance;  |
| No. 9  | White background with seven black vertical stripes in the upper half and black figure "9" in the lower half:  | miscellaneous substances and articles which, during carriage, present dangers other than those covered by the other classes;  |
| No. 10 | Open black umbrella and six black drops of water on white or suitable contrasting background:   | to be kept dry;   |
| No. 11 | Two black arrows on white or suitable contrasting background:   | this side up; label to be affixed, arrows pointing upwards;   |
| No. 12 | Black wineglass on white or suitable contrasting background:  | fragile, or: handle with care;  |
| No. 13 | Red triangle with an exclamation mark in black on white background:   | shunt with care;  |
| No. 14 | (Reserved)  |   |
| No. 15 | Three triangles, red with black exclamation mark:   | loose shunting or hump shunting forbidden. Shall be accompanied by a motive power unit. Shall not bump, or be bumped by, other wagons.  |

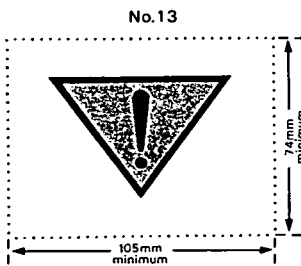
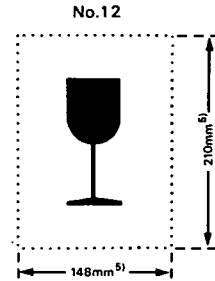
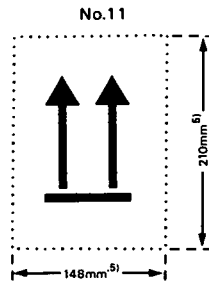
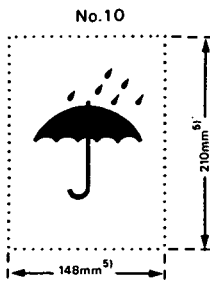
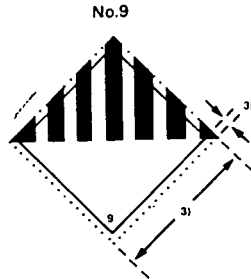
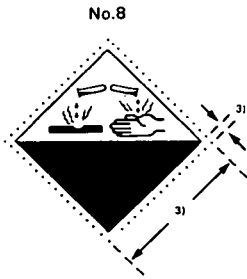
1903 *Transitional provisions*

Danger labels which until 1 January 1988 conformed to the prescribed models Nos. 7A, 7B, 7C, 10, 11, 12 and 13 may be used until stocks are exhausted.

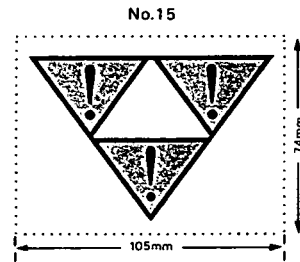
1904-  
1999







No.14  
(Reserved)



<sup>(3)</sup> For dimensions, see label No. 1.

<sup>(5)</sup> The dimensions of the labels to be affixed to packages may be reduced to A7 format (74 mm × 105 mm).

## APPENDIX X

REQUIREMENTS CONCERNING THE USE, CONSTRUCTION  
AND TESTING OF TANK-CONTAINERS

(Editorial Note: For footnotes, see p. 590)

1. *Requirements applicable to all classes*
- 1.1 *General; scope; definitions*
- 1.1.1 These requirements shall apply to tank-containers of a capacity of more than 0.45 cubic metre which are used for the carriage of liquid, gaseous, powdery or granular substances, and to their fittings and accessories.
- 1.1.2 Part 1 sets out the requirements applicable to tank-containers intended for the carriage of substances of all classes. Parts 2 to 9 contain special requirements supplementing or modifying the requirements of Part 1.
- 1.1.3 A tank-container shall comprise a shell and items of equipment, including equipment to facilitate movement of the tank-container without significant change of attitude.
- 1.1.4 In the following requirements:
- 1.1.4.1 — “Shell” means the tank proper (including the openings and their closures);  
 — “Service equipment” of the shell means the filling, emptying, venting, safety, heating and heat-insulating devices, and measuring instruments;  
 — “Structural equipment” means the internal or external reinforcing, fastening, protective or stabilizing members of the shell;
- 1.1.4.2 — “Calculation pressure” means a theoretical pressure, at least equal to the test pressure, which according to the degree of danger exhibited by the substance being carried may to a greater or lesser degree exceed the working pressure. It is used solely to determine the thickness of the walls of the shell, independently of any external or internal reinforcing device;  
 — “Test pressure” means the highest effective pressure which arises in the shell during the pressure test;  
 — “Filling pressure” means the maximum pressure actually built up in the shell when it is being filled under pressure;  
 — “Discharge pressure” means the maximum pressure actually built up in the shell when it is being discharged under pressure;  
 — “Maximum working pressure (gauge pressure)” means the highest of the following three pressures:  
 (a) The highest effective pressure allowed in the shell during filling (“maximum filling pressure allowed”);  
 (b) The highest effective pressure allowed in the shell during discharge (“maximum discharge pressure allowed”); and  
 (c) The effective gauge pressure to which the shell is subjected by its contents (including such extraneous gases as it may contain) at the maximum working temperature;  
 unless specially prescribed otherwise in the various classes, the numerical value of this working pressure (gauge pressure) shall not be lower than the vapour pressure (absolute pressure) of the filling substance at 50°C.

For shells equipped with safety valves (with or without bursting disc), the maximum working pressure (gauge pressure) shall however be equal to the prescribed opening pressure of such safety valves.

- 1.1.4.3 — “Leakproofness test” means a test which consists of subjecting the shell to an effective internal pressure equal to the maximum working pressure, but not less than 20 kPa (0.2 bar) (gauge pressure), by a method recognized by the competent authority.

For shells equipped with venting systems and a safety device to prevent the contents spilling out if the shell overturns, the pressure for the leakproofness test shall be equal to the static pressure of the filling substance.

## 1.2 *Construction*

- 1.2.1 Shells shall be designed and constructed in accordance with the provisions of a technical code recognized by the competent authority, but the following minimum requirements shall be met:

- 1.2.1.1 Shells shall be made of suitable metallic materials which, unless other temperature ranges are prescribed in the various classes, shall be resistant to brittle fracture and to stress corrosion cracking at a temperature between  $-20^{\circ}\text{C}$  and  $+50^{\circ}\text{C}$ .

- 1.2.1.2 For welded shells, only materials of faultless weldability whose adequate impact strength at an ambient temperature of  $-20^{\circ}\text{C}$  can be guaranteed, particularly in the weld seams and the zones adjacent thereto, shall be used.

Water-quenched steel shall not be used for welded steel shells. If fine-grained steel is used, the guaranteed value of the yield stress  $R_e$  shall not exceed  $460\text{ N/mm}^2$  and the value of the upper limit of guaranteed tensile strength  $R_m$  shall not exceed  $725\text{ N/mm}^2$  in accordance with the specifications relating to the material.

- 1.2.1.3 Welds shall be skilfully made and shall afford the fullest safety.

With regard to the execution and checking of weld beads, see also 1.2.8.6.

Shells whose minimum wall thicknesses have been determined in accordance with 1.2.8.3 and 1.2.8.4 shall be checked by the methods described in the definition of the weld coefficient 0.8.

- 1.2.1.4 The materials of shells or their protective linings which are in contact with the contents shall not contain substances liable to react dangerously with the latter, to form dangerous compounds, or substantially to weaken the material.

- 1.2.1.5 The protective lining shall be so designed that its leakproofness remains intact whatever the deformation liable to occur in normal conditions of carriage (1.2.8.1).

- 1.2.1.6 If contact between the substance carried and the material used for the construction of the shell entails a progressive decrease in the thickness of the walls, this thickness shall be increased at manufacture by an appropriate amount.

This additional thickness to allow for corrosion shall not be taken into consideration in calculating the thickness of the shell walls.

- 1.2.2 Shells and their service and structural equipment shall be designed to withstand without loss of contents (other than quantities of gas escaping through any degassing vents):

— The static and dynamic stresses in normal conditions of carriage;

— The prescribed minimum stresses as defined in 1.2.6 and 1.2.8.

- 1.2.3 The pressure on which the wall thickness of the shell is based shall be not less than the calculation pressure, but the stresses referred to in 1.2.2 shall also be taken into account.

- 1.2.4 Unless specially prescribed otherwise in the various classes, the following particulars shall be taken into account in the design of shells:
- 1.2.4.1. — Gravity-discharge shells intended for the carriage of substances having a vapour pressure not exceeding 110 kPa (1.1 bar) (absolute pressure) at 50°C shall be designed for a calculation pressure of twice the static pressure of the substance to be carried but not less than twice the static pressure of water;
- 1.2.4.2 — Pressure-filled or pressure-discharge shells intended for the carriage of substances having a vapour pressure not exceeding 110 kPa (1.1 bar) (absolute pressure) at 50°C shall be designed for a calculation pressure equal to 1.3 times the filling or discharge pressure;
- 1.2.4.3 — Shells intended for the carriage of substances having a vapour pressure of more than 110 kPa (1.1 bar) but not more than 175 kPa (1.75 bar) (absolute pressure) at 50°C shall, whatever their filling or discharge system, be designed for a calculation pressure of not less than 0.15 MPa (1.5 bar) (gauge pressure), or 1.3 times the filling or discharge pressure, whichever is the higher;
- 1.2.4.4 — Shells intended for the carriage of substances having a vapour pressure of more than 175 kPa (1.75 bar) (absolute pressure) at 50°C shall, whatever their filling or discharge system, be designed for a calculation pressure equal to 1.3 times the filling or discharge pressure but not less than 0.4 MPa (4 bar) (gauge pressure).
- 1.2.5 Tank-containers intended to contain certain dangerous substances shall be provided with additional protection. This may take the form of additional thickness of the shell (such additional thickness being determined in the light of the dangers inherent in the substances concerned; see the various classes) or of a protective device.
- 1.2.6 At the test pressure, the stress  $\sigma$  (sigma) at the most severely stressed point of the shell shall not exceed the material-dependent limits prescribed below. Allowance shall be made for any weakening due to the welds. In addition, in choosing the material and determining wall thickness, the maximum and minimum filling and working temperatures should be taken into account.
- 1.2.6.1 For metals and alloys exhibiting a clearly-defined yield point or characterized by a guaranteed conventional yield stress  $R_e$  (generally 0.2% of residual elongation and, in the case of austenitic steels, 1% of maximum elongation):
- 1.2.6.1.1 — Where the ratio  $R_e/R_m$  is not more than 0.66 ( $R_e$  = apparent yield stress or 0.2% proof stress or 1% proof stress in the case of austenitic steels;  $R_m$  = guaranteed minimum tensile strength):  $\sigma \leq 0.75 R_e$
- 1.2.6.1.2 — Where the ratio  $R_e/R_m$  exceeds 0.66:  $\sigma \leq 0.5 R_m$ .
- For welded steel shells, the ratio  $R_e/R_m$  shall not be greater than 0.85
- 1.2.6.2 For metals and alloys exhibiting no apparent yield stress and characterized by a guaranteed minimum tensile strength  $R_m$ :  $\sigma \leq 0.43 R_m$ .
- 1.2.6.3 For steel, the elongation at fracture, in per cent, shall be not less than  $\frac{10,000}{\text{determined tensile strength in N/mm}^2}$  but in any case it shall be not less than 16% for fine-grained steels and not less than 20% for other steels.
- For aluminium alloys, the elongation at fracture shall be not less than 12%.<sup>(1)</sup>
- 1.2.7 All parts of a tank-container intended for the carriage of liquids having a flash-point of not more than 55°C and for the carriage of inflammable gases shall

be capable of being electrically earthed. Any metal contact which might encourage electrochemical corrosion shall be avoided.

1.2.8 Tank-containers shall be capable of absorbing the stresses specified in 1.2.8.1, and the wall thickness of the shells shall be at least as prescribed in 1.2.8.2 to 1.2.8.5 below.

1.2.8.1 Tank-containers and their fastenings shall, under the maximum permissible load mass, be capable of absorbing the stresses exerted by:

- In the direction of travel: twice the total mass;
- Horizontally at right angles to the direction of travel: the total mass (where the direction of travel is not clearly determined, twice the total mass in each direction);
- Vertically upwards: the total mass; and
- Vertically downwards: twice the total mass.

Under each of these forces the safety factors to be observed shall be the following:

- For metals having a clearly-defined yield point: a safety factor of 1.5 in relation to the apparent yield stress; or
- For metals with no clearly-defined yield point: a safety factor of 1.5 in relation to the guaranteed 0.2% proof stress (1% maximum elongation for austenitic steels).

1.2.8.2 The thickness of the cylindrical wall of the shell and of the ends and cover plates shall be not less than the value determined by the following formula:

$$e = \frac{P_{Pa} \times D}{2 \times \sigma \times \lambda} \text{ mm} \quad e = \frac{P_{bar} \times D}{20 \times \sigma \times \lambda} \text{ mm}$$

where  $P_{Pa}$  = calculation pressure in MPa;

$P_{bar}$  = calculation pressure in bar;

$D$  = internal diameter of shell in mm;

$\sigma$  = permissible stress as defined in 1.2.6.1.1, 1.2.6.1.2 and 1.2.6.2. in  $N/mm^2$ ;

$\lambda$  = a coefficient not exceeding 1, allowing for any weakening due to welds.

The thickness shall in no case be less than the values prescribed in 1.2.8.3 and 1.2.8.4.

1.2.8.3 The walls, ends and cover plates of shells shall be not less than 5 mm thick if of mild steel<sup>(2)</sup> (in conformity with the provisions of 1.2.6) or of equivalent thickness if of another metal. Where the diameter exceeds 1.80 m this thickness shall be increased to 6 mm if the shell is of mild steel<sup>(2)</sup> (in conformity with the provisions of 1.2.6) or to an equivalent thickness if of another metal.

Whatever the metal used, the minimum thickness of the shell wall shall never be less than 3 mm.

“Equivalent thickness” means the thickness obtained by the following formula:<sup>(3)</sup>

$$e_1 = \frac{21.4 \times e_0}{\sqrt[3]{Rm_1 \times A_1}}$$

1.2.8.4 Where protection of the shell against damage is provided, the competent authority may allow the aforesaid minimum thicknesses to be reduced in

proportion to the protection provided; however, the said thicknesses shall be not less than 3 mm in the case of mild steel,<sup>(2)</sup> or than an equivalent thickness in the case of other materials, for shells not more than 1.80 m in diameter.<sup>(4)</sup> For shells of a diameter exceeding 1.80 m<sup>(4)</sup> this minimum thickness shall be increased to 4 mm in the case of mild steel<sup>(2)</sup> and to an equivalent thickness in the case of other metals. "Equivalent thickness" means the thickness obtained by the following formula:<sup>(3)</sup>

$$e_1 = \frac{21.4 \times e_0}{\sqrt[3]{Rm_1 \times A_1}}$$

- 1.2.8.5 The additional protection referred to under 1.2.8.4 may consist of  
 over-all external structural protection as in "sandwich" construction where the sheathing is secured to the shell, or  
 a structure in which the shell is supported by a complete skeleton including longitudinal and transverse structural members, or  
 double-wall construction.

Where the shells are made with double walls, the space between being evacuated of air, the aggregate thickness of the outer metal wall and the shell wall shall correspond to the minimum wall thickness prescribed in 1.2.8.3, the thickness of the wall of the shell itself being not less than the minimum thickness prescribed in 1.2.8.4.

Where shells are made with double walls with an intermediate layer of solid materials at least 50 mm thick, the outer wall shall have a thickness of not less than 0.5 mm if it is made of mild steel<sup>(2)</sup> or at least 2 mm if it is made of a plastics material reinforced with glass fibre. Solid foam with an impact absorption capacity such as that, for example, of polyurethane foam, may be used as the intermediate layer of solid material.

- 1.2.8.6 The manufacturer's qualification for performing welding operations shall be one recognized by the competent authority. Welding shall be performed by skilled welders using a welding process whose effectiveness (including any heat treatments required) has been demonstrated by test. Non-destructive tests shall be carried out by radiography or by ultrasound and shall confirm that the quality of the welding is appropriate to the stresses.

In determining the thickness of the shell walls in accordance with 1.2.8.2, the following values of the coefficient lambda ( $\lambda$ ) should be adopted for the welds:

- 0.8: where the weld beads are so far as possible inspected visually on both faces and are subjected to a non-destructive spot check with particular attention to connections;  
 0.9: where all longitudinal beads throughout their length, all connections, 25% of circular beads, and welds for the assembly of large-diameter items of equipment are subjected to non-destructive checks. Beads shall be checked visually on both sides as far as possible;  
 1.0: where all beads are subjected to non-destructive checks and are so far as possible inspected visually on both sides. A weld test-piece shall be taken.

Where the competent authority has doubts regarding the quality of weld beads, it may require additional checks.

- 1.2.8.7 Measures shall be taken to protect shells against the risk of deformation as a result of a negative internal pressure.

- 1.2.8.8 The thermal insulation shall be so designed as not to hinder access to, or the operation of, filling and discharge devices and safety valves.

### 1.3 *Items of equipment*

1.3.1 The items of equipment shall be so arranged as to be protected against the risks of being wrenched off or damaged during carriage and handling. They shall exhibit a suitable degree of safety comparable to that of the shells themselves and shall in particular:

- Be compatible with the substances carried;
- Meet the requirements of 1.2.2.

The leakproofness of the service equipment shall be ensured even in the event of the overturning of the tank-container.

The gaskets shall be made of material compatible with the substance carried and shall be replaced as soon as their effectiveness is impaired, for example as a result of ageing.

Gaskets ensuring the leakproofness of fittings requiring manipulation during normal use of the tank-containers shall be so designed and arranged that manipulation of the fittings incorporating them does not damage them.

1.3.2 Every bottom-discharge shell, and in the case of compartmented bottom-discharge shells every compartment, shall be equipped with two mutually independent shut-off devices, the first being an internal stop-valve<sup>(5)</sup> fixed directly to the shell and the second being a sluice-valve or other equivalent device,<sup>(6)</sup> mounted in series, one at each end of the discharge pipe. In addition, the openings shall be capable of being closed by means of screw-threaded plugs, blank flanges or other equally effective devices.

The internal stop-valve may be operated from above or from below. In both cases its setting — open or closed — shall be capable of being verified, from the ground if possible. The control devices shall be so designed as to prevent any unintended opening through impact or an inadvertent act.

The internal shut-off device shall continue to be effective in the event of damage to the external control device.

In order to avoid any loss of contents in the event of damage to the external discharge fittings (pipes, lateral shut-off devices), the internal stop-valve and its seating shall be protected against the danger of being wrenched off by external stresses or shall be so designed as to resist them. The filling and discharge devices (including flanges or threaded plugs) and any protective caps shall be secured against any inadvertent opening.

The position and/or direction of closure of the sluice valves shall be clearly apparent.

1.3.3 The shell or each of its compartments shall be provided with an opening large enough to permit its inspection.

1.3.4 Shells intended for the carriage of substances for which all openings are above the surface level of the liquid may be equipped, in the lower part of the body, with a cleaning aperture (first-hole). This aperture shall be capable of being sealed by a flange so closed as to be leakproof, the design of which shall be approved by the competent authority or by a body designated by that authority.

1.3.5 Shells intended for the carriage of liquids having a vapour pressure of not more than 110 kPa (1.1 bar) (absolute pressure) at 50°C shall have a venting system and a safety device to prevent the contents from spilling out of the shell if the tank-container overturns, or shall conform to the requirements of 1.3.6 or 1.3.7 below.

1.3.6 Shells intended for the carriage of liquids having a vapour pressure of more than 110 kPa (1.1 bar) but not more than 175 kPa (1.75 bar) (absolute pressure) at



50°C shall have a safety valve set at not less than 150 kPa (1.5 bar) (gauge pressure) and such that it is fully open at a pressure not exceeding the test pressure; or shall conform to the requirements of 1.3.7.

1.3.7 Shells intended for the carriage of liquids having a vapour pressure of more than 175 kPa (1.75 bar) but not more than 300 kPa (3 bar) (absolute pressure) at 50°C shall be equipped with a safety valve set at a gauge pressure of not less than 300 kPa (3 bar) and such that it is fully open at a pressure not exceeding the test pressure; or shall be hermetically closed.<sup>(7)</sup>

1.3.8 No movable parts such as covers, closure devices, etc., which are liable to come into frictional or percussive contact with aluminium shells intended for the carriage of inflammable liquids having a flash-point of not more than 55°C or for the carriage of inflammable gases may be made of unprotected corrodible steel.

1.4 *Type approval*

The competent authority or a body designated by that authority shall issue in respect of each new type of tank-container a certificate attesting that the prototype tank-container, including fastenings, which it has surveyed is suitable for the purpose for which it is intended and meets the construction requirements of Section 1.2, the equipment requirements of Section 1.3 and the special conditions for the classes of substance carried. If the tank-containers are serially manufactured without modification, this approval shall be valid for the entire series. The test results, the substances and/or the groups of substances for the carriage of which the tank-container is approved and a type approval number shall be entered in a test report.

The substances of a group of substances shall be of a similar kind and equally compatible with the characteristics of the shell. The substances or groups of substances permitted shall be specified in the test report, with their chemical names or the corresponding collective heading in the list of substances, and their class and item number. The approval number shall consist of the distinguishing sign<sup>(8)</sup> of the State in whose territory the approval was granted, and a registration number.

1.5 *Tests*

1.5.1 Shells and their equipment shall either together or separately undergo an initial inspection before being put into service. This inspection shall include:

- A check of conformity to the approved prototype;
- A check of the design characteristics;<sup>(9)</sup>
- An external and internal examination;
- A hydraulic pressure test<sup>(10)</sup> at the test pressure indicated on the data plate; and
- A check of satisfactory operation of the equipment.

The hydraulic pressure test shall be carried out before the installation of such thermal insulation as may be necessary. If the shells and their equipment have been tested separately, they shall be jointly subjected to a leakproofness test after assembly in accordance with 1.1.4.3.

1.5.2 Shells and their equipment shall undergo periodic inspections at fixed intervals. The periodic inspections shall include an external and internal examination and, as a general rule, a hydraulic pressure test.<sup>(10)</sup> Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the shell's characteristics.

In the case of shells intended for the carriage of powdery or granular substances, and with the agreement of the expert approved by the competent authority, the periodic hydraulic pressure tests may be omitted and replaced by leakproofness tests in accordance with 1.1.4.3.

The maximum intervals for periodic inspections shall be five years.

Empty tank-containers, uncleaned, may also be moved after expiration of the fixed period for the purpose of undergoing the test.

1.5.3 In addition, a leakproofness test of the shell with its equipment in accordance with 1.1.4.3 and a check of the satisfactory operation of all the equipment shall be carried out at least every two and a half years.

1.5.4 When the safety of the shell or of its equipment may have been impaired as a result of repairs, alterations or accident, an exceptional check shall be carried out.

1.5.5 The tests, inspections and checks in accordance with 1.5.1 to 1.5.4 shall be carried out by the expert approved by the competent authority. Certificates shall be issued showing the results of these operations.

## 1.6 *Marking*

1.6.1 Each shell shall be fitted with a corrosion-resistant metal plate permanently attached to the shell in a place readily accessible for inspection. The following particulars at least shall be marked on the plate by stamping or by any other similar method. These particulars may be engraved directly on the walls of the shell itself if the walls are so reinforced that the strength of the shell is not impaired:

- Approval number;
- Manufacturer's name or mark;
- Manufacturer's serial number;
- Year of manufacture;
- Test pressure<sup>(11)</sup> (gauge pressure);
- Capacity;<sup>(11)</sup> in the case of multiple-element tank-containers: the capacity of each element;
- Design temperature<sup>(11)</sup> (only if above 50°C or below -20°C);
- Date (month and year) of initial test and of most recent periodic test in accordance with 1.5.1. and 1.5.2;
- Stamp of the expert who carried out the tests; and
- Material of the shell and, where appropriate, the protective lining.

On pressure-filled or pressure-discharge shells the maximum permissible working pressure<sup>(11)</sup> allowed shall be inscribed in addition.

1.6.2 The following particulars shall be inscribed either on the tank-container itself or on a panel:

- Names of the owner and of the operator;
- Capacity<sup>(11)</sup> of the shell;
- Unladen (tare) mass;<sup>(11)</sup>
- Maximum permissible laden mass;<sup>(11)</sup>
- Names of the substance being carried.<sup>(12)</sup>

In addition, tank-containers shall bear the prescribed danger labels.

## 1.7 *Operation*

1.7.1 During carriage, tank-containers shall be loaded on the wagon in such a way as to be adequately protected by the fittings of the wagon or of the tank-container itself against lateral and longitudinal impact and against overturning.<sup>(13)</sup> If the shells and the service equipment are so constructed as to withstand impact or

overturning they need not be protected in this way. The thickness of the walls of the shell shall remain, throughout its period of use, not less than the minimum value prescribed in 1.2.8.

1.7.2 Shells shall not be loaded with any dangerous substances other than those for whose carriage they have been approved and which, in contact with the materials of the shell, gaskets, equipment and protective linings, are not liable to react dangerously with them, to form dangerous products or appreciably to weaken the material. Foodstuffs shall not be carried in these shells unless the necessary steps have been taken to prevent any harm to public health.

1.7.3 The following degrees of filling shall not be exceeded in tank-containers intended for the carriage of liquids at ambient temperatures:

1.7.3.1 — For inflammable substances without additional risks (e.g. toxicity or corrosivity) in shells with a venting system or with safety valves (even where preceded by a bursting disc):

$$\text{Degree of filling} = \frac{100}{1 + \alpha (50 - t_F)} \text{ \% of capacity;}$$

1.7.3.2 — For toxic or corrosive substances (whether inflammable or not) in shells with a venting system or with safety valves (even where preceded by a bursting disc):

$$\text{Degree of filling} = \frac{98}{1 + \alpha (50 - t_F)} \text{ \% of capacity;}$$

1.7.3.3 — For inflammable substances and for harmful or slightly corrosive substances (whether inflammable or not) in hermetically closed shells without safety device:

$$\text{Degree of filling} = \frac{97}{1 + \alpha (50 - t_F)} \text{ \% of capacity;}$$

1.7.3.4 — For highly toxic, toxic, highly corrosive or corrosive substances (whether inflammable or not) in hermetically closed shells without safety device:

$$\text{Degree of filling} = \frac{95}{1 + \alpha (50 - t_F)} \text{ \% of capacity.}$$

1.7.3.5 In these formulae  $\alpha$  is the mean coefficient of cubic expansion of the liquid between 15°C and 50°C, i.e. for a maximum variation in temperature of 35°C.

$$\alpha \text{ is calculated by the formula: } \alpha = \frac{d_{15} - d_{[50]}^1}{35 \times d_{50}}$$

in which  $d_{15}$  and  $d_{50}$  are the relative densities of the liquid at 15°C and 50°C respectively.  $t_F$  is the mean temperature of the liquid at the time of filling.

1.7.3.6 The provisions of 1.7.3.1 to 1.7.3.4 above shall not apply to shells whose contents are maintained by means of a heating device at a temperature above 50°C during carriage. In such a case the degree of filling at the outset shall be such and the temperature shall be so regulated that the shell is not full to more than 95% of its capacity at any time during carriage and that the filling temperature is not exceeded.

<sup>1</sup> The text between brackets reads "15" in the authentic French text — Le texte entre crochets se lit « 15 » dans le texte authentique français.

- 1.7.3.7 Where hot substances are loaded, the temperature on the outer surface of the shell or of the thermal insulation shall not exceed 70°C during carriage.
- 1.7.4 Shells intended for the carriage of liquids<sup>(4)</sup> which are not divided by partitions or surge plates into sections of not more than 7,500 litres capacity shall be filled to not less than 80% of their capacity unless they are empty.
- 1.7.5 Tank-containers shall be closed so that the contents cannot spill out uncontrolled. The openings of bottom-discharge shells shall be closed by means of screw-threaded plugs, blank flanges or other equally effective devices. The leakproofness of the shell closures, particularly in the upper part of the dip tube, shall be verified by the consignor after the shell has been filled.
- 1.7.6 Where several closure systems are fitted in series, that nearest to the substance being carried shall be closed first.
- 1.7.7 No dangerous residue of the substance being carried shall adhere to the outside of shells during carriage, whether they are full or empty.
- 1.7.8 To be accepted for carriage, empty shells, uncleaned, shall be closed in the same manner and be leakproof in the same degree as though they were full.

1.8 *Transitional measures*

Tank-containers constructed before the entry into force of the provisions applicable from 1 January 1988 which do not conform to those provisions but were constructed according to the requirements of RID in force until that date may still be used.

1.9 *Use of tank-containers approved for maritime transport*

Tank-containers which do not fully meet the requirements of this appendix but which have been approved in accordance with the requirements concerning maritime transport<sup>(5)</sup> shall be accepted for carriage on the following conditions:

- (a) Only substances accepted for carriage in tank-containers in accordance with the requirements of this appendix may be carried;
- (b) The sender shall enter in the consignment note, in addition to the particulars already prescribed: "*Carriage in accordance with Section 1.9 of Appendix X*".

2. *Special requirements applicable to Class 2:  
Gases: compressed, liquefied or dissolved under pressure*

2.1 *Use*

Gases of marginal 201 other than those listed below may be carried in tank containers: fluorine and silicon tetrafluoride [item 1 (at)]; nitric oxide [item 1 (ct)]; mixtures of hydrogen with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume [item 2 (bt)]; mixtures of hydrogen with not more than 10% diborane by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% diborane by volume [item 2 (ct)]; boron trichloride, chlorine trifluoride, nitrosyl chloride, sulphuryl fluoride and tungsten hexafluoride [item 3 (at)]; methylsilane [item 3 (b)]; arsine, dichlorosilane, dimethylsilane, hydrogen selenide and trimethylsilane [item 3 (bt)]; cyanogen, cyanogen chloride and ethylene oxide [item 3 (ct)]; mixtures of methylsilanes [item 4 (bt)]; ethylene oxide containing not more than 50% methyl formate by mass [item 4 (ct)]; silane [item 5 (b)]; substances of items 5 (bt) and (ct); dissolved acetylene [item 9 (c)]; and the gases of items 12 and 13.

## 2.2 Construction

2.2.1 Shells intended for the carriage of substances of items 1 to 6 and 9 shall be made of steel.

For weldless shells, by derogation from 1.2.6.3 a minimum elongation at fracture of 14% and a stress  $\sigma$  (sigma) lower than or equal to the limits given below according to the materials may be accepted:

(a) If the ratio  $Re/Rm$  (minimum guaranteed characteristics after heat treatment) is higher than 0.66 without exceeding 0.85:  $\sigma \leq 0.75 Re$ ;

(b) If the ratio  $Re/Rm$  (minimum guaranteed characteristics after heat treatment) is higher than 0.85:  $\sigma \leq 0.5 Rm$ .

2.2.2 The requirements of Appendix II C. shall apply to the materials and construction of welded shells.

2.2.3 Shells intended for the carriage of chlorine or phosgene of item 3 (*at*) shall be designed for a calculation pressure<sup>(16)</sup> of at least 2.2 MPa (22 bar) (gauge pressure).

## 2.3 Items of equipment

2.3.1 The discharge pipes of shells shall be capable of being closed by blank flanges or some other equally reliable device.

2.3.2 Shells intended for the carriage of liquefied gases may, in addition to the openings prescribed in 1.3.2 and 1.3.3, be provided with openings for the fitting of gauges, thermometers, manometers and with bleed holes, as required for their operation and safety.

2.3.2.1 Filling and discharge openings of shells of a capacity exceeding 1 m<sup>3</sup> intended for the carriage of liquefied inflammable and/or toxic gases shall be equipped with an instant-closing internal safety device which closes automatically in the event of an unintended movement of the tank-container or of fire. It shall also be possible to operate the closing device by remote control.

2.3.2.2 All openings, other than those for the accommodation of safety valves and closed bleed holes, of shells intended for the carriage of liquefied inflammable and/or toxic gases shall, if their nominal diameter is more than 1.5 mm, be equipped with an internal shut-off device.

2.3.2.3 By derogation from the provisions of 2.3.2.1 and 2.3.2.2, shells intended for the carriage of deeply-refrigerated inflammable and/or toxic liquefied gases may be equipped with external devices in place of internal devices if the external devices afford protection against external damage at least equivalent to that afforded by the wall of the shell.

2.3.2.4 If the shells are equipped with gauges, these shall not be of a transparent material in direct contact with the substance carried. If there are thermometers they shall not project directly into the gas or liquid through the shell wall.

2.3.2.5 Shells intended for the carriage of chlorine, sulphur dioxide and phosgene of item 3 (*at*), methyl mercaptan and hydrogen sulphide of item 3 (*bt*) shall not have any opening below the surface level of the liquid. In addition, the cleaning apertures (first holes) referred to in 1.3.4 shall not be permitted.

2.3.2.6 Filling and discharge orifices situated in the upper part of shells shall be equipped with, in addition to what is prescribed in 2.3.2.1, a second, external, closing device. This device shall be capable of being closed by a blank flange or some other equally reliable device.

2.3.3 Safety valves shall meet the conditions prescribed in 2.3.3.1 to 2.3.3.3 below.

2.3.3.1 Shells intended for the carriage of gases of items 1 to 6 and 9 may be fitted with not more than two safety valves whose aggregate clear cross-sectional area of passage at the seating or seatings shall be not less than 20 cm<sup>2</sup> per 30 m<sup>3</sup> or part thereof of the receptacle's capacity. These safety valves shall be capable of opening automatically under a pressure of from 0.9 to 1.0 times the test pressure

of the shell to which they are fitted. They shall be of such a type as to resist dynamic stresses, including liquid surge. The use of deadweight or counterweight valves is prohibited.

Shells intended for the carriage of gases of items 1 to 9 harmful to the respiratory organs or entailing a poison risk<sup>(17)</sup> shall not have safety valves unless the safety valves are preceded by a bursting disc. In the latter case, the arrangement of the bursting disc and the safety valve shall be satisfactory to the competent authority.

Where tank-containers are intended for carriage by sea, the provisions of this paragraph shall not prohibit the fitting of safety valves conforming to the regulations governing that mode of transport.

- 2.3.3.2 Shells intended for the carriage of gases of items 7 and 8 shall be fitted with two independent safety valves; each valve shall be so designed as to allow the gases formed by evaporation during normal operation to escape from the shell in such a way that the pressure does not at any time exceed by more than 10% the working pressure indicated on the shell.

One of the two safety valves may be replaced by a bursting disc which shall be such as to burst at the test pressure.

In the event of loss of the vacuum in a double-walled shell, or of destruction of 20% of the insulation of a single-walled shell, the safety valve and the bursting disc shall permit an outflow such that the pressure in the shell cannot exceed the test pressure.

- 2.3.3.3 The safety valves of shells intended for the carriage of gases of items 7 and 8 shall be capable of opening at the working pressure indicated on the shell. They shall be so designed as to function faultlessly even at the lowest working temperature. The reliability of their operation at that temperature shall be established and checked either by testing each valve or by testing a specimen valve of each design type.

#### 2.3.4 Thermal insulation

- 2.3.4.1 If shells intended for the carriage of liquefied gases of items 3 and 4 are equipped with thermal insulation, this shall consist of either:

- A sun shield covering not less than the upper third but not more than the upper half of the shell surface and separated from the shell by an air space at least 4 cm across; or
- A complete cladding, of adequate thickness, of insulating materials.

- 2.3.4.2 Shells intended for the carriage of gases of items 7 and 8 shall be thermally insulated. The thermal insulation shall be protected by means of continuous sheathing. If the space between the shell and the sheathing is under vacuum (vacuum insulation), the protective sheathing shall be so designed as to withstand without deformation an external pressure of at least 100 kPa (1 bar) (gauge pressure). Notwithstanding 1.1.4.2, external and internal reinforcing devices may be taken into account in the calculations. If the sheathing is so closed as to be gas-tight, a device shall be provided to prevent any dangerous pressure from developing in the insulating layer in the event of inadequate gas-tightness of the shell or of its items of equipment. This device shall prevent the infiltration of moisture into the heat-insulating sheath.

- 2.3.4.3 Shells intended for the carriage of liquefied gases having a boiling point below  $-182^{\circ}\text{C}$  at atmospheric pressure shall not include any combustible material either in the thermal insulation or in the fastenings.

The fastenings of shells intended for the carriage of argon, nitrogen, helium and neon of item 7 (a) and hydrogen of item 7 (b) may, with the consent of the competent authority, contain plastics substances between the inner and the outer sheathing.

2.3.5 The following are considered to be elements of a multiple-element tank-container:

- Receptacles as defined in marg. 212 (1) (b); or
- Tanks as defined in marg. 212 (1) (c).

The provisions of this appendix do not apply to frames of cylinders conforming to marg. 212 (1) (d).

For multiple-element tank-containers, the following conditions shall be complied with:

2.3.5.1 If one of the elements of a multiple-element tank-container is fitted with a safety valve and shut-off devices are provided between the elements, every element shall be so fitted.

2.3.5.2 The filling and discharge devices may be fitted to a manifold.

2.3.5.3 Each element of a multiple-element tank-container intended for the carriage of compressed gases of items 1 and 2 which are harmful to the respiratory organs or entail a poison risk<sup>(17)</sup> shall be capable of being isolated by a valve.

2.3.5.4 The elements of a multiple-element tank-container intended for the carriage of liquefied gases of items 3 to 6 shall be so designed that they can be filled separately and be kept isolated by a valve capable of being sealed.

2.3.6 By derogation from the provisions of 1.3.3, shells intended for the carriage of deeply-refrigerated liquefied gases need not have an inspection aperture.

#### 2.4 Type approval

No special requirements.

#### 2.5 Tests

2.5.1 The materials of every welded shell shall be tested according to the method described in Appendix II C.

2.5.2 The test pressure values shall be as follows:

2.5.2.1 For shells intended for the carriage of gases of items 1 and 2: the values indicated in marg. 219 (1) and (3)

2.5.2.2 For shells intended for the carriage of gases of items 3 and 4:

(a) If the shells are not more than 1.5 m in diameter, the values indicated in marg. 220 (2);

(b) If the shells are more than 1.5 m in diameter, the values<sup>(18)</sup> indicated below:

Description of substance	Item number	Minimum test pressure for shells				Maximum permissible mass of contents per litre of capacity kg
		with thermal insulation		without thermal insulation		
		MPa	bar	MPa	bar	
Bromochlorodifluoromethane (R 12B1) . . .	3 (a)	1	10	1	10	1.61
Chlorodifluoromethane (R 22) . . . . .	3 (a)	2.4	24	2.6	26	1.03
Chloropentafluoroethane (R 115) . . . . .	3 (a)	2	20	2.3	23	1.08
1-Chloro-2,2,2-trifluoroethane (R 133a) . . . . .	3 (a)	1	10	1	10	1.18
Dichlorodifluoromethane (R 12) . . . . .	3 (a)	1.5	15	1.6	16	1.15
Dichlorofluoromethane (R 21) . . . . .	3 (a)	1	10	1	10	1.23
1,2-Dichloro-1,1,2,2-tetrafluoroethane (R 114) . . . . .	3 (a)	1	10	1	10	1.30
Octafluorocyclobutane (R C318) . . . . .	3 (a)	1	10	1	10	1.34
Ammonia . . . . .	3 (at)	2.6	26	2.9	29	0.53
Chlorine . . . . .	3 (at)	1.7	17	1.9	19	1.25
Hexafluoropropylene (R 1216) . . . . .	3 (at)	1.7	17	1.9	19	1.11
Hydrogen bromide . . . . .	3 (at)	5	50	5.5	55	1.54

Description of substance	Item number	Minimum test pressure for shells				Maximum permissible mass of contents per litre of capacity kg
		with thermal insulation		without thermal insulation		
		MPa	bar	MPa	bar	
Methyl bromide . . . . .	3 (at)	1	10	1	10	1.51
Nitrogen dioxide NO <sub>2</sub> . . . . .	3 (at)	1	10	1	10	1.30
Phosgene . . . . .	3 (at)	1.5	15	1.7	17	1.23
Sulphur dioxide . . . . .	3 (at)	1	10	1.2	12	1.23
Butane . . . . .	3 (b)	1	10	1	10	0.51
1-Butene . . . . .	3 (b)	1	10	1	10	0.53
1-Chloro-1, 1-difluoroethane (R 142b) . . . . .	3 (b)	1	10	1	10	0.99
Cis-2-butene . . . . .	3 (b)	1	10	1	10	0.55
Cyclopropane . . . . .	3 (b)	1.6	16	1.8	18	0.53
1,1-Difluoroethane (R 152a) . . . . .	3 (b)	1.4	14	1.6	16	0.79
Dimethyl ether . . . . .	3 (b)	1.4	14	1.6	16	0.58
Isobutane . . . . .	3 (b)	1	10	1	10	0.49
Isobutene . . . . .	3 (b)	1	10	1	10	0.52
Propane . . . . .	3 (b)	2.1	21	2.3	23	0.42
Propylene . . . . .	3 (b)	2.5	25	2.7	27	0.43
Trans-2-butene . . . . .	3 (b)	1	10	1	10	0.54
1,1,1-Trifluoroethane . . . . .	3 (b)	2.8	28	3.2	32	0.79
Dimethylamine . . . . .	3 (bt)	1	10	1	10	0.59
Ethylamine . . . . .	3 (bt)	1	10	1	10	0.61
Ethyl chloride . . . . .	3 (bt)	1	10	1	10	0.80
Hydrogen sulphide . . . . .	3 (bt)	4.5	45	5	50	0.67
Methylamine . . . . .	3 (bt)	1	10	1.1	11	0.58
Methyl chloride . . . . .	3 (bt)	1.3	13	1.5	15	0.81
Methyl mercaptan . . . . .	3 (bt)	1	10	1	10	0.78
Trimethylamine . . . . .	3 (bt)	1	10	1	10	0.56
1,2-Butadiene . . . . .	3 (c)	1	10	1	10	0.59
1,3-Butadiene . . . . .	3 (c)	1	10	1	10	0.55
Vinyl chloride . . . . .	3 (c)	1	10	1.1	11	0.81
Methyl vinyl ether . . . . .	3 (ct)	1	10	1	10	0.67
Trifluorochloroethylene (R 1113) . . . . .	3 (ct)	1.5	15	1.7	17	1.13
Vinyl bromide . . . . .	3 (ct)	1	10	1	10	1.37
Mixture F 1 . . . . .	4 (a)	1	10	1.1	11	1.23
Mixture F 2 . . . . .	4 (a)	1.5	15	1.6	16	1.15
Mixture F 3 . . . . .	4 (a)	2.4	24	2.7	27	1.03
Mixture of gases R 500 . . . . .	4 (a)	1.8	18	2	20	1.01
Mixture of gases R 502 . . . . .	4 (a)	2.5	25	2.8	28	1.05
Mixtures of 19% to 21% by mass dichlorodifluoromethane (R 12) and 79% to 81% by mass bromochlorodifluoromethane (R 12B1); . . . . .	4 (a)	1	10	1.1	11	1.50
Mixtures of methyl bromide and chloropicrin . . . . .	4 (at)	1	10	1	10	1.51
Mixture A (trade name: butane) . . . . .	4 (b)	1	10	1	10	0.50
Mixture AO (trade name: butane) . . . . .	4 (b)	1.2	12	1.4	14	0.47
Mixture A1 . . . . .	4 (b)	1.6	16	1.8	18	0.46
Mixture B . . . . .	4 (b)	2	20	2.3	23	0.43
Mixture C (trade name: propane) . . . . .	4 (b)	2.5	25	2.7	27	0.42
Mixtures of hydrocarbons containing methane . . . . .	4 (b)	—	—	22.5	225	0.187
		—	—	30	300	0.244
Mixtures of methyl chloride and methylene chloride . . . . .	4 (bt)	1.3	13	1.5	15	0.81
Mixtures of methyl chloride and chloropicrin . . . . .	4 (bt)	1.3	13	1.5	15	0.81
Mixtures of methyl bromide and ethylene bromide . . . . .	4 (bt)	1	10	1	10	1.51



Description of substance	Item number	Minimum test pressure for shells				Maximum permissible mass of contents per litre of capacity kg
		with thermal insulation		without thermal insulation		
		MPa	bar	MPa	bar	
Methylacetylene/propadiene and hydrocarbon mixtures						
Mixture P1 . . . . .	4 (c)	2.5	25	2.8	28	0.49
Mixture P2 . . . . .	4 (c)	2.2	22	2.3	23	0.47
Mixtures of 1,3-butadiene and hydrocarbons . . . . .	4 (c)	1	10	1	10	0.50
Ethylene oxide containing not more than 10% carbon dioxide by mass . . . . .	4 (ct)	2.4	24	2.6	26	0.73
Ethylene oxide with nitrogen up to a total pressure of 1 MPa (10 bar) at 50°C . . . . .	4 (ct)	1.5	15	1.5	15	0.78
Dichlorodifluoromethane containing 12% ethylene oxide by mass . . . . .	4 (ct)	1.5	15	1.6	16	1.09

2.5.2.3 For shells intended for the carriage of gases of items 5 and 6:

- (a) If the shells are not sheathed in thermal insulation, the values indicated in marg. 220 (3) and (4);
- (b) If the shells are sheathed in thermal insulation: the values indicated below:

Description of substance	Item number	Minimum test pressure		Maximum permissible mass of contents per litre of capacity kg
		MPa	bar	
Bromotrifluoromethane (R 13B1) . . . . .	5 (a)	12	120	1.50
Carbon dioxide . . . . .	5 (a)	19	190	0.73
		22.5	225	0.78
Chlorotrifluoromethane (R 13) . . . . .	5 (a)	12	120	0.96
		22.5	225	1.12
Hexafluoroethane (R 116) . . . . .	5 (a)	16	160	1.28
		20	200	1.34
Nitrous oxide N <sub>2</sub> O . . . . .	5 (a)	22.5	225	0.78
Sulphur hexafluoride . . . . .	5 (a)	12	120	1.34
Trifluoromethane (R 23) . . . . .	5 (a)	19	190	0.92
		25	250	0.99
Xenon . . . . .	5 (a)	12	120	1.30
Hydrogen chloride . . . . .	5 (at)	12	120	0.69
Ethane . . . . .	5 (b)	12	120	0.32
Ethylene . . . . .	5 (b)	12	120	0.25
		22.5	225	0.36
1,1-Difluoroethylene . . . . .	5 (c)	12	120	0.66
		22.5	225	0.78
Vinyl fluoride . . . . .	5 (c)	12	120	0.58
		22.5	225	0.65
Mixture of gases R 503 . . . . .	6 (a)	3.1	31	0.11
		4.2	42	0.21
		10	100	0.76
Carbon dioxide containing not more than 35% ethylene oxide by mass . . . . .	6 (c)	19	190	0.73
		22.5	225	0.78
Ethylene oxide containing more than 10% but not more than 50% carbon dioxide by mass . . . . .	6 (ct)	19	190	0.66
		25	250	0.75

Where shells sheathed in thermal insulation are used which have been subjected to a test pressure lower than that shown in the table, the maximum mass of the contents per litre of capacity shall be such that the pressure reached in the shell by the substance in question at 55°C does not exceed the test pressure stamped on the shell. In such a case the maximum load allowed shall be prescribed by the expert approved by the competent authority.

- 2.5.2.4 For shells intended for the carriage of ammonia dissolved under pressure of item 9 (*at*), the values indicated below:

Description of substance	Item number	Minimum test pressure		Maximum permissible mass of contents per litre of capacity kg
		MPa	bar	
Ammonia dissolved under pressure in water . . . . . with more than 35% and not more than 40% ammonia . . . . .	9 ( <i>at</i> )	1	10	0.80
with more than 40% and not more than 50% ammonia . . . . .	9 ( <i>at</i> )	1.2	12	0.77

- 2.5.2.5 For shells intended for the carriage of gases of items 7 and 8: not less than 1.3 times the maximum permitted working pressure indicated on the shell, but not less than 300 kPa (3 bar) (gauge pressure); for shells with vacuum insulation the test pressure shall be not less than 1.3 times the maximum permitted working pressure increased by 100 kPa (1 bar).

- 2.5.3 The first hydraulic pressure test shall be carried out before thermal insulation is applied.

- 2.5.4 The capacity of each shell intended for the carriage of gases of items 3 to 6 and 9 shall be determined, under the supervision of an expert approved by the competent authority, by weighing or by volumetric measurement of the quantity of water required to fill the shell. The measurement of shell capacity shall be accurate to within 1%. Determination by a calculation based on the dimensions of the shell is not permitted. The maximum permissible load mass according to marg. 220 (4) and 2.5.2.3 shall be prescribed by an approved expert.

- 2.5.5 Checking of the welds shall be carried out in accordance with the lambda-coefficient 1.0 requirements of 1.2.8.6.

- 2.5.6 Notwithstanding the requirements of 1.5, the periodic tests, including the hydraulic pressure test, shall take place:

- 2.5.6.1 — Every two and a half years in the case of shells intended for the carriage of boron trifluoride [item 1 (*at*)], town gas [item 2 (*bt*)], chlorine, hydrogen bromide, nitrogen dioxide, phosgene or sulphur dioxide [item 3 (*at*)], hydrogen sulphide [item 3 (*bt*)] and hydrogen chloride [item 5 (*at*)].

- 2.5.6.2 — After eight years' service and thereafter every 12 years in the case of tank-containers intended for the carriage of gases of items 7 and 8. A leakproofness check may be performed, at the request of the competent authority, between any two successive tests.

- 2.5.7 In the case of vacuum-insulated shells the hydraulic-pressure test and the check of the internal condition may, with the consent of the approved expert, be replaced by a leakproofness test and measurement of the vacuum.

- 2.5.8 If apertures have been made, on the occasion of periodic inspections, in shells intended for the carriage of gases of items 7 [or]<sup>1</sup> 8, the method by which

<sup>1</sup> The text between brackets reads "and" in the authentic French text — Le texte entre crochets se lit « et » dans le texte authentique français.

they are hermetically closed before the shells are replaced in service shall be approved by the approved expert and shall ensure the integrity of the shell.

- 2.5.9 The leakproofness tests of shells intended for the carriage of gases of items 1 to 6 and 9 shall be carried out at a pressure of not less than 0.4 MPa (4 bar) and not more than 0.8 MPa (8 bar) (gauge pressure).

2.6 *Marking*

- 2.6.1 In addition, the following particulars shall be marked by stamping or by any other similar method on the plate prescribed in 1.6.1, or directly on the walls of the shell itself if the walls are so reinforced that the strength of the shell is not impaired.

- 2.6.1.1 On shells intended for the carriage of only one substance:

— The name of the gas in full.

This indication shall be supplemented, in the case of shells intended for the carriage of compressed gases of items 1 and 2 by the maximum filling pressure at 15°C allowed for the shell and, in the case of shells intended for the carriage of liquefied gases of items 3 to 8 and of ammonia dissolved under pressure of item 9 (*at*), by the maximum permissible load mass in kg and the filling temperature if below –20°C.

- 2.6.1.2 On multi-purpose shells:

— The names, in full, of the gases for whose carriage the shell is approved.

This shall be supplemented by particulars of the permissible maximum load mass, in kg, for each of them.

- 2.6.1.3 On shells intended for the carriage of gases of items 7 and 8:

— The working pressure.

- 2.6.1.4 On shells equipped with thermal insulation:

— The inscription “thermally insulated” or “thermally insulated by vacuum”.

- 2.6.2 The frame of a multiple-element tank-container shall bear near the filling point a plate specifying:

— The test pressure of the elements;<sup>(1)</sup>

— The maximum filling pressure<sup>(1)</sup> at 15°C allowed for the elements intended for compressed gases;

— The number of elements;

— The total capacity<sup>(1)</sup> of the elements;

— The name of the gas in full;

and, in addition, in the case of liquefied gases:

— The maximum permissible load mass<sup>(1)</sup> per element.

- 2.6.3 In addition to the particulars prescribed in 1.6.2, the following shall be inscribed either on the shell itself or on a plate:

(a) Either: “minimum filling temperature allowed: –20°C” or: “minimum filling temperature allowed: . . .”;

(b) Where the shell is intended for the carriage of one substance only:

— The name of the gas in full;

— For liquefied gases of items 3° to 8° and for ammonia dissolved under pressure in water of item 9° (*at*), the maximum permissible load mass in kg;

- (c) Where the shell is a multi-purpose shell:  
 — The names in full of all the gases to whose carriage the shell is assigned, with an indication of the maximum permissible load mass in kg for each of them;
- (d) Where the shell is equipped with thermal insulation:  
 — The inscription “thermally insulated” or “thermally insulated by vacuum”, in an official language of the country of registration, and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

## 2.7 Operation

2.7.1 Shells assigned at different times to the carriage of different liquefied gases of items 3 to 8 (multi-purpose shells) may not carry substances other than those listed in one, and one only, of the following groups:

- Group 1: halogenated hydrocarbons of items 3 (a) and 4 (a);
- Group 2: hydrocarbons of items 3 (b) and 4 (b), 1,2-butadiene and 1,3-butadiene [item 3 (c)] and mixtures of 1,3-butadiene and hydrocarbons [item 4 (c)];
- Group 3: ammonia [item 3 (at)], dimethyl ether [item 3 (b)], dimethylamine, ethylamine, methylamine and trimethylamine [item 3 (bt) and vinyl chloride [item 3 (c)];
- Group 4: methyl bromide [item 3 (at)], ethyl chloride and methyl chloride [item 3 (bt)];
- Group 5: mixtures of ethylene oxide with carbon dioxide and of ethylene oxide with nitrogen [item 4 (ct)];
- Group 6: nitrogen, carbon dioxide, rare gases, nitrous oxide  $N_2O$ , and oxygen of item 7 (a); air, mixtures of nitrogen with rare gases, and mixtures of oxygen with nitrogen, also when they contain rare gases, of item 8 (a);
- Group 7: ethane, ethylene and methane [item 7 (b)] and mixtures of ethane with methane, also when they contain propane or butane [item 8 (b)].

Shells which have been filled with a substance of group 1 or group 2 shall be emptied of liquefied gas before being loaded with another substance belonging to the same group. Shells which have been filled with a substance of groups 3 to 7 shall be completely emptied of liquefied gas and then blown down before being loaded with another substance belonging to the same group.

2.7.2 The multiple use of shells for the carriage of liquefied gases of the same group shall be allowed if all the requirements prescribed for the gases to be carried in one and the same shell are observed. Such multiple use shall be subject to approval by an approved expert.

2.7.3 The multiple use of shells for the carriage of gases of different groups shall be allowed if permitted by the approved expert.

When shells are reassigned to gases of a different group, the shells shall be completely emptied of liquefied gases, then blown down and, lastly, degassed. The degassing of shells shall be verified and certified by the approved expert.

2.7.4 When loaded tank-containers or empty but uncleaned tank-containers are handed over for carriage, only the particulars applicable under 2.6.3 to the gas loaded or just discharged shall be visible; all particulars concerning other gases shall be covered up.

2.7.5 All the elements of a multiple-element tank-container shall contain only one and the same gas. In the case of a multiple-element tank-container intended for the

carriage of liquefied gases of items 3 to 6, the elements shall be filled separately and be kept isolated by a sealed valve.

- 2.7.6 The maximum filling pressure for compressed gases of items 1 and 2 other than boron trifluoride [item 1 (*at*)] shall not exceed the values prescribed in marg. 219 (2).

For boron trifluoride [item 1 (*at*)] the maximum permissible filling mass per litre of capacity shall not exceed 0.86 kg.

The maximum permissible filling mass per litre of capacity according to marg. 220 (2), (3) and (4) and 2.5.2.2, 2.5.2.3 and 2.5.2.4 shall be abided by.

- 2.7.7 The degree of filling of shells intended for the carriage of gases of items 7 (*b*) and 8 (*b*) shall remain below the level at which, if the contents were raised to the temperature at which the vapour pressure equalled the opening pressure of the safety valve, the volume of the liquid would reach 95% of the capacity of the shell at that temperature. Shells intended for the carriage of gases of items 7 (*a*) and 8 (*a*) may be filled to 98% at the loading temperature and the loading pressure.

- 2.7.8 In the case of shells intended for the carriage of nitrous oxide and oxygen [item 7 (*a*)], air or mixtures containing oxygen [item 8 (*a*)], substances containing grease or oil shall not be used to ensure leakproofness of the joints or for the maintenance of the closures.

- 2.7.9 The requirement in 1.7.6 shall not apply to gases of items 7 and 8.

3. *Special requirements applicable to Class 3:  
Inflammable liquids*

3.1 *Use*

The following substances of marg. 301 may be carried in tank-containers:

- 3.1.1 Substances listed by name in item 12.

- 3.1.2 Substances classified under (*a*) of items 11, 14 to 23, 25 and 26 and comparable substances to be classified under (*a*) of those items, with the exception of isopropyl chloroformate of item 25 (*a*);

- 3.1.3 Substances classified under (*b*) of items 11, 14 to 20, 22 and 24 to 26 and comparable substances to be classified under (*b*) of those items;

- 3.1.4 Substances classified under items 1 to 6 and 31 to 34 and comparable substances to be classified under those items with the exception of nitromethane of item 31 (*c*).

3.2 *Construction*

- 3.2.1 Shells intended for the carriage of substances listed by name in item 12 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 1.5 MPa (15 bar) (gauge pressure).

- 3.2.2 Shells intended for the carriage of the substances referred to in 3.1.2 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 1 MPa (10 bar) (gauge pressure).

- 3.2.3 Shells intended for the carriage of the substances referred to in 3.1.3 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).

- 3.2.4 Shells intended for the carriage of the substances referred to in 3.1.4 shall be designed in accordance with the requirements of the general part of this appendix.

3.3 *Items of equipment*

- 3.3.1 All openings of shells intended for the carriage of the substances referred to in 3.1.1 and 3.1.2 shall be above the surface level of the liquid. No pipes or pipe

connections shall pass through the walls of the shell below the surface level of the liquid. Shells shall be capable of being hermetically closed,<sup>(7)</sup> and the closures shall be capable of being protected by a lockable cap.

3.3.2 Shells intended for the carriage of the substances referred to in 3.1.3 and 3.1.4 may also be of the bottom discharge type. Shells intended for the carriage of the substances referred to in 3.1.3 shall be capable of being hermetically closed.<sup>(7)</sup>

3.3.3 If shells intended for the carriage of the substances referred to in 3.1.1, 3.1.2 or 3.1.3 are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority. If shells intended for the carriage of the substances referred to in 3.1.4 are equipped with safety valves or a venting system, these shall satisfy the requirements of 1.3.5 to 1.3.7. Shells intended for the carriage of the substances referred to in 3.1.4 having a flash-point not exceeding 55°C and equipped with a venting system which cannot be closed shall have a flame-trap in the venting system.

3.4 *Type approval*

No special requirements.

3.5 *Tests*

3.5.1 Shells intended for the carriage of substances referred to in 3.1.1, 3.1.2 and 3.1.3 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

3.5.2 Shells intended for the carriage of substances referred to in 3.1.4 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

3.6 *Marking*

No special requirements.

3.7 *Operation*

3.7.1 Shells intended for the carriage of the substances referred to in 3.1.1, 3.1.2 and 3.1.3 shall be hermetically closed<sup>(7)</sup> during carriage. The closures of shells intended for the carriage of substances referred to in 3.1.1 and 3.1.2 shall be protected by a locked cap.

3.7.2 Tank-containers approved for the carriage of substances of items 6, 11, 12 and 14 to 20 shall not be used for the carriage of foodstuffs, articles of consumption or animal feedstuffs.

3.7.3 An aluminium alloy shell shall not be used for the carriage of acetaldehyde of item 1 (a) unless the shell is reserved solely for such carriage and the acetaldehyde is free from acid.

3.7.4 The petrol (gasoline) referred to in the Note to item 3 (b) of marg. 301 may also be carried in shells designed according to 1.2.4.1 and having equipment conforming to 1.3.5.

4. *Special requirements applicable to Class 4.1: Inflammable solids; Class 4.2: Substances liable to spontaneous combustion; Class 4.3: Substances which give off inflammable gases on contact with water*

4.1 *Use*

Substances of items 2, 8 and 11 of marg. 401, items 1, 3 and 8 of marg. 431, sodium, potassium, alloys of sodium and potassium [item 1 (a)] and substances of items 2 (e) and 4 of marg. 471 may be carried in tank-containers.

## 4.2 *Construction*

4.2.1 Shells intended for the carriage of white or yellow phosphorus of item 1 of marg. 431, and substances of items 2 (e) and 4 of marg. 471, shall be designed for a calculation pressure<sup>(6)</sup> of not less than 1 MPa (10 bar) (gauge pressure).

4.2.2 Shells intended for the carriage of substances of item 3 of marg. 431 shall be designed for a calculation pressure<sup>(6)</sup> of not less than 2.1 MPa (21 bar) (gauge pressure). The requirements of Appendix II C are applicable to the materials and construction of these shells.

## 4.3 *Items of equipment*

4.3.1 Shells intended for the carriage of sulphur of item 2 (b) and of naphthalene of item 11 (c) of marg. 401 shall be equipped with thermal insulation made of materials which are not readily inflammable. They may be equipped with valves opening automatically inwards or outwards under the effect of a difference of pressure between 20 kPa and 30 kPa (0.2 bar and 0.3 bar).

4.3.2 Shells intended for the carriage of white or yellow phosphorus of item 1 of marg. 431 shall meet the following requirements:

4.3.2.1 The heating device shall not penetrate into, but shall be exterior to, the body of the shell. However, a pipe used for extracting the phosphorus may be equipped with a heating jacket. The heating device of the jacket shall be so regulated as to prevent the temperature of the phosphorus from exceeding the filling temperature of the shell. Other piping shall enter the shell in its upper part; openings shall be above the highest permissible level of the phosphorus and be capable of being completely enclosed under lockable caps. In addition, the cleaning apertures (fist holes) referred to in 1.3.4 shall not be permitted.

4.3.2.2 The shell shall be equipped with a gauging system for verifying the level of the phosphorus and, if water is used as the protective agent, with a fixed gauge mark showing the highest permissible level of water.

4.3.3 Shells intended for the carriage of substances of item 3 of marg. 431 or item 2 (e) of marg. 471 shall not have any openings or connections below the level of the liquid, even if such openings or connections are capable of being closed. In addition the cleaning openings (fist holes) provided for in 1.3.4 shall not be permitted. Openings in the upper part of the shell, including their fittings, shall be capable of being protected by a cap.

4.3.4 Shells intended for the carriage of substances of item 1 (a) of marg. 471 shall have their openings and orifices (valves, terminals, manholes, etc.) protected by leakproof lockable caps and shall be equipped with thermal insulation made of materials which are not readily inflammable.

## 4.4 *Type approval*

No special requirements.

## 4.5 *Tests*

4.5.1 Shells intended for the carriage of sulphur in the molten state of item 2 (b), or naphthalene in the molten state of item 11 (c) of marg. 401; white or yellow phosphorus of item 1 of marg. 431; sodium, potassium or alloys of sodium and potassium of item 1 (a), substances of item 2 (e) [or]<sup>1</sup> 4 of marg. 471 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

4.5.2 Shells intended for the carriage of substances of item 3 of marg. 431 shall be subjected to the initial and periodic tests with a liquid which does not react with the substance to be carried, and at a test pressure not less than 1 MPa (10 bar) (gauge pressure). The materials of each of these shells shall be tested by the method described in Appendix II C.

<sup>1</sup> The text between brackets reads "and" in the authentic French text — Le texte entre crochets se lit « et » dans le texte authentique français.

4.5.3 Shells intended for the carriage of sulphur (including flowers of sulphur) of item 2 (a), substances of item 8, crude or pure naphthalene of items 11 (a) and (b) of marg. 401, or of freshly-quenched charcoal of item 8 of marg. 431 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

#### 4.6 *Marking*

4.6.1 Shells intended for the carriage of substances of marg. 431, item 3 shall bear, in addition to the particulars prescribed in 1.6.2, the words: "Do not open during carriage. Liable to spontaneous combustion". Shells intended for the carriage of substances of item 2 (e) of marg. 471 shall bear, in addition to the particulars prescribed in 1.6.2, the words "Do not open during carriage. Gives off inflammable gases on contact with water".

These particulars shall be in an official language of the country of approval and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.

4.6.2 Shells intended for the carriage of substances of marg. 471, item 4 shall also have their maximum permissible load mass in kg marked on the plate prescribed in 1.6.1.

#### 4.7 *Operation*

4.7.1 Shells intended for the carriage of sulphur of item 2 (b) or naphthalene of item 11 (c) of marg. 401 shall be filled to not more than 98% of their capacity.

4.7.2 White or yellow phosphorus of item 1 of marg. 431 shall, if water is used as the protective agent, be covered with a depth of not less than 12 cm of water at the time of filling; the degree of filling at a temperature of 60°C shall not exceed 98%. If nitrogen is used as the protective agent, the degree of filling at a temperature of 60°C shall not exceed 96%. The remaining space shall be filled with nitrogen in such a way that, even after cooling, the pressure at no time falls below the atmospheric pressure. The shell shall be hermetically closed so that no leakage of gas occurs.

4.7.3 For the carriage of substances of item 1 (a) of marg. 471, caps shall be locked in conformity with 4.3.4.

4.7.4 The degree of filling per litre of capacity shall not exceed 1.14 kg for trichlorosilane (silicochloroform), 0.95 kg for methylchlorosilane and 0.93 kg for ethylchlorosilane of item 4 of marg. 471 if filling is by mass, or 85% if filling is by volume.

4.7.5 Shells which have contained phosphorus of item 1 of marg. 431 shall, when handed over for carriage, either

— Be filled with nitrogen; the consignor shall certify in the consignment note that the shell, after closure, is gas-tight; or

— Be filled with water to not less than 96% and not more than 98% of their capacity; between 1 October and 31 March this water shall contain one or more anti-freeze agents free from corrosive action, not liable to react with phosphorus, and sufficiently concentrated to prevent the water from freezing during carriage.

4.7.6 The degree of filling for shells containing substances of item 3 of marg. 431 [or] item 2 (e) of marg. 471 shall not exceed 90%; a space of 5% shall remain empty when the liquid is at an average temperature of 50°C. During carriage, these substances shall be under a layer of inert gas, the gauge pressure of which shall not exceed 50 kPa (0.5 bar). The shells shall be hermetically closed<sup>(7)</sup> and the protective caps conforming to 4.3.3 shall be locked. Empty shells, uncleaned,

<sup>7</sup> The text between brackets reads "and" in the authentic French text — Le texte entre crochets se lit « et » dans le texte authentique français.



shall when handed over for carriage be filled with an inert gas at a gauge pressure of up to 50 kPa (0.5 bar).

5. *Special requirements applicable to Class 5.1: Oxidizing substances;  
Class 5.2: Organic peroxides*

5.1 *Use*

Substances of marg. 501, items 1 to 3, solutions of item 4 (as well as powdery sodium chlorate in the moist or dry state), hot aqueous solutions of ammonium nitrate of item 6 (a) in a concentration of more than 80% but not exceeding 93% on condition that:

- (a) The pH value, measured in a 10% aqueous solution of the substance carried, is between 5 and 7;
- (b) Solutions do not contain combustible matter in excess of 0.2% nor compounds of chlorine to such a degree that the content of chlorine exceeds 0.02%.

Substances of items 1, 10, 14, 15 and 18 of marg. 551 may be carried in tank-containers.

5.2 *Construction*

5.2.1 Shells intended for the carriage in the liquid state of the substances referred to in 5.1 shall be designed for a calculation pressure<sup>(16)</sup> of at least 0.4 MPa (4 bar) (gauge pressure).

5.2.2 Shells, and their items of equipment, intended for the carriage of hydrogen peroxide or of aqueous solutions of hydrogen peroxide of item 1 of marg. 501 or liquid organic peroxides of items 1, 10, 14, 15 and 18 of marg. 551 shall be made of aluminium not less than 99.5% pure or of suitable steel not liable to cause the hydrogen peroxide or the organic peroxides to decompose.

Where shells are made of aluminium not less than 99.5% pure, the wall thickness need not be greater than 15 mm, even where calculation in accordance with 1.2.8.2 gives a higher value.

5.2.3 Shells intended for the carriage of hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501, shall be made of austenitic steel.

5.3 *Items of equipment*

5.3.1 Shells intended for the carriage of aqueous solutions of hydrogen peroxide containing more than 70% hydrogen peroxide and of hydrogen peroxide of item 1 of marg. 501 shall have their openings above the surface level of the liquid. In addition the cleaning apertures (fist holes) referred to in 1.3.4 shall not be permitted. In the case of solutions containing more than 60% but not more than 70% hydrogen peroxide, openings below the surface level of the liquid shall be permissible. In this case the shell-discharge system shall be equipped with two mutually independent shut-off devices, mounted in series, the first being a quick-closing internal stop-valve of an approved type and the second a sluice-valve, placed at each end of the discharge pipe. A blank flange or some other equally reliable device shall also be fitted to the outlet of each external sluice-valve. The internal stop-valve shall be such that it will remain integral with the shell and in the closed position if the pipe is wrenched off.

5.3.2 The connections to the external pipe-sockets of shells shall be made of materials not liable to cause decomposition of hydrogen peroxide.

5.3.3 Shells intended for the carriage of hydrogen peroxide or aqueous solutions of hydrogen peroxide of item 1, or of hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501 shall be fitted in their upper part with a shut-off device

preventing any build-up of excess pressure inside the shell, any leakage of liquid, and any entry of foreign matter into the shell.

The shut-off devices of shells intended for the carriage of hot aqueous solutions of ammonium nitrate of marg. 501, item 6 (a), shall be so designed as to preclude obstruction of the devices by solidified ammonium nitrate during carriage.

5.3.4 Where shells intended for the carriage of hot aqueous solutions of ammonium nitrate of marg. 501, item 6 (a), are sheathed in thermally-insulating material, the material shall be of an inorganic nature and entirely free from combustible matter.

5.3.5 Shells intended for the carriage of liquid organic peroxides of marg. 551, items 1, 10, 14, 15 and 18 shall be equipped with a venting device fitted with a flame-trap and followed in series by a safety valve opening at a gauge pressure of 180 to 220 kPa (1.8 to 2.2 bar).

5.3.6 Shells intended for the carriage of liquid organic peroxides of marg. 551, items 1, 10, 14, 15 and 18 shall be equipped with thermal insulation complying with the requirements of 2.3.4.1. The covering and any uncovered part of the shell, or the outer sheathing of a complete lagging, shall be painted white and the paint shall be cleaned before each transport journey and renewed in case of yellowing or deterioration. The thermal insulation shall be free from combustible matter.

#### 5.4 *Type approval*

Tank-containers approved for the carriage of hot aqueous solutions of ammonium nitrate of marg. 501, item 6 (a), shall not be approved for the carriage of other substances.

#### 5.5 *Tests*

Shells intended for the carriage of substances referred to in 5.1 in the liquid state shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

Shells intended for the carriage of the other substances referred to in 5.1 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

Shells of pure aluminium intended for the carriage of hydrogen peroxide or aqueous solutions of hydrogen peroxide of marg. 501, item 1 or liquid organic peroxides of marg. 551, items 1, 10, 14, 15 or 18 need only be subjected to the initial and periodic hydraulic pressure tests at a gauge pressure of 250 kPa (2.5 bar).

#### 5.6 *Marking*

No special requirements.

#### 5.7 *Operation*

5.7.1 The inside of the shell, and all parts liable to come into contact with substances referred to in 5.1 shall be kept clean. No lubricant capable of combining dangerously with the substance carried shall be used for pumps, valves or other devices.

5.7.2 Shells intended for the carriage of substances of marg. 501, items 1 to 3 shall be filled to not more than 95% of their capacity at a reference temperature of 15°C. Shells intended for the carriage of hot aqueous solutions of ammonium nitrate of marg. 501, item 6 (a) shall be filled to not more than 97% of their capacity, and the maximum temperature after filling shall not exceed 140°C. Tank-containers approved for the carriage of hot aqueous solutions of ammonium nitrate shall not be used for the carriage of other substances.

- 5.7.3 Shells intended for the carriage of liquid organic peroxides of marg. 551, items 1, 10, 14, 15 and 18 shall be filled to not more than 80% of their capacity. Shells shall be free from impurities at the time of filling.

6. *Special requirements applicable to Class 6.1:  
Toxic substances*

6.1 *Use*

The following substances of marg. 601 may be carried in tank-containers:

- 6.1.1 The substances listed by name in items 2 and 3;
- 6.1.2 The highly toxic substances listed under (a) of items 11 to 24, 31, 41, 51, 55, 68 and 71 to 88, carried in the liquid state, and comparable substances or solutions to be classified under (a) of those items;
- 6.1.3 The toxic or harmful substances listed under (b) or (c) of items 11 to 24, 51 to 55, 57 to 68 and 71 to 88, carried in the liquid state, and comparable substances or solutions to be classified under (b) or (c) of those items;
- 6.1.4 The toxic or harmful powdery or granular substances listed under (b) or (c) of items 12, 14, 17, 19, 21, 23, 24, 51 to 55, 57 to 68 and 71 to 88, and comparable powdery or granular substances to be classified under (b) or (c) of those items.

NOTE. For the carriage in bulk of substances of items 44 (b), 60 (c) and 63 (c), and solid wastes classified under (c) of the various items, see marg. 617.

6.2 *Construction*

- 6.2.1 Shells intended for the carriage of substances listed by name in items 2 and 3 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 1.5 MPa (15 bar) (gauge pressure).
- 6.2.2 Shells intended for the carriage of the substances referred to in 6.1.2 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 1 MPa (10 bar) (gauge pressure).
- 6.2.3 Shells intended for the carriage of the substances referred to in 6.1.3 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 0.4 MPa (4 bar) gauge pressure).
- 6.2.4 Shells intended for the carriage of the powdery or granular substances referred to in 6.1.4 shall be designed in accordance with the requirements of the general part of this appendix.

6.3 *Items of equipment*

- 6.3.1 All openings of shells intended for the carriage of the substances referred to in 6.1.1 and 6.1.2 shall be above the surface level of the liquid. No pipe or pipe connections shall pass through the walls of the shell below the surface level of the liquid. Shells shall be capable of being hermetically closed<sup>(7)</sup> and the closures shall be capable of being protected with a lockable cap. The cleaning openings (fist holes) provided for in 1.3. 4 shall not however be permitted for shells intended for the carriage of solutions of hydrocyanic acid of item 2.
- 6.3.2 Shells intended for the carriage of the substances referred to in 6.1.3 and 6.1.4 may also be of the bottom-discharge type. The shells shall be capable of being hermetically closed.<sup>(7)</sup>
- 6.3.3 If shells are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.

6.4 *Type approval*

No special requirements.

## 6.5 *Tests*

6.5.1 Shells intended for the carriage of the substances referred to in 6.1.1 to 6.1.3 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

6.5.2 Shells intended for the carriage of substances referred to in 6.1.4 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

## 6.6 *Marking*

No special requirements.

## 6.7 *Operation*

6.7.1 Shells intended for the carriage of the substances of item 3 shall not be filled to more than 1 kg per litre of capacity.

6.7.2 Shells shall be hermetically closed<sup>(7)</sup> during carriage. The closures of shells intended for the carriage of the substances referred to in 6.1.1 and 6.1.2 shall be protected with a locked cap.

6.7.3 Tank-containers approved for the carriage of the substances referred to in 6.1 shall not be used for the carriage of foodstuffs, articles of consumption or animal feedstuffs.

## 7. *Special requirements applicable to Class 7: Radioactive material*

### 7.1 *Use*

Material of marg. 704, Schedules 1, 5, 6, 9, 10 and 11, except uranium hexafluoride, may be carried in tank-containers. The provisions of the appropriate schedule in marg. 704 are applicable

NOTE. There may be additional requirements for tank-containers which are designed as a Type A or Type B packaging.

### 7.2 *Construction*

See marg. 1736.

### 7.3 *Items of equipment*

Shells intended for the carriage of liquid radioactive material<sup>(4)</sup> shall have their openings above the level of the liquid. No piping or pipe connection shall pass through the walls of the shell below the surface level of the liquid.

### 7.4 *Type approval*

Tank-containers approved for the carriage of radioactive material shall not be approved for the carriage of other substances.

### 7.5 *Tests*

7.5.1 Shells shall undergo the initial and periodic hydraulic pressure tests at a pressure of at least 0.265 MPa (2.65 bar) (gauge pressure).

7.5.2 Notwithstanding the requirements of 1.5.2, the periodic internal inspection may be replaced by a programme approved by the competent authority.

### 7.6 *Marking*

In addition, the trefoil symbol, as shown on labels models Nos. 7A to 7D, shall be marked by stamping or by any other equivalent method on the plate described in 1.6.1. This trefoil symbol may be applied directly on the walls of the shell itself, if the walls are so reinforced that the strength of the shell is not impaired.

## 7.7 Operation

- 7.7.1 The degree of filling according to 1.7.3 at the reference temperature of 15°C shall not exceed 93% of the capacity of the shell
- 7.7.2 Tank-containers which have been used for the carriage of radioactive material shall not be used for the carriage of other substances.

## 8. Special requirements applicable to Class 8: Corrosive substances

### 8.1 Use

The following substances of marg. 801 may be carried in tank-containers:

- 8.1.1 The substances listed by name in items 6, 7 and 24, and substances comparable with those of item 7;
- 8.1.2 The highly corrosive substances listed under (a) of items 1, 2, 3, 10, 11, 21, 26, 27, 32, 33, 36, 37, 39, 46, 55, 64, 65 and 66, carried in the liquid state, and comparable substances or solutions to be classified under (a) of those items;
- 8.1.3 Corrosive or slightly corrosive substances classified under (b) or (c) of items 1 to 5, 8 to 11, 21, 26, 27, 31 to 39, 42 to 46, 51 to 55 and 61 to 66, carried in the liquid state, and comparable substances or solutions to be classified under (b) or (c) of those items;
- 8.1.4 Powdery or granular corrosive or slightly corrosive substances classified under (b) or (c) of items 22, 23, 26, 27, 31, 35, 39, 41, 45, 46, 52, 55 and 65 and comparable powdery or granular substances to be classified under (b) or (c) of those items.

NOTE. For the carriage in bulk of substances of item 23 and solid wastes classified under (c) of the various items, see marg. 817.

### 8.2 Construction

- 8.2.1 Shells intended for the carriage of substances listed by name in items 6 and 24 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 2.1 MPa (21 bar) (gauge pressure). Shells intended for the carriage of bromine of item 24 shall be provided with a lead lining not less than 5 mm thick or an equivalent lining. The requirements of Appendix II C shall apply to the materials and construction of welded shells intended for the carriage of substances of item 6. Shells intended for the carriage of substances of item 7 (a) shall be designed for a calculation pressure<sup>(16)</sup> of not less than 1 MPa (10 bar) (gauge pressure) and shells for the carriage of substances of items 7 (b) and (c) for a calculation pressure<sup>(16)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).
- 8.2.2 Shells intended for the carriage of the substances referred to in 8.1.2 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 1 MPa (10 bar) (gauge pressure).
- Where the use of aluminium is necessary for shells intended for the carriage of nitric acid of item 2 (a), such shells shall be made of aluminium not less than 99.5% pure; the wall thickness need not exceed 15 mm, even when the calculation according to 1.2.8.2 gives a higher figure.
- 8.2.3 Shells intended for the carriage of the substances referred to in 8.1.3 shall be designed for a calculation pressure<sup>(16)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).
- Shells intended for the carriage of monochloroacetic acid of item 31 (b) shall be equipped with an enamel or equivalent lining if the material of the shell is attacked by that acid.

Shells and their items of equipment intended for the carriage of aqueous solutions of hydrogen peroxide of item 62 shall be made of aluminium not less than 99.5% pure or of a suitable steel not causing hydrogen peroxide to decompose. If the shells are made of pure aluminium the wall thickness need not be greater than 15 mm even when the calculation according to 1.2.8.2 gives a higher figure.

8.2.4 Shells intended for the carriage of powdery or granular substances referred to in 8.1.4 shall be designed in accordance with the requirements of the general part of this appendix.

### 8.3 *Items of equipment*

8.3.1 All openings of shells intended for the carriage of substances of items 6, 7 and 24 shall be above the surface level of the liquid. No pipes or pipe connections shall pass through the walls of the shell below the surface level of the liquid. In addition, the cleaning openings (fist holes) referred to in 1.3.4 shall not be permitted. Shells shall be capable of being hermetically closed<sup>(7)</sup> and the closures shall be capable of being protected by a lockable cap.

8.3.2 Shells intended for the carriage of the substances referred to in 8.1.2, 8.1.3 and 8.1.4 may also be of the bottom-discharge type.

8.3.3 If shells intended for the carriage of the substances referred to in 8.1.2 are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.

8.3.4 Shells intended for the carriage of sulphur trioxide of item 1 (a) shall be thermally insulated and fitted with a heating device on the outside.

8.3.5 Shells and their service equipment intended for the carriage of hypochlorite solutions of item 61 and of aqueous solutions of hydrogen peroxide of item 62 shall be so designed as to prevent the entry of foreign matter, leakage of liquid or any building up of dangerous excess pressure inside the shell.

### 8.4 *Type approval*

No special requirements.

### 8.5 *Tests*

8.5.1 Shells intended for the carriage of anhydrous hydrofluoric acid or aqueous solutions of hydrofluoric acid of item 6 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of at least 1 MPa (10 bar) (gauge pressure). The materials of each of these welded shells shall be tested by the method described in Appendix II C.

Shells intended for the carriage of substances of item 7 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

Shells intended for the carriage of substances of items 6 and 7 shall be inspected every two and a half years for resistance to corrosion, by means of suitable instruments (e.g. by ultrasound).

8.5.2 Shells intended for the carriage of bromine of item 24 or of the substances referred to in 8.1.2 and 8.1.3 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure). The hydraulic pressure test for shells intended for the carriage of sulphur trioxide of item 1 (a) shall be repeated every two and a half years.

Shells made of pure aluminium and intended for the carriage of nitric acid of item 2 (a) and of aqueous solutions of hydrogen peroxide of item 62 need be subjected to the initial and periodic hydraulic pressure tests at a pressure of only 250 kPa (2.5 bar) (gauge pressure).

The condition of the lining of shells intended for the carriage of bromine of item 24 shall be inspected every year by an expert approved by the competent authority, who shall inspect the inside of the shell.

- 8.5.3 Shells intended for the carriage of the substances referred to in 8.1.4 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

8.6 *Marking*

- 8.6.1 Shells intended for the carriage of anhydrous hydrofluoric acid or aqueous solutions of hydrofluoric acid of item 6 or bromine of item 24 shall bear, in addition to the particulars already prescribed in 1.6.1, an indication of the maximum permissible load mass in kg and the date (month, year) of the most recent internal inspection of the shell.

8.7 *Operation*

- 8.7.1 Shells intended for the carriage of sulphur trioxide of item 1 (a) shall not be filled to more than 88% of their capacity; those intended for the carriage of bromine of item 24 shall be filled to not less than 88% and not more than 92% of their capacity or to 2.86 kg per litre of capacity.

Shells intended for the carriage of anhydrous hydrofluoric acid or aqueous solutions of hydrofluoric acid of item 6 shall not be filled to more than 0.84 kg per litre of capacity.

- 8.7.2 Shells intended for the carriage of substances of items 6, 7 and 24 shall be hermetically closed<sup>(7)</sup> during carriage and the closures shall be protected by a locked cap.

9. *Special requirements applicable to Class 9:  
Miscellaneous dangerous substances and articles*

9.1 *Use*

Substances of items 1 and 2 of marg. 901 may be carried in tank-containers.

9.2 *Construction*

- 9.2.1 Shells intended for the carriage of substances of item 1 shall be designed in accordance with the requirements of the general part of this appendix.

- 9.2.2 Shells intended for the carriage of substances of item 2 shall be designed for a calculation pressure<sup>(10)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).

9.3 *Items of equipment*

- 9.3.1 Shells shall be capable of being hermetically closed.<sup>(7)</sup>

- 9.3.2 If shells are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.

9.4 *Type approval*

No special requirements.

9.5 *Tests*

- 9.5.1 Shells intended for the carriage of substances of item 2 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of at least 0.4 MPa (4 bar) (gauge pressure).

- 9.5.2 Shells intended for the carriage of substances of item 1 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure<sup>(10)</sup> as defined in 1.2.4.

9.6 *Marking*

No special requirements.

9.7 *Operation*

9.7.1 Shells shall be hermetically closed<sup>(7)</sup> during carriage.

9.7.2 Tank-containers approved for the carriage of substances of items 1 and 2 shall not be used for the carriage of foodstuffs, articles of consumption or animal feedstuffs.

<sup>(1)</sup> In the case of sheet metal the axis of the tensile test-piece shall be at right angles to the direction of rolling. The permanent elongation at fracture ( $l = 5d$ ) shall be measured on test-pieces of circular cross-section in which the gauge length  $l$  is equal to five times the diameter  $d$ ; if test-pieces of rectangular section are used, the gauge length shall be calculated by the formula  $l = 5.65\sqrt{F_0}$  where  $F_0$  is the initial cross-sectional area of the test-piece.

<sup>(2)</sup> "Mild steel" means a steel having a breaking strength between 360 N/mm<sup>2</sup> and 440 N/mm<sup>2</sup>.

<sup>(3)</sup> This formula is derived from the general formula

$$e_1 = e_0 \sqrt[3]{\frac{Rm_0 \times A_0}{Rm_1 \times A_1}}$$

where:  $Rm_0 = 360$

$A_0 = 27$  for the mild steel of reference

$Rm_1 =$  minimum tensile strength of the metal chosen, in N/mm<sup>2</sup>

$A_1 =$  minimum elongation of the metal chosen on fracture under tensile stress, in %.

<sup>(4)</sup> For shells not of circular cross-section, for example box-shaped or elliptical shells, the indicated diameters shall correspond to those calculated on the basis of a circular cross-section of the same area. For such shapes of cross-section the radius of convexity of the shell wall shall not exceed 2,000 mm at the sides or 3,000 mm at the top and bottom.

<sup>(5)</sup> Save as may be otherwise provided in the case of shells intended for the carriage of certain crystallizable or highly viscous substances, of deeply refrigerated gases or of powdery or granular substances.

<sup>(6)</sup> In the case of tank-containers of less than 1 m<sup>3</sup> capacity, the sluice-valve or other equivalent device may be replaced by a blank flange.

<sup>(7)</sup> Hermetically closed shells means shells whose openings are hermetically closed and which are not equipped with safety valves, bursting discs or other similar safety devices. Shells having safety valves preceded by a bursting disc shall be deemed to be hermetically closed.

<sup>(8)</sup> The distinguishing signs in international traffic prescribed by the Vienna Convention on road traffic (Vienna 1968) are as follows:

A	Austria	GB	United Kingdom of Great Britain and Northern Ireland	NL	Netherlands
B	Belgium	P	Portugal		
BG	Bulgaria	GR	Greece	PL	Poland
CH	Switzerland	H	Hungary	R	Romania
CS	Czechoslovakia	I	Italy	RL	Lebanon
D	Federal Republic of Germany	IR	Iran	S	Sweden
DDR	German Democratic Republic	IRL	Republic of Ireland	SF	Finland
DK	Denmark	IRQ	Iraq	SYR	Syria
DZ	Algeria	L	Luxembourg	TN	Tunisia
E	Spain	MA	Morocco	TR	Turkey
F	France	N	Norway	YU	Yugoslavia
FL	Liechtenstein				

<sup>(9)</sup> The check of the design characteristics shall also include, for shells requiring a test pressure of 1 MPa (10 bar) or higher, the taking of weld test-pieces in accordance with the tests prescribed in Appendix II C.

<sup>(10)</sup> In special cases and with the agreement of the expert approved by the competent authority, the hydraulic pressure test may be replaced by a test using another liquid or a gas, where such an operation does not present any danger.

<sup>(11)</sup> Add the units of measurement after the numerical values.

<sup>(12)</sup> A collective description covering a group of substances of a similar nature and equally compatible with the characteristics of the shell may be given instead of the name.

<sup>(13)</sup> Examples of protection of shells:

1. Protection against lateral impact may for example consist of longitudinal bars protecting the shell on both sides at the level of the median line.
2. Protection against overturning may for example consist of reinforcing rings or bars fixed transversally in relation to the frame.
3. Protection against rear impact may for example consist of a bumper or frame.

<sup>(14)</sup> Substances whose kinematic viscosity at 20°C is less than 2,680 mm<sup>2</sup>/s shall be deemed to be liquids for the purposes of this provision.

(Continued on p. 591)



(Continued from p. 590)

<sup>(15)</sup> These requirements are published in the IMDG Code.

<sup>(16)</sup> See 1.2.8.2.

<sup>(17)</sup> Gases identified by the letter "t" in the list of substances are deemed to be gases harmful to the respiratory organs or entailing a poison risk.

<sup>(18)</sup> 1. The prescribed test pressures are:

(a) If the shell is equipped with thermal insulation, at least equal to the vapour pressure, reduced by 0.1 MPa (1 bar), of the liquid at 60°C, but not less than 1 MPa (10 bar);

(b) If the shell is not equipped with thermal insulation, at least equal to the vapour pressure, reduced by 0.1 MPa (1 bar), of the liquid at 65°C but not less than 1 MPa (10 bar).

2. In view of the high toxicity of phosgene of item 3 (a), the minimum test pressure for this gas is fixed at 1.5 MPa (15 bar) if the shell is equipped with thermal insulation and 1.7 MPa (17 bar) if it is not so equipped.

3. The maximum values in kg/litre prescribed for the degree of filling are calculated as follows: maximum mass of contents per litre of capacity =  $0.95 \times$  specific gravity of the liquid phase at 50°C.

## APPENDIX XI

### REQUIREMENTS CONCERNING THE USE, CONSTRUCTION AND TESTING OF TANK WAGONS

(Editorial Note: For footnotes, see p. 621)

1. *Requirements applicable to all classes*
  - 1.1 *General; scope; definitions*
    - 1.1.1 These requirements shall apply to tank wagons used for the carriage of liquid, gaseous, powdery or granular substances.
    - 1.1.2 Part 1 sets out the requirements applicable to tank wagons intended for the carriage of substances of all classes. Parts 2 to 9 contain special requirements supplementing or modifying the requirements of Part 1.
    - 1.1.3 A tank wagon comprises a superstructure, consisting of one or more shells and their items of equipment, and an underframe fitted with its own items of equipment (running gear, suspension, buffing, traction, braking gear and inscriptions).
    - 1.1.4 In the following requirements:
      - 1.1.4.1 — "Shell" means the tank proper (including the openings and their closures);
      - "Service equipment" of the shell means the filling, emptying, venting, safety, heating and heat-insulating devices, and measuring instruments;
      - "Structural equipment" means the reinforcing, fastening and protective members external or internal to the shell;
      - 1.1.4.2 — "Calculation pressure" means a theoretical pressure at least equal to the test pressure which, according to the degree of danger exhibited by the substance being carried, may to a greater or lesser degree exceed the working pressure. It is used solely to determine the thickness of the walls of the shell, independently of any external or internal reinforcing device;
      - "Test pressure" means the highest effective pressure which arises in the shell during the pressure test;
      - "Filling pressure" means the maximum pressure actually built up in the shell when it is being filled under pressure;
      - "Discharge pressure" means the maximum pressure actually built up in the shell when it is being discharged under pressure;

— “Maximum working pressure (gauge pressure)” means the highest of the following three pressures:

- (a) The highest effective pressure allowed in the shell during filling (“maximum filling pressure allowed”);
- (b) The highest effective pressure allowed in the shell during discharge (“maximum discharge pressure allowed”); and
- (c) The effective gauge pressure to which the shell is subjected by its contents (including such extraneous gases as it may contain) at the maximum working temperature;

unless specially prescribed otherwise in the various classes, the numerical value of this working pressure (gauge pressure) shall not be lower than the vapour pressure (absolute pressure) of the filling substance at 50°C.

For shells equipped with safety valves (with or without bursting disc), the maximum working pressure (gauge pressure) shall however be equal to the prescribed opening pressure of such safety valves.

1.1.4.3 — “Leakproofness test” means a test which consists of subjecting the shell to an effective internal pressure equal to the maximum working pressure, but not less than 20 kPa (0.2 bar) (gauge pressure), by a method recognized by the competent authority.

For shells equipped with venting systems and a safety device to prevent the contents spilling out if the shell overturns, the pressure for the leakproofness test shall be equal to the static pressure of the filling substance.

## 1.2 *Construction*

1.2.1 Shells shall be designed and constructed in accordance with the provisions of a technical code recognized by the competent authority, but the following minimum requirements shall be met:

1.2.1.1 Shells shall be made of suitable metallic materials which, unless other temperature ranges are prescribed in the various Classes, shall be resistant to brittle fracture and to stress corrosion cracking at a temperature between –20°C and +50°C.

1.2.1.2 For welded shells, only materials of faultless weldability and whose adequate impact strength at an ambient temperature of –20°C can be guaranteed, particularly in the weld seams and the zones adjacent thereto, shall be used.

Water-quenched steel may not be used for welded steel shells. If fine-grained steel is used, the guaranteed value of the yield stress  $R_e$  shall not exceed 460 N/mm<sup>2</sup> and the value of the upper limit of guaranteed tensile strength  $R_m$  shall not exceed 725 N/mm<sup>2</sup>, in accordance with the specifications relating to the material.

1.2.1.3 Welds shall be skilfully made and shall afford the fullest safety.

With regard to the execution and checking of weld beads, see also 1.2.8.4.

Shells whose minimum wall thicknesses have been determined in accordance with 1.2.8.3 and 1.2.8.4 shall be checked by the methods described in the definition of the weld coefficient 0.8.

1.2.1.4 The materials of shells or their protective linings in contact with the contents shall not contain substances liable to react dangerously with the contents, to form dangerous compounds, or substantially to weaken the material.

1.2.1.5 The protective lining shall be so designed that its leakproofness remains intact whatever the deformation liable to occur in normal conditions of carriage (1.2.8.1).

- 1.2.1.6 If contact between the substance carried and the material used for the construction of the shell entails a progressive decrease in the thickness of the walls, this thickness shall be increased at manufacture by an appropriate amount.
- This additional thickness to allow for corrosion shall not be taken into consideration in calculating the thickness of the shell walls.
- 1.2.2 Shells and their service and structural equipment shall be designed to withstand without loss of contents (other than quantities of gas escaping through any degassing vents):
- Static and dynamic stresses in normal conditions of carriage;
  - Prescribed minimum stresses as defined in 1.2.6 and 1.2.8.
- In the case of wagons in which the shell constitutes a stressed self-supporting member, the shell shall be designed to withstand the stresses thus imposed in addition to stresses from other sources.
- 1.2.3 The pressure on which the thickness of the shell walls is based shall be not less than the calculation pressure, but the stresses referred to in 1.2.2. shall also be taken into account.
- 1.2.4 Unless specially prescribed otherwise in the various Classes, the following particulars shall be taken into account in the design of shells:
- 1.2.4.1 — Gravity-discharge shells intended for the carriage of substances having a vapour pressure not exceeding 110 kPa (1.1 bar) (absolute pressure) at 50°C shall be designed for a calculation pressure of twice the static pressure of the substance to be carried but not less than twice the static pressure of water;
- 1.2.4.2 — Pressure-filled or pressure-discharge shells intended for the carriage of substances having a vapour pressure not exceeding 110 kPa (1.1 bar) (absolute pressure) at 50°C shall be designed for a calculation pressure equal to 1.3 times the filling or discharge pressure;
- 1.2.4.3 — Shells intended for the carriage of substances having a vapour pressure of more than 110 kPa (1.1 bar) but not more than 175 kPa (1.75 bar) (absolute pressure) at 50°C shall, whatever their filling or discharge system, be designed for a calculation pressure of not less than 150 kPa (1.5 bar) (gauge pressure), or 1.3 times the filling or discharge pressure, whichever is the higher;
- 1.2.4.4 — Shells intended for the carriage of substances having a vapour pressure of more than 175 kPa (1.75 bar) (absolute pressure) at 50°C shall, whatever their filling or discharge system, be designed for a calculation pressure equal to 1.3 times the filling or discharge pressure but not less than 0.4 MPa (4 bar) (gauge pressure).
- 1.2.5 Tank wagons intended to contain certain dangerous substances shall be provided with special protection, which shall be determined for the various classes.
- 1.2.6 At the test pressure, the stress  $\sigma$  (sigma) at the most severely stressed point of the shell shall not exceed the material-dependent limits prescribed below. Allowance shall be made for any weakening due to the welds. In addition, in choosing the material and determining wall thickness, the maximum and minimum filling and working temperatures should be taken into account.
- 1.2.6.1 For metals and alloys exhibiting a clearly-defined yield point or characterized by a guaranteed conventional yield stress  $R_e$  (generally 0.2% of residual elongation and, in the case of austenitic steels, 1% of maximum elongation):
- 1.2.6.1.1 — Where the ratio  $R_e/R_m$  is not more than 0.66 ( $R_e$  = apparent yield stress or 0.2% proof stress or 1% proof stress in the case of austenitic steels;  $R_m$  = guaranteed minimum tensile strength):  $\sigma \leq 0.75 R_e$ .

1.2.6.1.2— Where the ratio  $Re/Rm$  exceeds 0.66:  $\sigma \leq 0.5 Rm$ . For welded steel shells, the ratio  $Re/Rm$  shall not be greater than 0.85.

1.2.6.2 For metals and alloys exhibiting no apparent yield stress and characterized by a guaranteed minimum tensile strength  $Rm$ :  $\sigma \leq 0.43 Rm$ .

1.2.6.3 For steel, the elongation at fracture, in per cent, shall not be less than  $\frac{10,000}{\text{determined tensile strength in N/mm}^2}$  but in any case it shall be not less than 16% for fine-grained steels and not less than 20% for other steels.

For aluminium alloys the elongation at fracture shall be not less than 12%<sup>(1)</sup>.

1.2.7 All parts of tank wagons intended for the carriage of liquids having a flash-point of not more than 55°C and for the carriage of inflammable gases shall be linked by equipotential connections and shall be capable of being electrically earthed. Any metal contact capable of causing electrochemical corrosion shall be avoided.

1.2.8 Shells and their fastenings shall withstand the stresses specified in 1.2.8.1 and the wall thickness of the shells shall be at least as determined in 1.2.8.2 [and 1.2.8.3]<sup>1</sup> below.

1.2.8.1. Tank wagons shall be so constructed as to be capable of withstanding, under the maximum permissible load, the stresses which occur during carriage by rail. As regards these stresses, reference should be made to the tests prescribed by the competent railway authorities.

1.2.8.2 The thickness of the cylindrical wall of the shell and of the ends and cover plates shall be at least equal to that obtained by the following formula:

$$e = \frac{P_{pa} \times D}{2 \times \sigma \times \lambda} \text{ mm} \quad e = \frac{P_{bar} \times D}{2 \times \sigma \times \lambda} \text{ mm}$$

where:  $P_{pa}$  = calculation pressure in MPa;

$P_{bar}$  = calculation pressure in bar;

$D$  = internal diameter of shell in mm;

$\sigma$  = permissible stress as defined in 1.2.6.1.1, 1.2.6.1.2. and 1.2.6.2 in N/mm<sup>2</sup>;

$\lambda$  = a coefficient, not exceeding 1, allowing for any weakening due to welds.

The thickness shall in no case be less than those defined in [1.2.8.3]<sup>2</sup>.

1.2.8.3 The walls, ends and cover plates of shells shall be not less than 6 mm thick if of mild steel<sup>(2)</sup> or of equivalent thickness if of another metal. "Equivalent thickness" means the thickness obtained by the following formula:<sup>(3)</sup>

$$e_1 = \frac{21.4 \times e_0}{\sqrt[3]{Rm_1 \times A_1}}$$

1.2.8.4 The manufacturer's qualification for performing welding operations shall be one recognised by the competent authority. Welding shall be performed by skilled welders using a welding process whose effectiveness (including any heat treatments required) has been demonstrated by test. Non-destructive tests shall be carried out by radiography or ultrasound and shall confirm that the quality of the welding is appropriate to the stresses.

<sup>1</sup> The text between brackets reads "to 1.2.8.5" in the authentic French text — Le texte entre crochets se lit « à 1.2.8.5 » dans le texte authentique français.

<sup>2</sup> The text between brackets reads "1.2.8.3 and 1.2.8.4" in the authentic French text — Le texte entre crochets se lit « 1.2.8.3 et 1.2.8.4 » dans le texte authentique français.

In determining the thickness of the shell walls in accordance with 1.2.8.2, the following values of the coefficient lambda should be adopted for the welds:

- 0.8: where the weld beads are inspected visually on both sides so far as possible and are subjected to a non-destructive spot check with particular attention to connections;
- 0.9: where all longitudinal beads throughout their length, all connections, 25% of circular beads, and welds for the assembly of large-diameter items of equipment are subjected to non-destructive checks. Beads shall be checked visually on both sides so far as possible;
- 1.0: where all beads are subjected to non-destructive checks and are checked visually on both sides so far as possible. A weld test piece shall be taken.

Where the competent authority has doubts regarding the quality of weld beads, it may require additional checks.

1.2.8.5 Measures shall be taken to protect shells against the risk of deformation as a result of a negative internal pressure.

1.2.8.6 The thermal insulation shall be so designed as not to hinder access to, or the operation of, the filling and discharge devices and the safety valves.

### 1.3 *Items of equipment*

1.3.1 The items of equipment shall be so arranged as to be protected against the risk of being wrenched off or damaged during carriage and handling. They shall exhibit a suitable degree of safety comparable to that of the shell itself, and shall in particular:

- Be compatible with the goods carried,
- Meet the requirements of 1.2.2.

The leakproofness of the service equipment shall be ensured even in the event of the tank wagon overturning. Gaskets shall be made of a material compatible with the substance carried and shall be replaced as soon as their effectiveness is impaired, for example as a result of ageing.

Gaskets ensuring the leakproofness of fittings needing to be manipulated during normal use of the tank wagon shall be so designed and arranged that manipulation of the fitting in which they are incorporated does not damage them.

1.3.2 Every bottom-discharge shell, or in the case of compartmented bottom-discharge shells every compartment, shall be equipped with two mutually independent shut off devices, the first being an internal stop-valve<sup>(4)</sup> placed, with its seating, inside the shell and the second being a sluice-valve or other equivalent device, mounted in series, one at each end of the discharge pipe. In addition, the openings shall be capable of being closed by means of screw-threaded plugs, blank flanges or other equally effective devices. The internal stop-valve may be operated from above or from below. In both cases, its setting — open or closed — shall be capable of being verified, from the ground if possible. Its control devices shall be so designed as to prevent any unintended opening through impact or an inadvertent act. The internal shut-off device must continue to be effective in the event of damage to the external control device.

In order to avoid any loss of contents in the event of damage to the external filling and discharge fittings (pipes, lateral shut-off devices), the internal stop-valve and its seating shall be protected against the danger of being wrenched off by external stresses or shall be so designed as to resist them. The filling and discharge devices (including flanges or threaded plugs) and any protective caps shall be capable of being secured against any inadvertent opening.

The position and/or the direction of closure of the sluice-valves must be clearly apparent.

- 1.3.3 The shell or each of its compartments shall be provided with an opening large enough to permit its inspection.
- 1.3.4 Shells intended for the carriage of substances for which all openings are above the surface level of the liquid may be equipped, in the lower part of the body, with a cleaning aperture (fist hole). This aperture must be capable of being sealed by a flange so closed as to be leakproof, the design of which must be approved by the competent authority or by a body designated by that authority.
- 1.3.5 Shells intended for the carriage of liquids having a vapour pressure of not more than 110 kPa (1.1 bar) (absolute pressure) at 50°C shall have a venting system and a device to prevent the contents from spilling out if the shell overturns; otherwise they must conform to the requirements of 1.3.6 or 1.3.7.
- 1.3.6 Shells intended for the carriage of liquids having a vapour pressure of more than 110 kPa (1.1 bar) but not exceeding 175 kPa (1.75 bar) (absolute pressure) at 50°C shall have a safety valve set at a gauge pressure of not less than 150 kPa (1.5 bar) and such that it is fully open at a pressure not exceeding the test pressure; otherwise they must conform to the requirements of 1.3.7.
- 1.3.7 Shells intended for the carriage of liquids having a vapour pressure of more than 175 kPa (1.75 bar) but not exceeding 300 kPa (3 bar) (absolute pressure) at 50°C shall be equipped with a safety valve set at a gauge pressure of not less than 300 kPa (3 bar) and such that it is fully open at a pressure not exceeding the test pressure; otherwise they must be hermetically closed.<sup>(4)</sup>
- 1.3.8 No movable parts such as covers, closure devices, etc., which are liable to come into frictional or percussive contact with aluminium shells intended for the carriage of inflammable liquids having a flash-point of not more than 55°C or for the carriage of inflammable gases, may be made of unprotected corrodible steel.
- 1.4 *Type approval*
- 1.4.1 The competent authority or a body designated by that authority shall issue in respect of each new type of tank wagon a certificate attesting that the prototype tank wagon, including the fastenings of the shell, which it has surveyed is suitable for the purpose for which it is intended and meets the construction requirements of Section 1.2, the equipment requirements of Section 1.3 and the special conditions depending on the classes of substances carried. The test results, the substances and/or the groups of substances for the carriage of which the tank wagon is approved and its type approval number shall be entered in a test report.
- The substances of a group of substances shall be of a similar kind and equally compatible with the characteristics of the shell. The substances or groups of substances permitted shall be specified in the test report, with their chemical names or the corresponding collective heading in the list of substances, and their class and item number.
- 1.4.2 If tank wagons are manufactured according to this prototype without modification, this approval shall be valid for tank wagons so manufactured.
- 1.5 *Acceptance and periodic tests of tank wagons*
- 1.5.1 Shells and their equipment shall either together or separately undergo an initial inspection before being put into service. This inspection shall include:
- A check of conformity to the approved prototype;
  - A check of the design characteristics;<sup>(6)</sup>
  - An external and internal examination;
  - A hydraulic pressure test<sup>(7)</sup> at the test pressure indicated on the data plate; and
  - A check of satisfactory operation of the equipment.

The hydraulic pressure test shall be carried out before the installation of such thermal insulation as may be necessary. If the shells and their equipment have been tested separately, they shall be jointly subjected to a leakproofness test after assembly in accordance with 1.1.4.3.

- 1.5.2 Shells and their equipment shall undergo periodic inspections at fixed intervals. The periodic inspections shall include an external and internal examination and, as a general rule, a hydraulic pressure test.<sup>(7)</sup> Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the shell's characteristics.

In the case of shells intended for the carriage of powdery or granular substances, and with the agreement of the expert approved by the competent authority, the periodic hydraulic pressure tests may be omitted and replaced by leakproofness tests in accordance with 1.1.4.3.

The maximum intervals for periodic inspections shall be eight years.

Empty tank wagons, uncleaned, may also be transported after the expiry of the set time limit, for the purpose of undergoing the test.

- 1.5.3 In addition, a leakproofness test of the shell with its equipment in accordance with 1.1.4.3 and a check of the satisfactory operation of all the equipment shall be carried out at least every four years.

- 1.5.4 When the safety of the shell or of its equipment may have been impaired as a result of repairs, alterations or accident, an exceptional check shall be carried out.

- 1.5.5 The tests, inspections and checks in accordance with 1.5.1 to 1.5.4 shall be carried out by the expert approved by the competent authority. Certificates shall be issued showing the results of these operations.

## 1.6 *Marking*

- 1.6.1 Each shell shall be fitted with a corrosion-resistant metal plate permanently attached to the shell in a place readily accessible for inspection. The following particulars at least shall be marked on the plate by stamping or by any other similar method. These particulars may be engraved directly on the walls of the shell itself if the walls are so reinforced that the strength of the shell is not impaired:

- Approval number;
- Manufacturer's name or mark;
- Manufacturer's serial number;
- Year of manufacture;
- Test pressure\* (gauge pressure);
- Capacity;\* in the case of multiple-element shells: the capacity of each element;
- Design temperature\* (only if above 50°C or below -20°C);
- Date (month and year) of initial test and of most recent periodic test in accordance with 1.5.1 and 1.5.2;
- Stamp of the expert who carried out the tests; and
- Material of the shell and, where appropriate, the protective lining.

On pressure-filled or pressure-discharge shells the maximum permissible working pressure\* allowed shall be inscribed in addition.

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\* Add the units of measurement after the numerical values.

1.6.2 The following particulars shall be inscribed on each side of the tank wagon (on the shell itself or on a panel):

- Name of the owner;
- Capacity;
- Unladen (tare) mass of tank wagon;
- Load limits according to the characteristics of the wagon and the nature of the lines used; and
- Name of the substance or substances accepted for carriage.<sup>(6)</sup>

In addition, tank wagons shall bear the prescribed danger labels.

### 1.7 Operation

1.7.1 The thickness of the walls of the shell shall not, throughout its use, fall below the minimum figure prescribed in 1.2.8.

1.7.2 Shells shall not be loaded with any dangerous substances other than those for whose carriage they have been approved and which, in contact with the material of the shell, gaskets, equipment and protective linings, are not liable to react dangerously with them, to form dangerous products or appreciably to weaken the material. Foodstuffs may not be carried in these shells unless the necessary measures have been taken to prevent any harm to public health.

1.7.3 The following degrees of filling shall not be exceeded in the shells intended for the carriage of liquids at ambient temperatures:

1.7.3.1 — For inflammable substances without additional risks (e.g. toxicity or corrosivity) in shells with a venting system, or with safety valves (even where preceded by a bursting disc):

$$\text{Degree of filling} = \frac{100}{1 + \alpha (50 - t_F)} \% \text{ of capacity};$$

1.7.3.2 — For toxic or corrosive substances (whether inflammable or not) in shells with a venting system or with safety valves (even where preceded by a bursting disc):

$$\text{Degree of filling} = \frac{98}{1 + \alpha (50 - t_F)} \% \text{ of capacity};$$

1.7.3.3 — For inflammable substances and for harmful or slightly corrosive substances (whether inflammable or not) in hermetically closed shells<sup>(5)</sup> without safety device:

$$\text{Degree of filling} = \frac{97}{1 + \alpha (50 - t_F)} \% \text{ of capacity};$$

1.7.3.4 — For highly toxic, toxic, highly corrosive or corrosive substances (whether inflammable or not) in hermetically closed shells<sup>(5)</sup> without safety device:

$$\text{Degree of filling} = \frac{95}{1 + \alpha (50 - t_F)} \% \text{ of capacity}.$$



- 1.7.3.5 In these formulae  $\alpha$  is the mean coefficient of cubic expansion of the liquid between 15°C and 50°C, i.e. for a maximum variation in temperature of 35°C.

$$\alpha \text{ is calculated by the formula: } \alpha = \frac{d_{15} - d_{50}}{35 \times d_{50}}$$

in which  $d_{15}$  and  $d_{50}$  are the density of the liquid at 15°C and 50°C respectively.  $t_F$  is the mean temperature of the liquid at the time of filling.

- 1.7.3.6 The provisions of 1.7.3.1 to 1.7.3.4 above shall not apply to shells whose contents are maintained by means of a heating device at a temperature above 50°C during carriage. In such a case the degree of filling at the outset shall be such and the temperature shall be so regulated that the shell is not full to more than 95% of its capacity at any time during carriage and that the filling temperature is not exceeded.
- 1.7.3.7 Where hot substances are loaded, the temperature of the outer surface of the shell or of the thermal insulation shall not exceed 70°C during carriage.
- 1.7.4 Shells shall be closed so that the contents cannot run out uncontrolled. The openings of bottom-discharge shells shall be closed by means of screw-threaded plugs, blank flanges or other equally effective devices. The leakproofness of the shell closures, particularly in the upper part of the dip tube, shall be verified by the consignor after the shell has been filled.
- 1.7.5 Where several closure systems are fitted in series, that nearest to the substance being carried shall be closed first.
- 1.7.6 No dangerous residue of the substance carried shall adhere to the outside of shells during carriage, whether they are full or empty.
- 1.7.7 To be accepted for carriage, empty shells, uncleaned, shall be closed in the same manner and be leakproof in the same degree as though they were full.
- 1.7.8 The connecting pipes between the shells of several independent but interconnected tank wagons (complete train, for example) shall be empty during carriage.

## 1.8 *Transitional measures*

NOTE. For the application of the transitional measures under 1.8.1 to 1.8.4, the date of entry into force is 1 October 1978.

- 1.8.1 Tank wagons constructed before the entry into force of the requirements of this appendix and which do not comply with them, but which were built in accordance with the provisions of RID, may be used for a period of eight years from the date of entry into force of these requirements. Tank wagons intended for the carriage of gases of Class 2 may, however, be used for 16 years from the same date, if the periodic tests are carried out.
- 1.8.2 At the expiration of this period, their retention in service is permitted if the items of equipment of the shell satisfy the requirements of this appendix. The wall thickness of the shells, except for shells intended for the carriage of gases of items 7 and 8 of Class 2, shall meet a calculation pressure of at least 0.4 MPa (4 bar) (gauge pressure) for mild steel or 200 kPa (2 bar) (gauge pressure) for aluminium and aluminium alloys.
- 1.8.3 Periodic tests for tank wagons retained in service in conformity with the transitional provisions shall be carried out in accordance with the provisions of Section 1.5 and the special provisions pertaining to the various classes. Unless the earlier provisions prescribed a higher test pressure, a test pressure of 200 kPa (2 bar) (gauge pressure) is sufficient for aluminium and aluminium alloy shells.

1.8.4 Tank wagons which meet these transitional provisions may be used for a period of 20 years from the date of entry into force of the requirements of this appendix, for the carriage of the dangerous goods for which they were approved.

This transitional period does not apply to tank wagons intended for the carriage of substances of Class 2, or to tank wagons whose wall thickness and items of equipment meet the requirements of this appendix.

1.8.5 Tank wagons constructed before the entry into force of the requirements applicable from 1 January 1988 and which do not conform to those provisions but were constructed according to the requirements of RID in force until that date may still be used.

2. *Special requirements applicable to Class 2:  
Gases: compressed, liquefied or dissolved under pressure*

2.1 *Use*

Gases of marginal 201 other than those listed below may be carried in tank wagons, battery wagons and demountable tanks:<sup>(9)</sup> fluorine and silicon tetrafluoride [item 1 (*at*)]; nitric oxide [item 1 (*ct*)]; mixtures of hydrogen with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% hydrogen selenide or phosphine or silane or germane by volume or with not more than 15% arsine by volume [item 2 (*bt*)]; mixtures of hydrogen with not more than 10% diborane by volume; mixtures of nitrogen or rare gases (containing not more than 10% xenon by volume) with not more than 10% diborane by volume [item 2 (*ct*)]; boron trichloride, chlorine trifluoride, nitrosyl chloride, sulphuryl fluoride and tungsten hexafluoride [item 3 (*at*)]; methylsilane [item 3 (*b*)]; arsine, dichlorosilane, dimethylsilane, hydrogen selenide and trimethylsilane [item 3 (*bt*)]; cyanogen, cyanogen chloride and ethylene oxide [item 3 (*ct*)]; mixtures of methylsilanes [item 4 (*bt*)]; ethylene oxide containing not more than 50% methyl formate by mass [item 4 (*ct*)]; silane [item 5 (*b*)]; substances of items 5 (*bt*) and (*ct*); dissolved acetylene [item 9 (*c*)]; and the gases of items 12 and 13.

2.2 *Construction*

2.2.1 Shells intended for the carriage of substances of items 1 to 6 and 9 shall be made of steel. For weldless shells, by derogation from 1.2.6.3 a minimum elongation at fracture of 14% and a stress  $\sigma$  (sigma) lower than or equal to the limits given below according to the materials may be accepted:

(a) If the ratio  $Re/Rm$  (minimum guaranteed characteristics after heat treatment) is higher than 0.66 without exceeding 0.85:  $\sigma < 0.75 Re$ ;

(b) If the ratio  $Re/Rm$  (minimum guaranteed characteristics after heat treatment) is higher than 0.85:  $\sigma < 0.5 Rm$ .

2.2.2 The requirements of Appendix II C shall apply to the materials and construction of welded shells.

2.2.3 Shells intended for the carriage of chlorine or phosgene [item 3 (*at*)] shall be designed for a calculation pressure<sup>(10)</sup> of at least 2.2 MPa (22 bar) (gauge pressure).

2.2.4 For double-walled shells, the wall thickness of the inner receptacle may, notwithstanding the requirements of 1.2.8.3, be 3 mm if a metal is used which has good low-temperature performance corresponding to a minimum tensile strength  $Rm = 490 N/mm^2$  and a minimum coefficient of elongation  $A = 30\%$ .

If other metals are used, an equivalent minimum wall thickness shall be maintained; this thickness is to be calculated according to the formula in footnote 3 to 1.2.8.3, where  $Rm_0 = 490 \text{ N/mm}^2$  and  $A_0 = 30\%$ .

The outer shell must in this case have a minimum wall thickness of 6 mm where mild steel is concerned. If other materials are used, an equivalent minimum wall thickness shall be maintained, which must be calculated according to the formula given in 1.2.8.3.

### 2.3 *Items of equipment*

2.3.1 The discharge pipes of shells shall be capable of being closed by blank flanges or some other equally reliable device.

2.3.2 Shells intended for the carriage of liquefied gases may, in addition to being provided with the openings prescribed in 1.3.2 and 1.3.3, be provided with openings for the fitting of gauges, thermometers, manometers and with bleed holes, as required for their operation and safety.

2.3.2.1 Filling and discharge openings of shells intended for the carriage of liquefied inflammable and/or toxic gases shall be equipped with an instant-closing internal safety device which closes automatically in the event of an unintended movement of the tank wagon or a fire. It must also be possible to operate the closing device from a distance. The device which keeps the internal closure open, e.g. a rail hook, is not a component of the wagon.

2.3.2.2 All openings, other than those for the accommodation of safety valves and closed bleed holes, of shells intended for the carriage of liquefied inflammable and/or toxic gases shall, if their nominal diameter is more than 1.5 mm, be equipped with an internal shut-off device

2.3.2.3 Notwithstanding the provisions of 2.3.2.1 and 2.3.2.2, shells intended for the carriage of deeply-refrigerated inflammable and/or toxic liquefied gases may be equipped with external devices in place of internal devices if the external devices have a protection against external damage at least equivalent to that of the wall of the shell.

2.3.2.4 If the shells are equipped with gauges in direct contact with the substance carried they shall not be of a transparent material. If there are thermometers they shall not project directly into the gas or liquid through the shell wall.

2.3.2.5 Shells intended for the carriage of chlorine, sulphur dioxide, and phosgene [item 3 (*at*)], methyl mercaptan and hydrogen sulphide [item 3 (*bt*)] shall not have any opening below the surface level of the liquid. In addition, the cleaning apertures (fist holes) referred to in 1.3.4 shall not be permitted.

2.3.2.6 Filling and discharge openings situated in the upper part of shells shall, in addition to what is prescribed in paragraph 2.3.2.1, be equipped with a second, external closing device. This shall be capable of being closed by a blank flange or some other equally reliable device.

2.3.3 Safety valves shall meet the conditions prescribed in 2.3.3.1 to 2.3.3.3 below.

2.3.3.1 Shells intended for the carriage of gases of items 1 to 6 and 9 may be fitted with not more than two safety valves, whose aggregate clear cross-sectional area of passage at the seating or seatings shall be not less than  $20 \text{ cm}^2$  per  $30 \text{ m}^3$  or part thereof of the receptacle's capacity. These valves shall be capable of opening automatically under a pressure of from 0.9 to 1.0 times the test pressure of the shell to which they are fitted. They shall be of a type able to resist dynamic stresses, including liquid surge. The use of deadweight or counterweight valves is prohibited.

Shells intended for the carriage of gases of items 1 to 9 harmful to the respiratory organs or entailing a poison risk<sup>(10)</sup> shall not have safety valves unless

the safety valves are preceded by a bursting disc. In the latter case the arrangement of the bursting disc and the safety valve shall be to the satisfaction of the competent authority.

Where tank wagons are intended for carriage by sea, the provisions of this paragraph shall not prohibit the fitting of safety valves conforming to the regulations governing that mode of transport.

- 2.3.3.2 Shells intended for the carriage of gases of items 7 and 8 shall be fitted with two independent safety valves each so designed as to permit the gases formed by evaporation during normal operation to escape from the shell in such a way that the pressure does not at any time exceed the working pressure indicated on the shell by more than 10%.

One of the two safety valves may be replaced by a bursting disc which shall be such as to burst at the test pressure.

In the event of loss of the vacuum in a double-walled shell, or of destruction of 20% of the insulation of a single-walled shell, the safety valve and the bursting disc shall permit an outflow such that the pressure in the shell cannot exceed the test pressure.

- 2.3.3.3 The safety valves of shells intended for the carriage of gases of items 7 and 8 shall be capable of opening at the working pressure indicated on the shell. They shall be so designed as to function faultlessly even at their lowest working temperature. The reliability of their operation at that temperature shall be established and checked either by testing each valve or by testing a specimen valve of each design type.

- 2.3.4 Thermal insulation:

- 2.3.4.1 If shells intended for the carriage of liquefied gases of items 3 and 4 are equipped with thermal insulation, such insulation shall consist of either:

- A sun shield covering not less than the upper third but not more than the upper half of the shell and separated from the shell by an air space not less than 4 cm across; or
- A completed cladding, of adequate thickness, of insulating materials.

- 2.3.4.2 Shells intended for the carriage of gases of items 7 and 8 shall be thermally insulated. The thermal insulation shall be ensured by means of continuous sheathing. If the space between the shell and the sheathing is under vacuum (vacuum insulation), the protective sheathing shall be so designed as to withstand without deformation an external pressure of at least 100 kPa (1 bar) (gauge pressure). By derogation from 1.1.4.2, external and internal reinforcing devices may be taken into account in the calculation. If the sheathing is so closed as to be gas-tight, a device shall be provided to prevent any dangerous pressure from developing in the insulating layer in the event of inadequate gas-tightness of the shell or of its items of equipment. The device shall prevent the infiltration of moisture into the heat-insulating sheath.

- 2.3.4.3 Shells intended for the carriage of liquefied gases having a boiling point below  $-182^{\circ}\text{C}$  at atmospheric pressure shall not include any combustible material either in the thermal insulation or in the means of attachment to the frame.

The means of attachment of shells intended for the carriage of argon, nitrogen, helium or neon of item 7 (a) or hydrogen of item 7 (b) may, with the consent of the competent authority, contain plastics substances between the inner and outer sheath.

- 2.3.5 The following are considered to be elements of a battery-wagon:

- Receptacles as defined in marg. 212 (1) (b),
- Tank as defined in marg. 212 (1) (c).

The provisions of this appendix do not apply to frames of cylinders conforming to marg. 212 (1) (d).

The following conditions shall be complied with for battery-wagons:

- 2.3.5.1 If one of the elements of a multiple-element shell is fitted with a safety valve and shut-off devices are provided between the elements, every element shall be so fitted.
- 2.3.5.2 The filling and discharge devices may be fitted to a manifold.
- 2.3.5.3 Each element of a multiple-element shell intended for the carriage of compressed gases of items 1 and 2 harmful to the respiratory organs or entailing a poison risk<sup>(10)</sup> or of inflammable gases, shall be capable of being isolated by a valve.
- 2.3.5.4 The elements of a multiple-element shell intended for the carriage of liquefied gases of items 3 to 6 shall be so designed that they can be filled separately and be kept isolated by a valve capable of being sealed.
- 2.3.5.5 If the elements are demountable,<sup>(9)</sup> the following requirements apply:
- (a) They shall be so fixed on the underframe of the wagon that they cannot move.
- (b) They shall not be interconnected by a manifold.
- (c) If the elements can be rolled, the valves shall be provided with protective caps.
- 2.3.6 Notwithstanding the provisions of 1.3.3, shells intended for the carriage of deeply refrigerated liquefied gases need not have an inspection aperture.
- 2.4 *Type approval*  
No special requirements.
- 2.5 *Tests*
- 2.5.1 The materials of every welded shell shall be tested by the method described in Appendix II C.
- 2.5.2 The test pressure values shall be as follows:
- 2.5.2.1 For shells intended for the carriage of gases of items 1 and 2: the values given in marg. 219 (1) and (3);
- 2.5.2.2 For shells intended for the carriage of gases of items 3 and 4:
- (a) If the shells are not more than 1.5 m in diameter: the values indicated in marg. 220 (2):
- (b) If the shells are more than 1.5 m in diameter: the values<sup>(12)</sup> indicated below:

Description of substance	Item number	Minimum test pressure for shells				Maximum permissible mass of contents per litre of capacity kg
		with thermal insulation		without thermal insulation		
		MPa	bar	MPa	bar	
Bromochlorodifluoromethane (R 12B1) . . .	3 (a)	1	10	1	10	1.61
Chlorodifluoromethane (R 22) . . . . .	3 (a)	2.4	24	2.6	26	1.03
Chloropentafluoroethane (R 115) . . . . .	3 (a)	2	20	2.3	23	1.08
1-Chloro-2,2,2-trifluoroethane (R 133a) . . . . .	3 (a)	1	10	1	10	1.18
Dichlorodifluoromethane (R 12) . . . . .	3 (a)	1.5	15	1.6	16	1.15
Dichlorofluoromethane (R 21) . . . . .	3 (a)	1	10	1	10	1.23
1,2-Dichloro-1,1,2,2-tetrafluoroethane (R 114) . . . . .	3 (a)	1	10	1	10	1.30
Octafluorocyclobutane (R C318) . . . . .	3 (a)	1	10	1	10	1.34
Ammonia . . . . .	3 (at)	2.6	26	2.9	29	0.53
Cblorine . . . . .	3 (at)	1.7	17	1.9	19	1.25
Hexafluoropropylene (R 1216) . . . . .	3 (at)	1.7	17	1.9	19	1.11
Hydrogen bromide . . . . .	3 (at)	5	50	5.5	55	1.54

Description of substance	Item number	Minimum test pressure for shells				Maximum permissible mass of contents per litre of capacity kg
		with thermal insulation		without thermal insulation		
		MPa	bar	MPa	bar	
Methyl bromide . . . . .	3 (at)	1	10	1	10	1.51
Nitrogen dioxide NO <sub>2</sub> . . . . .	3 (at)	1	10	1	10	1.30
Phosgene . . . . .	3 (at)	1.5	15	1.7	17	1.23
Sulphur dioxide . . . . .	3 (at)	1	10	1.2	12	1.23
Butane . . . . .	3 (b)	1	10	1	10	0.51
1-Butene . . . . .	3 (b)	1	10	1	10	0.53
1-Chloro-1, 1-difluoroethane (R 142b) . . . . .	3 (b)	1	10	1	10	0.99
Cis-2-butene . . . . .	3 (b)	1	10	1	10	0.55
Cyclopropane . . . . .	3 (b)	1.6	16	1.8	18	0.53
1,1-Difluoroethane (R 152a) . . . . .	3 (b)	1.4	14	1.6	16	0.79
Dimethyl ether . . . . .	3 (b)	1.4	14	1.6	16	0.58
Isobutane . . . . .	3 (b)	1	10	1	10	0.49
Isobutene . . . . .	3 (b)	1	10	1	10	0.52
Propane . . . . .	3 (b)	2.1	21	2.3	23	0.42
Propylene . . . . .	3 (b)	2.5	25	2.7	27	0.43
Trans-2-butene . . . . .	3 (b)	1	10	1	10	0.54
1,1,1-Trifluoroethane . . . . .	3 (b)	2.8	28	3.2	32	0.79
Dimethylamine . . . . .	3 (bt)	1	10	1	10	0.59
Ethylamine . . . . .	3 (bt)	1	10	1	10	0.61
Ethyl chloride . . . . .	3 (bt)	1	10	1	10	0.80
Hydrogen sulphide . . . . .	3 (bt)	4.5	45	5	50	0.67
Methylamine . . . . .	3 (bt)	1	10	1.1	11	0.58
Methyl chloride . . . . .	3 (bt)	1.3	13	1.5	15	0.81
Methyl mercaptan . . . . .	3 (bt)	1	10	1	10	0.78
Trimethylamine . . . . .	3 (bt)	1	10	1	10	0.56
1,2-Butadiene . . . . .	3 (c)	1	10	1	10	0.59
1,3-Butadiene . . . . .	3 (c)	1	10	1	10	0.55
Vinyl chloride . . . . .	3 (c)	1	10	1.1	11	0.81
Methyl vinyl ether . . . . .	3 (ct)	1	10	1	10	0.67
Trifluorochloroethylene (R 1113) . . . . .	3 (ct)	1.5	15	1.7	17	1.13
Vinyl bromide . . . . .	3 (ct)	1	10	1	10	1.37
Mixture F 1 . . . . .	4 (a)	1	10	1.1	11	1.23
Mixture F 2 . . . . .	4 (a)	1.5	15	1.6	16	1.15
Mixture F 3 . . . . .	4 (a)	2.4	24	2.7	27	1.03
Mixture of gases R 500 . . . . .	4 (a)	1.8	18	2	20	1.01
Mixture of gases R 502 . . . . .	4 (a)	2.5	25	2.8	28	1.05
Mixtures of 19% to 21% by mass dichlorodifluoromethane (R 12) and 79% to 81% by mass bromochlorodifluoromethane (R 12B1); . . . . .	4 (a)	1	10	1.1	11	1.50
Mixtures of methyl bromide and chloropicrin . . . . .	4 (at)	1	10	1	10	1.51
Mixture A (trade name: butane) . . . . .	4 (b)	1	10	1	10	0.50
Mixture AO (trade name: butane) . . . . .	4 (b)	1.2	12	1.4	14	0.47
Mixture A1 . . . . .	4 (b)	1.6	16	1.8	18	0.46
Mixture B . . . . .	4 (b)	2	20	2.3	23	0.43
Mixture C (trade name: propane) . . . . .	4 (b)	2.5	25	2.7	27	0.42
Mixtures of hydrocarbons containing methane . . . . .	4 (b)	—	—	22.5	225	0.187
		—	—	30	300	0.244
Mixtures of methyl chloride and methylene chloride . . . . .	4 (bt)	1.3	13	1.5	15	0.81
Mixtures of methyl chloride and chloropicrin . . . . .	4 (bt)	1.3	13	1.5	15	0.81
Mixtures of methyl bromide and ethylene bromide . . . . .	4 (bt)	1	10	1	10	1.51

Description of substance	Item number	Minimum test pressure for shells				Maximum permissible mass of contents per litre of capacity kg
		with thermal insulation		without thermal insulation		
		MPa	bar	MPa	bar	
Methylacetylene/propadiene and hydrocarbon mixtures						
Mixture P1 . . . . .	4 (c)	2.5	25	2.8	28	0.49
Mixture P2 . . . . .	4 (c)	2.2	22	2.3	23	0.47
Mixtures of 1,3-butadiene and hydrocarbons . . . . .	4 (c)	1	10	1	10	0.50
Ethylene oxide containing not more than 10% carbon dioxide by mass . . . . .	4 (ct)	2.4	24	2.6	26	0.73
Ethylene oxide with nitrogen up to a total pressure of 1 MPa (10 bar) at 50°C . . . . .	4 (ct)	1.5	15	1.5	15	0.78
Dichlorodifluoromethane containing 12% ethylene oxide by mass . . . . .	4 (ct)	1.5	15	1.6	16	1.09

2.5.2.3 For shells intended for the carriage of gases of items 5 and 6:

- (a) If the shells are not sheathed in thermal insulation, the values indicated in marg. 220 (3) and (4);
- (b) If they are sheathed in thermal insulation, the values indicated below:

Description of substance	Item number	Minimum test pressure		Maximum permissible mass of contents per litre of capacity kg
		MPa	bar	
		Bromotrifluoromethane (R 13B1) . . . . .	5 (a)	
Carbon dioxide . . . . .	5 (a)	19	190	0.73
		22.5	225	0.78
Chlorotrifluoromethane (R 13) . . . . .	5 (a)	12	120	0.96
		22.5	225	1.12
Hexafluoroethane (R 116) . . . . .	5 (a)	16	160	1.28
		20	200	1.34
Nitrous oxide N <sub>2</sub> O . . . . .	5 (a)	22.5	225	0.78
Sulphur hexafluoride . . . . .	5 (a)	12	120	1.34
Trifluoromethane (R 23) . . . . .	5 (a)	19	190	0.92
		25	250	0.99
Xenon . . . . .	5 (a)	12	120	1.30
Hydrogen chloride . . . . .	5 (at)	12	120	0.69
Ethane . . . . .	5 (b)	12	120	0.32
Ethylene . . . . .	5 (b)	12	120	0.25
		22.5	225	0.36
1,1-Difluoroethylene . . . . .	5 (c)	12	120	0.66
		22.5	225	0.78
Vinyl fluoride . . . . .	5 (c)	12	120	0.58
		22.5	225	0.65
Mixture of gases R 503 . . . . .	6 (a)	3.1	31	0.11
		4.2	42	0.21
		10	100	0.76
Carbon dioxide containing not more than 35% ethylene oxide by mass . . . . .	6 (c)	19	190	0.73
		22.5	225	0.78
Ethylene oxide containing more than 10% but not more than 50% carbon dioxide by mass . . . . .	6 (ct)	19	190	0.66
		25	250	0.75

Where shells sheathed in thermal insulation are used which have been subjected to a test pressure lower than that shown in the table, the maximum mass of the contents per litre of capacity shall be such that the pressure reached in the shell by the substance in question at 55°C does not exceed the test pressure stamped on the shell. In such a case the maximum load allowed shall be prescribed by the expert approved by the competent authority.

- 2.5.2.4 For shells intended for the carriage of ammonia dissolved under pressure [item 9 (*at*)]: the values indicated below:

Description of substance	Item number	Minimum test pressure		Maximum permissible mass of contents per litre of capacity kg
		MPa	bar	
Ammonia dissolved under pressure in water . . . . .				
with more than 35% and not more than 40% ammonia . . . . .	9 ( <i>at</i> )	1	10	0.80
with more than 40% and not more than 50% ammonia . . . . .	9 ( <i>at</i> )	1.2	12	0.77

- 2.5.2.5 For shells intended for the carriage of gases of items 7 and 8: not less than 1.3 times the maximum permitted working pressure indicated on the shell, but not less than 300 kPa (3 bar) (gauge pressure); for shells with vacuum insulation the test pressure shall be not less than 1.3 times the maximum permitted working pressure increased by 100 kPa (1 bar).
- 2.5.3 The first hydraulic pressure test shall be carried out before thermal insulation is placed in position.
- 2.5.4 The capacity of each shell intended for the carriage of gases of items 3 to 6 and 9 shall be determined, under the supervision of an expert approved by the competent authority, by weighing or by volumetric measurement of the quantity of water required to fill the shell. The measurement of shell capacity shall be accurate to within 1%. Determination by a calculation based on the dimensions of the shell is not permitted. The maximum permissible load according to marg. 220 (4) and 2.5.2.3 shall be prescribed by an approved expert.
- 2.5.5 Checking of the welds shall be carried out in accordance with the lambda-coefficient 1.0 requirements of 1.2.8.4.
- 2.5.6 Notwithstanding the requirements of Section 1.5, the periodic tests, including the hydraulic pressure test, shall take place:
- 2.5.6.1 Every four years in the case of shells intended for the carriage of boron trifluoride [item 1 (*at*)], town gas [item 2 (*bt*)], chlorine, hydrogen bromide, nitrogen dioxide, phosgene or sulphur dioxide [item 3 (*at*)], hydrogen sulphide [item 3 (*bt*)] and hydrogen chloride [item 5 (*at*)].
- 2.5.6.2 After eight years' service and thereafter every 12 years in the case of shells intended for the carriage of gases of items 7 and 8. A leakproofness check must be performed by an approved expert six years after each periodic test.
- 2.5.7 For shells equipped with vacuum insulation, the hydraulic test and the check of the internal condition may, with the consent of the approved expert, be replaced by a leakproofness test and measurement of the vacuum.
- 2.5.8 If, at the time of periodic inspections, openings are made in shells intended for the carriage of gases of items 7 and 8, the method by which they are



hermetically closed before being returned to service shall be approved by the approved expert and shall ensure the integrity of the shell.

- 2.5.9 The leakproofness test for shells intended for the carriage of gases of items 1 to 6 and 9 shall be carried out at a pressure of not less than 0.4 MPa (4 bar) and not more than 0.8 MPa (8 bar) (gauge pressure).

2.6 *Marking*

- 2.6.1 In addition, the following particulars shall be marked by stamping or by any other similar method on the plate prescribed in 1.6.1 or directly on the walls of the shell itself if the walls are so reinforced that the strength of the shell is not impaired:

- 2.6.1.1 On shells intended for the carriage of only one substance:

— The name of the gas in full.

This shall be supplemented, in the case of shells intended for the carriage of compressed gases of items 1 and 2, by the maximum filling pressure at 15°C allowed for the shell and, in the case of shells intended for the carriage of liquefied gases of items 3 to 8 and of ammonia dissolved under pressure of item 9 (*at*), by the maximum permissible load mass in kg and the filling temperature, if below -20 °C.

- 2.6.1.2 On multi-purpose shells:

— The names, in full, of the gases for whose carriage the shell is approved.

This shall be supplemented by particulars of the maximum permissible load mass, in kg, for each of them.

- 2.6.1.3 On shells intended for the carriage of gases of items 7 and 8:

— The working pressure.

- 2.6.1.4 On shells equipped with thermal insulation:

— The expression “thermally insulated” or “thermally insulated by vacuum”.

- 2.6.2 The frame of a battery-wagon, with the exception of demountable shells, shall be fitted near the filling point with a plate specifying:

— The test pressure\* of the elements;

— The maximum filling pressure\* at 15°C allowed for elements intended for compressed gases;

— The number of elements;

— The aggregate capacity\* of the elements;

— The name of the gas in full;

and, in addition, in the case of liquefied gases:

— The maximum permissible load mass\* per element.

- 2.6.3 In addition to the inscriptions prescribed in 1.6.2, the following shall be inscribed on each side of the tank wagon or on panels:

(a) Either: “lowest permissible filling temperature -20°C”

Or: “lowest permissible filling temperature. . .”;

(b) For shells intended for the carriage of one substance only:

— The name of the gas in full;

\* Add the units of measurement after the numerical values.

## (c) For multi-purpose shells:

— The name in full of all the gases to whose carriage the shell is assigned, with an indication of the maximum permissible load mass in kg for each of them;

## (d) For shells equipped with thermal insulation:

— The inscription “thermally insulated” or “thermally insulated by vacuum”, in an official language of the country of registration and also in French, German, Italian or English, unless international tariffs or agreements concluded between the railway administrations provide otherwise.

2.6.3.1 For boron trifluoride [item 1 (*at*)], liquefied gases of items 3 to 8 and ammonia dissolved under pressure in water [item 9 (*at*)] the load limits in accordance with 1.6.2 shall be determined in the light of the maximum permissible load mass of the shell, depending on the substance carried; in the case of multi-purpose shells, the name in full of the particular gas being carried shall be stated together with the load limit.

2.6.4 The panels on wagons carrying demountable receptacles as referred to in 2.3.5.5 need not bear the particulars prescribed in 1.6.2 and 2.6.3.

2.6.5 Shells intended for the carriage of liquefied gases of items 3 to 8 must be marked with an unbroken orange<sup>(13)</sup> band, about 30 cm wide, encircling the shell at mid-height.

2.7 *Operation*

2.7.1 A shell assigned at different times to the carriage of different liquefied gases of items 3 to 8 (multi-purpose shell) may not carry substances other than those listed in one, and one only, of the following groups:

Group 1: halogenated hydrocarbons of items 3 (*a*) and 4 (*a*);

Group 2: hydrocarbons of items 3 (*b*) and 4 (*b*), 1,2-butadiene and 1,3-butadiene [item 3 (*c*)] and mixtures of 1,3-butadiene and hydrocarbons [item 4 (*c*)];

Group 3: ammonia [item 3 (*at*)]; dimethyl ether [item 3 (*b*)], dimethylamine, ethylamine, methylamine and trimethylamine [item 3 (*bt*)] and vinyl chloride [item 3 (*c*)];

Group 4: methyl bromide [item 3 (*at*)], ethyl chloride and methyl chloride [item 3 (*bt*)];

Group 5: mixtures of ethylene oxide with carbon dioxide and of ethylene oxide with nitrogen [item 4 (*ct*)];

Group 6: nitrogen, carbon dioxide, rare gases, nitrous oxide, oxygen [item 7 (*a*)], air, mixtures of nitrogen with rare gases, mixtures of oxygen with nitrogen, even if they contain rare gases [item 8 (*a*)];

Group 7: ethane, ethylene and methane [item 7 (*b*)] and mixtures of methane with ethane, also when they contain propane or butane [item 8 (*b*)].

Shells which have been filled with a substance of group 1 or group 2 shall be emptied of liquefied gas before being loaded with another substance belonging to the same group. Shells which have been filled with a substance of one of the groups 3 to 7 shall be completely emptied of liquefied gas and blown down before being loaded with another substance belonging to the same group.

2.7.2 The multiple use of shells for the carriage of liquefied gases of the same group shall be allowed if all the requirements prescribed for the gases to be carried in one and the same shell are observed. Such multiple use shall be subject to approval by an approved expert.

- 2.7.3 The multiple use of shells for the carriage of gases of different groups shall be allowed if permitted by the approved expert.  
When shells are reassigned to gases which belong to a different group, the shells must be completely emptied of liquefied gases, then blown down and lastly degassed. The degassing of shells must be checked and certified by the approved expert.
- 2.7.4 When loaded tank wagons or empty but uncleaned tank wagons are handed over for carriage, only the particulars applicable under 2.6.3 to the gas loaded or just discharged shall be visible; all particulars concerning other gases shall be covered up.
- 2.7.5 All the elements of a battery-wagon shall contain only one and the same gas. In the case of a battery-wagon intended for the carriage of liquefied gases of items 3 to 6, the elements shall be filled separately and be kept isolated by a sealed valve.
- 2.7.6 The maximum filling pressure for compressed gases of items 1 and 2 other than boron trifluoride [item 1 (*at*)] shall not exceed the values prescribed in marg. 219 (2).  
For boron trifluoride [item 1 (*at*)], the maximum permissible load mass per litre of capacity shall not exceed 0.86 kg.  
The maximum permissible load mass per litre of capacity according to marg. 220 (2), (3) and (4) and 2.5.2.2, 2.5.2.3 and 2.5.2.4 shall be complied with.
- 2.7.7 The degree of filling of shells intended for the carriage of gases of items 7 (*b*) and 8 (*b*) shall remain below the level at which, if the contents were raised to the temperature at which the vapour pressure equalled the opening pressure of the safety valve, the volume of the liquid would reach 95% of the shell's capacity at that temperature. Shells intended for the carriage of gases of items 7 (*a*) and 8 (*a*) may be filled to 98% at the loading temperature and the loading pressure.
- 2.7.8 On shells intended for the carriage of nitrous oxide or oxygen [item 7 (*a*)], or of air or mixtures containing oxygen [item 8 (*a*)], substances containing grease or oil shall not be used to ensure leakproofness of the joints or for the maintenance of the closures.
- 2.7.9 The requirement in paragraph 1.7.5 does not apply to gases of items 7 and 8.
- 2.7.10 *Control provisions for the loading of liquid-gas tank wagons*
- 2.7.10.1 Control measures before loading
- (a) For each gas to be carried, the details on the tank plate (see 1.6.1 and 2.6.1) shall be checked to agree with those on the wagon panel (see 1.6.2 and 2.6.3).  
Tank wagons for multiple use shall especially be checked to ensure that the correct folding panels are visible on both sides of the wagon.  
The load limits on the wagon panel shall not exceed the maximum permissible filling mass on the tank plate.
- (b) The last load shall be determined, either from particulars in the consignment note or by analysis. If necessary the tank shall be cleaned.
- (c) The mass of the residue shall be determined (e.g. by weighing) and taken into account in determining the filling quantity, so that the tank-wagon is not overfilled or overloaded.
- (d) The leakproofness of the shell and its items of equipment, and their ability to function, shall be checked.
- 2.7.10.2 Loading procedure
- For loading, the provisions of the operating instructions of the tank wagon shall be complied with.

### 2.7.10.3 Control measures after loading

- (a) After filling, whether the wagon is overfilled or overloaded shall be checked by calibrated checking devices (e.g. by weighing on a calibrated weighbridge). Overfilled or overloaded tank wagons shall be immediately discharged in a safe manner until the permitted filling quantity is reached.
- (b) The partial pressure of inert gases in the gas phase shall not exceed 0.2 MPa (2 bar), or the gauge pressure in the gas phase shall not exceed by more than 0.1 MPa (1 bar) the vapour pressure (absolute) of the liquid gas at the temperature of the liquid phase [for ethylene oxide with nitrogen, however, see the provisions of marg. 201, item 4 (c)].
- (c) After loading, bottom-discharge wagons shall be checked to ensure that the internal shut-off devices are adequately closed.
- (d) Before attaching the blank flanges, the leakproofness of the valves shall be checked; any leaks shall be eliminated by suitable measures.
- (e) At the valve outlets, blank flanges with suitable leakproof seals and the prescribed number of bolts shall be attached.
- (f) Lastly, a final visual check of the wagon, its equipment and marking shall be made to ensure that no filling substance is escaping.

### 3. *Special requirements applicable to Class 3: Inflammable liquids*

#### 3.1 *Use*

The following substances of marg. 301 may be carried in tank wagons:

##### 3.1.1 Substances listed by name in item 12.

##### 3.1.2 Substances classified under (a) of items 11, 14 to 23, 25 and 26 and comparable substances to be classified under (a) of those items, with the exception of isopropyl chloroformate of item 25 (a);

##### 3.1.3 Substances classified under (b) of items 11, 14 to 20, 22 and 24 to 26 and comparable substances to be classified under (b) of those items;

##### 3.1.4 Substances classified under items 1 to 6 and 31 to 34 and comparable substances to be classified under those items, with the exception of nitromethane of item 31 (c).

#### 3.2 *Construction*

##### 3.2.1 Shells intended for the carriage of substances listed by name in item 12 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 1.5 MPa (15 bar) (gauge pressure).

##### 3.2.2 Shells intended for the carriage of the substances referred to in 3.1.2 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 1 MPa (10 bar) (gauge pressure).

##### 3.2.3 Shells intended for the carriage of the substances referred to in 3.1.3 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).

##### 3.2.4 Shells intended for the carriage of the substances referred to in 3.1.4 shall be designed in accordance with the requirements of the general part of this appendix.

#### 3.3 *Items of equipment*

##### 3.3.1 All openings of shells intended for the carriage of the substances referred to in 3.1.1 and 3.1.2 shall be above the surface level of the liquid. No pipes or pipe connections shall pass through the walls of the shell below the surface level of the

liquid. Shells shall be capable of being hermetically closed<sup>(5)</sup> and the closures shall be capable of being protected by a lockable cap.

3.3.2 Shells intended for the carriage of the substances referred to in 3.1.3 and 3.1.4 may also be of the bottom discharge type. Shells intended for the carriage of the substances referred to in 3.1.3 shall be capable of being hermetically closed.<sup>(5)</sup>

3.3.3 If shells intended for the carriage of the substances referred to in 3.1.1, 3.1.2 or 3.1.3 are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority. If shells intended for the carriage of the substances referred to in 3.1.4 are equipped with safety valves or a venting system, these shall satisfy the requirements of 1.3.5 to 1.3.7. Shells intended for the carriage of the substances referred to in 3.1.4 having a flash-point not exceeding 55°C and equipped with a venting system which cannot be closed shall have a flame-trap in the venting system.

3.4 *Type approval*

No special requirements.

3.5 *Tests*

3.5.1 Shells intended for the carriage of substances referred to in 3.1.1, 3.1.2 and 3.1.3 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

3.5.2 Shells intended for the carriage of substances referred to in 3.1.4 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

3.6 *Marking*

No special requirements.

3.7 *Operation*

3.7.1 Shells intended for the carriage of the substances referred to in 3.1.1, 3.1.2 and 3.1.3 shall be hermetically<sup>(5)</sup> closed during carriage. The closures of shells intended for the carriage of substances referred to in 3.1.1 and 3.1.2 shall be protected by a locked cap.

3.7.2 Tank wagons approved for the carriage of substances of items 6, 11, 12 and 14 to 20 shall not be used for the carriage of foodstuffs, articles of consumption or animal feedstuffs.

3.7.3 An aluminium alloy shell shall not be used for the carriage of acetaldehyde of item 1 (a) unless the shell is reserved solely for such carriage and the acetaldehyde is free from acid.

3.7.4 The petrol (gasoline) referred to in the Note to item 3 (b) of marg. 301 may also be carried in tanks designed according to 1.2.4.1 and having equipment conforming to 1.3.5.

4. *Special requirements applicable to Class 4.1: Inflammable solids; Class 4.2: Substances liable to spontaneous combustion; Class 4.3: Substances which give off inflammable gases on contact with water*

4.1 *Use*

Substances of items 2, 8 and 11 of marg. 401, items 1, 3 and 8 of marg. 431, sodium, potassium, alloys of sodium and potassium of item 1 (a) and substances of items 2 (e) and 4 of marg. 471 may be carried in tank wagons.

#### 4.2 *Construction*

- 4.2.1 Shells intended for the carriage of white or yellow phosphorus of item 1 of marg. 431, and substances of item 2 (e) and of item 4 of marg. 471, shall be designed for a calculation pressure<sup>(1)</sup> of not less than 1 MPa (10 bar) (gauge pressure).
- 4.2.2 Shells intended for the carriage of substances of item 3 of marg. 431 shall be designed for a calculation pressure<sup>(1)</sup> of not less than 2.1 MPa (21 bar) (gauge pressure). The requirements of Appendix II C are applicable to the materials and construction of these shells.

#### 4.3 *Items of equipment*

- 4.3.1 Shells intended for the carriage of sulphur of item 2 (b) and of naphthalene of item 11 (c) of marg. 401 shall be equipped with thermal insulation made of materials which are not readily inflammable. They may be equipped with valves opening automatically inwards or outwards under the effect of a difference of pressure between 20 kPa and 30 kPa (0.2 bar and 0.3 bar).
- 4.3.2 Shells intended for the carriage of white or yellow phosphorus of item 1 marg. 431 shall meet the following equipments:
- 4.3.2.1 The heating device shall not penetrate into the body of the shell but shall be exterior to it. However, a pipe used for extracting the phosphorus may be equipped with a heating jacket. The device for heating this jacket shall be so regulated as to prevent the temperature of the phosphorus from exceeding the filling temperature of the shell. Other piping shall enter the shell in its upper part; openings shall be above the highest permissible level of the phosphorus and be capable of being completely enclosed under lockable caps. In addition, the cleaning apertures (fist-holes) referred to in 1.3.4 shall not be permitted.
- 4.3.2.2 The shell shall be equipped with a gauging system for verifying the level of the phosphorus and, if water is used as the protective agent, with a fixed gauge mark showing the highest permissible level of water.
- 4.3.3 Shells intended for the carriage of substances of item 3 of marg. 431 or item 2 (e) of marg. 471 shall not have any openings or connections below the level of the liquid, even if such openings or connections are capable of being closed. In addition the cleaning openings (fist holes) provided for in 1.3.4 shall not be permitted. Openings in the upper part of the shell, including their fittings, shall be capable of being protected by a cap.
- 4.3.4 Shells intended for the carriage of substances of item 1 (a) of marg. 471 shall have their openings and orifices (valves, ducts, manholes, etc.) protected with leakproof lockable caps, and shall be equipped with thermal insulation made of materials which are not readily inflammable.

#### 4.4 *Type approval*

No special requirements.

#### 4.5 *Tests*

- 4.5.1 Shells intended for the carriage of: sulphur in the molten state of item 2 (b) or naphthalene in the molten state of item 11 (c) of marg. 401; white or yellow phosphorus of item 1 of marg. 431; sodium, potassium or alloys of sodium and potassium of item 1 (a), substances of item 2 (e) or of item 4 of marg. 471 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of at least 0.4 MPa (4 bar) (gauge pressure).

<sup>1</sup> The text between brackets does not appear in the authentic French text — Le texte entre crochets n'apparaît pas dans le texte authentique français.

- 4.5.2 Shells intended for the carriage of substances of marg. 431, item 3, shall be subjected to the initial and periodic tests with a liquid not reacting with the substance to be carried, and at a test pressure of not less than 1 MPa (10 bar) (gauge pressure). The materials of each of these shells shall be tested by the method described in Appendix II C.
- 4.5.3 Shells intended for the carriage of sulphur (including flowers of sulphur) of item 2 (a), substances of item 8, crude or pure naphthalene of items 11 (a) and (b) of marg. 401, or of freshly-quenched charcoal of item 8 of marg. 431 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.
- 4.6 *Marking*
- 4.6.1 Shells intended for the carriage of substances of item 3 of marg. 431 shall bear, in addition to the particulars prescribed in 1.6.2, the words: "Do not open during carriage. Liable to spontaneous combustion". Shells intended for the carriage of substances of item 2 (e) of marg. 471, shall bear, in addition to the particulars prescribed in 1.6.2, the words "Do not open during carriage. Gives off inflammable gases on contact with water".
- These particulars shall be in an official language of the country of approval and also in French, German, Italian or English, unless the international tariffs or agreements concluded between the railway administrations provide otherwise.
- 4.6.2 On shells intended for the carriage of the substances of item 4 of marg. 471, the plate prescribed under 1.6.1 shall additionally be marked with the maximum permissible load mass of the shell in kg. The load limits in accordance with 1.6.2 for the substance in question shall be determined in the light of the maximum permissible load mass of the shell.
- 4.7 *Operation*
- 4.7.1 Shells intended for the carriage of sulphur of item 2 (b) and naphthalene of item 11 (c) of marg. 401 shall be filled to not more than 98% of their capacity.
- 4.7.2 White or yellow phosphorus of item 1 of marg. 431, shall, if water is used as the protective agent, be covered with a depth of not less than 12 cm of water at the time of filling; the degree of filling at a temperature of 60°C shall not exceed 98%. If nitrogen is used as the protective agent, the degree of filling at a temperature of 60°C shall not exceed 96%. The remaining space shall be filled with nitrogen in such a way that, even after cooling, the pressure at no time falls below the atmospheric pressure. The shell shall be hermetically closed so that no leakage of gas occurs.
- 4.7.3 For the carriage of substances of item 1 (a) of marg. 471 caps shall be locked in conformity with 4.3.4.
- 4.7.4 The degree of filling shall not exceed 1.14 kg per litre of capacity for trichlorosilane (silicochloroform), 0.95 kg for methylchlorosilane and 0.93 kg for ethyldichlorosilane of item 4 of marg. 471 if filling is by mass, or 85% if filling is by volume.
- 4.7.5 Shells which have contained phosphorus of item 1 of marg. 431 shall when handed over for carriage either
- Be filled with nitrogen; the consignor shall certify in the consignment note that the shell, after closure, is gas-tight; or
  - Be filled with water to not less than 96% and not more than 98% of their capacity; between 1 October and 31 March this water shall contain one or more anti-freeze agents free from corrosive action, not liable to react with phosphorus, and sufficiently concentrated to prevent the water freezing during carriage.

- 4.7.6 The degree of filling for shells containing substances of item 3 of marg. 431 or item 2 (e) of marg. 471 shall not exceed 90%; a space of 5% shall remain empty when the liquid is at an average temperature of 50°C. During carriage, these substances shall be under a layer of inert gas, the gauge pressure of which shall not exceed 50 kPa (0.5 bar). The shells shall be hermetically closed<sup>(5)</sup> and the protective caps conforming to 4.3.3 shall be locked.

Empty shells, uncleaned, shall when handed over for carriage be filled with an inert gas at a gauge pressure of up to 50 kPa (0.5 bar).

5. *Special requirements applicable to Class 5.1 Oxidizing substances;  
Class 5.2 Organic peroxides*

5.1 *Use*

Substances of marg. 501 items 1 to 3, solutions of item 4 (as well as powdery sodium chlorate in the moist or dry state), hot aqueous solutions of ammonium nitrate of item 6 (a) in a concentration of more than 80% but not more than 93%, on condition that:

- (a) The pH value, measured in a 10% aqueous solution of the substance carried, is between 5 and 7,  
(b) Solutions do not contain any combustible substance in a quantity greater than 0.2% nor any compounds of chlorine in such a quantity that the chlorine content exceeds 0.02%.

Substances of items 1, 10, 14, 15 and 18 of marg. 551 may be carried in tank wagons.

5.2 *Construction*

- 5.2.1 Shells intended for the carriage in the liquid state of substances referred to in 5.1 shall be designed for a calculation pressure<sup>(14)</sup> of at least 0.4 MPa (4 bar) (gauge pressure).

- 5.2.2 Shells, and their items of equipment, intended for the carriage of hydrogen peroxide or of aqueous solutions of hydrogen peroxide of item 1 of marg. 501, or for the carriage of liquid organic peroxides of items 1, 10, 14, 15 and 18 of marg. 551 shall be made of aluminium not less than 99.5% pure or of suitable steel not liable to cause the hydrogen peroxide or the organic peroxides to decompose.

Where shells are made of aluminium not less than 99.5% pure the wall thickness need not be greater than 15 mm, even if the calculation in accordance with 1.2.8.2 gives a higher value.

- 5.2.3 Shells intended to carry hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501 shall be made of austenitic steel.

5.3 *Items of equipment*

- 5.3.1 Shells intended for the carriage of aqueous solutions of hydrogen peroxide containing more than 70% hydrogen peroxide and of hydrogen peroxide of item 1 of marg. 501 shall have their openings above the surface level of the liquid. In addition the cleaning openings (fist-holes) referred to in 1.3.4 shall not be permitted. In the case of solutions containing more than 60% but not more than 70% hydrogen peroxide, openings below the surface level of the liquid shall be permissible. In this case the shell-discharge system shall be equipped with two mutually independent shut-off devices mounted in series, the first being a quick-closing internal stop-valve of an approved type and the second a sluice-valve, at each end of the discharge pipe. A blank flange or some other equally reliable device shall also be fitted to the outlet of each external sluice-valve. The internal stop-valve shall be such that it remains integral with the shell and in the closed position if the pipe is wrenched off.



No part of the tank wagon may be of wood, unless this is protected by a suitable coating.

5.3.2 The connections to the external pipe-outlets of shells shall be made of materials not liable to cause decomposition of hydrogen peroxide.

5.3.3 Shells intended for the carriage of aqueous solutions of hydrogen peroxide, and of hydrogen peroxide, of item 1 and hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501, shall be fitted in their upper part with a shut-off device preventing any build-up of excess pressure inside the receptacle, any leakage of the liquid, and any entry of foreign matter into the receptacle.

The shut-off devices of shells intended for the carriage of hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501 shall be so designed as to preclude obstruction of the devices by solidified ammonium nitrate during carriage.

5.3.4 Where shells intended for the carriage of hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501 are sheathed in thermal insulating material, the material shall be of an inorganic nature and entirely free from combustible matter.

5.3.5 Shells intended for the carriage of liquid organic peroxides of items 1, 10, 14, 15 and 18 of marg. 551 shall be equipped with a venting device fitted with a flame-trap and followed in series by a safety valve opening at a gauge pressure of 180 kPa to 220 kPa (1.8 bar to 2.2. bar).

5.3.6 Shells intended for the carriage of liquid organic peroxides of items 1, 10, 14, 15 and 18 of marg. 551 shall be equipped with thermal insulation in accordance with the requirements of 2.3.4.1. The covering and any uncovered part of the shell, or the outer sheathing of a complete lagging, shall be painted white, and the paint shall be cleaned before each transport operation and renewed in case of yellowing or deterioration. The thermal insulation must be free from combustible matter.

#### 5.4 *Type approval*

Tank wagons approved for the carriage of hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501 shall not be approved for the carriage of other substances.

#### 5.5 *Tests*

Shells intended for the carriage in the liquid state of substances referred to in 5.1 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of 0.4 MPa (4 bar) (gauge pressure).

Shells intended for the carriage of the other substances referred to in 5.1 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

Shells of pure aluminium intended for the carriage of hydrogen peroxide and aqueous solutions of hydrogen peroxide of item 1 of marg. 501 or liquid organic peroxides of items 1, 10, 14, 15 and 18 of marg. 551 need only be subjected to the initial and periodic hydraulic pressure tests at a pressure of 250 kPa (2.5 bar) (gauge pressure).

#### 5.6 *Marking*

No special requirements.

#### 5.7 *Operation*

5.7.1 The inside of the shell, and all parts liable to come into contact with substances referred to in 5.1, shall be kept clean. No lubricant capable of combining dangerously with the substance carried shall be used for pumps, valves or other devices.

- 5.7.2 Shells intended for the carriage of substances of items 1 to 3 of marg. 501 shall be filled to not more than 95% of their capacity at a reference temperature of 15°C. Shells intended for the carriage of hot aqueous solutions of ammonium nitrate of item 6 (a) of marg. 501 shall not be filled to more than 97% of their capacity and the maximum temperature after filling shall not exceed 140°C. Tank wagons approved for the carriage of hot aqueous solutions of ammonium nitrate shall not be used for the carriage of other substances.
- 5.7.3 Shells intended for the carriage of liquid organic peroxides of items 1, 10, 14, 15 and 18 of marg. 551 shall be filled to not more than 80% of their capacity. Shells shall be free from impurities at the time of filling.

6. *Special requirements applicable to Class 6.1:  
Toxic substances*

6.1 [Use]

The following substances of marg. 601 may be carried in tank wagons:

- 6.1.1 Substances listed by name in items 2 and 3;
- 6.1.2 Highly toxic substances classified under (a) of items 11 to 24, 31, 41, 51, 55, 68 and 71 to 88, carried in the liquid state, and comparable substances or solutions to be classified under (a) of those items;
- 6.1.3 Toxic or harmful substances classified under (b) or (c) of items 11 to 24, 51 to 55, 57 to 68 and 71 to 88, carried in the liquid state, and comparable substances or solutions to be classified under (b) or (c) of those items;
- 6.1.4 Toxic or harmful powdery or granular substances classified under (b) or (c) of items 12, 14, 17, 19, 21, 23, 24, 51 to 55, 57 to 68 and 71 to 88 and comparable powdery or granular substances to be classified under (b) or (c) of those items.

NOTE. For the carriage in bulk of substances of items 44 (b), 60 (c) and 63 (c) and solid wastes classified under (c) of the various items, see marg. 617.

6.2 *Construction*

- 6.2.1 Shells intended for the carriage of substances listed by name in items 2 and 3 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 1.5 MPa (15 bar) (gauge pressure).
- 6.2.2 Shells intended for the carriage of the substances referred to in 6.1.2 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 1 MPa (10 bar) (gauge pressure).
- 6.2.3 Shells intended for the carriage of the substances referred to in 6.1.3 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).
- 6.2.4 Shells intended for the carriage of the powdery or granular substances referred to in 6.1.4 shall be designed in accordance with the requirements of the general part of this appendix.

6.3 *Items of equipment*

- 6.3.1 All openings of shells intended for the carriage of the substances referred to in 6.1.1 and 6.1.2 shall be above the surface level of the liquid. No pipe or pipe connections shall pass through the walls of the shell below the surface level of the liquid. Shells shall be capable of being hermetically closed<sup>(5)</sup> and the closures shall be capable of being protected with a lockable cap. The cleaning openings (fist holes) provided for in 1.3.4 shall not however be permitted for shells intended for the carriage of solutions of hydrocyanic acid of item 2.

6.3.2 Shells intended for the carriage of the substances referred to in 6.1.3 and 6.1.4 may also be of the bottom-discharge type. The shells shall be capable of being hermetically closed.<sup>(5)</sup>

6.3.3 If shells are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.

6.4 *Type approval*

No special requirements.

6.5 *Tests*

6.5.1 Shells intended for the carriage of the substances referred to in 6.1.1 to 6.1.3 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

For shells intended for the carriage of substances of item 31 (a), the periodic tests shall be carried out at intervals of not more than four years, and shall include the hydraulic pressure test.

6.5.2 Shells intended for the carriage of the substances referred to in 6.1.4 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

6.6 *Marking*

On shells intended for the carriage of substances of item 3 of marg. 601 the plate prescribed under 1.6.1 shall additionally be marked with the maximum permissible load mass of the shell in kg. The load limits in accordance with 1.6.2 for the substances in question shall be determined in the light of the maximum permitted load of the shell, depending on the substance carried.

6.7 *Operation*

6.7.1 Shells intended for the carriage of substances of item 3 shall not be filled to more than 1 kg per litre of capacity.

6.7.2 Shells shall be hermetically closed<sup>(5)</sup> during carriage. The closures of shells intended for the carriage of the substances referred to in 6.1.1 and 6.1.2 shall be protected with a locked cap.

6.7.3 Tank wagons approved for the carriage of the substances referred to in 6.1 shall not be used for the carriage of foodstuffs, articles of consumption or animal feedstuffs.

7. *Special requirements applicable to Class 7:  
Radioactive material*

7.1 *Use*

Material of marg. 704, Schedules 1, 5, 6, 9, 10 and 11, except uranium hexafluoride, may be carried in tank wagons. The provisions of the appropriate schedule in marg. 704 are applicable.

NOTE. There may be additional requirements for tank wagons which are designed as a Type A or Type B packaging.

7.2 *Construction*

See marg. 1736.

7.3 *Items of equipment*

Shells intended for the carriage of liquid radioactive material<sup>(5)</sup> shall have their openings above the surface level of the liquid. No pipes or pipe connections shall pass through the walls of the shell below the surface level of the liquid.

#### 7.4 *Type approval*

Tank wagons approved for the carriage of radioactive material shall not be approved for the carriage of other substances.

#### 7.5 *Tests*

7.5.1 Shells shall be tested initially and periodically at a pressure of at least 0.265 MPa (2.65 bar) (gauge pressure).

7.5.2 Notwithstanding the requirements of 1.5.2, the periodic internal inspection may be replaced by a programme approved by the competent authority.

#### 7.6 *Marking*

In addition, the trefoil symbol, as shown on labels models Nos. 7A to 7D, shall be marked by stamping or by any other equivalent method on the plate described in 1.6.1. This trefoil symbol may be applied directly on the walls of the shell itself, if the walls are so reinforced that the strength of the shell is not impaired.

#### 7.7 *Operation*

7.7.1 The degree of filling according to 1.7.3 at the reference temperature of 15°C shall not exceed 93% of the capacity of the shell.

7.7.2 Tank wagons which have been used for the carriage of radioactive material shall not be used for the carriage of other substances.

### 8. *Special requirements applicable to Class 8: Corrosive substances*

#### 8.1 *Use*

The following substances of marg. 801 may be carried in tank wagons:

8.1.1 Substances listed by name in items 6, 7 and 24, and substances comparable with those of item 7;

8.1.2 Highly corrosive substances classified under (a) of items 1, 2, 3, 10, 11, 21, 26, 27, 32, 33, 36, 37, 39, 46, 55, 64, 65 and 66, carried in the liquid state, and comparable substances or solutions to be classified under (a) of those items;

8.1.3 Corrosive or slightly corrosive substances classified under (b) or (c) of items 1 to 5, 8 to 11, 21, 26, 27, 31 to 39, 42 to 46, 51 to 55 and 61 to 66, carried in the liquid state, and comparable substances or solutions to be classified under (b) or (c) of those items;

8.1.4 Powdery or granular corrosive or slightly corrosive substances classified under (b) or (c) of items 22, 23, 26, 27, 31, 35, 39, 41, 45, 46, 52, 55 and 65 and comparable powdery or granular substances to be classified under (b) or (c) of those items.

NOTE. For the carriage in bulk of substances of item 23 and solid wastes classified under (c) of the various items, see marg. 817.

#### 8.2 *Construction*

8.2.1 Shells intended for the carriage of substances listed by name in items 6 and 24 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 2.1 MPa (21 bar) (gauge pressure). Shells intended for the carriage of bromine of item 24 shall be provided with a lead lining not less than 5 mm thick or an equivalent lining. The requirements of Appendix II C shall apply to the materials and construction of welded shells intended for the carriage of substances of item 6.

Shells intended for the carriage of substances of item 7 (a) shall be designed for a calculation pressure<sup>(14)</sup> of not less than 1 MPa (10 bar) (gauge pressure) and

shells for the carriage of substances of items 7 (b) and (c) for a calculation pressure<sup>(14)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).

- 8.2.2 Shells intended for the carriage of the substances referred to in 8.1.2 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 1 MPa (10 bar) (gauge pressure).

Where the use of aluminium is necessary for shells intended for the carriage of nitric acid of item 2 (a), such shells shall be made of aluminium not less than 99.5% pure; the wall thickness need not exceed 15 mm, even when the calculation according to 1.2.8.2 gives a higher figure.

- 8.2.3 Shells intended for the carriage of the substances referred to in 8.1.3 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).

Shells intended for the carriage of monochloroacetic acid of item 31 (b) shall be equipped with an enamel or equivalent lining if the material of the shell is attacked by that acid.

Shells and their items of equipment intended for the carriage of aqueous solutions of hydrogen peroxide of item 62 shall be made of aluminium not less than 99.5% pure or of a suitable steel not causing hydrogen peroxide to decompose. If the shells are made of pure aluminium the wall thickness need not be greater than 15 mm even when the calculation according to 1.2.8.2 gives a higher figure.

- 8.2.4 Shells intended for the carriage of powdery or granular substances referred to in 8.1.4 shall be designed in accordance with the requirements of the general part of this appendix.

### 8.3 *Items of equipment*

- 8.3.1 All openings of shells intended for the carriage of substances of items 6, 7 and 24 shall be above the surface level of the liquid. No pipes or pipe connections shall pass through the walls of the shell below the surface level of the liquid. In addition, the cleaning openings (fist holes) referred to in 1.3.4 shall not be permitted. Shells shall be capable of being hermetically closed<sup>(5)</sup> and the closures shall be capable of being protected by a lockable cap.

The following requirements are applicable to demountable tanks<sup>(9)</sup> intended for the carriage of substances of item 6:

- (a) They shall be so fixed on the underframe of the wagon that they cannot move;
- (b) They shall not be interconnected by a manifold;
- (c) If the receptacles can be rolled, the valves shall be provided with protective caps.

- 8.3.2 Shells intended for the carriage of substances referred to in 8.1.2, 8.1.3 and 8.1.4 may also be of the bottom-discharge type.

- 8.3.3 If shells intended for the carriage of the substances referred to in 8.1.2 are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.

- 8.3.4 Shells intended for the carriage of sulphur trioxide of item 1 (a) shall be thermally insulated and fitted with a heating device on the outside.

- 8.3.5 Shells and their service equipment intended for the carriage of hypochlorite solutions of item 61 and of aqueous solutions of hydrogen peroxide of item 62 shall be so designed as to prevent the entry of foreign matter, leakage of liquid or any building up of dangerous excess pressure inside the shell.

#### 8.4 *Type approval*

No special requirements.

#### 8.5 *Tests*

- 8.5.1 Shells intended for the carriage of anhydrous hydrofluoric acid or aqueous solutions of hydrofluoric acid of item 6 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of at least 1 MPa (10 bar) (gauge pressure). The materials of each of these welded shells shall be tested by the method described in Appendix II C.

Shells intended for the carriage of substances of item 7 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure).

Shells intended for the carriage of substances of items 6 and 7 shall be inspected every four years for resistance to corrosion, by means of suitable instruments (e.g. by ultrasound).

- 8.5.2 Shells intended for the carriage of bromine of item 24 or of the substances referred to in 8.1.2 and 8.1.3 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of not less than 0.4 MPa (4 bar) (gauge pressure). The hydraulic pressure test for shells intended for the carriage of sulphur trioxide of item 1 (a) shall be repeated every four years.

Shells made of pure aluminium and intended for the carriage of nitric acid of item 2 (a) and of aqueous solutions of hydrogen peroxide of item 62 need be subjected to the initial and periodic hydraulic pressure tests at a pressure of only 250 kPa (2.5 bar) (gauge pressure).

The condition of the lining of shells intended for the carriage of bromine of item 24 shall be inspected every year by an expert approved by the competent authority, who shall inspect the inside of the shell.

- 8.5.3 Shells intended for the carriage of the substances referred to in 8.1.4 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure as defined in 1.2.4.

#### 8.6 *Marking*

- 8.6.1 Shells intended for the carriage of anhydrous hydrofluoric acid or aqueous solutions of hydrofluoric acid of item 6 or bromine of item 24 shall bear, in addition to the particulars already prescribed in 1.6.2, the date (month, year) of the most recent internal inspection of the shell.

- 8.6.2 On shells intended for the carriage of sulphur trioxide of item 1 (a), anhydrous hydrofluoric acid and aqueous solutions of hydrofluoric acid of item 6 and bromine of item 24, the plate prescribed under 1.6.1 shall additionally be marked with the maximum permitted load mass of the shell in kg. The load limits in accordance with 1.6.2 for the substances in question shall be determined in the light of the maximum permitted load mass of the shell, depending on the substance carried.

#### 8.7 *Operation*

- 8.7.1 Shells intended for the carriage of sulphur trioxide of item 1 (a) shall not be filled to more than 88% of their capacity; those intended for the carriage of bromine of item 24 shall be filled to not less than 88% and not more than 92% of their capacity or to 2.86 kg per litre of capacity.

Shells intended for the carriage of anhydrous hydrofluoric acid or aqueous solutions of hydrofluoric acid of item 6 shall not be filled to more than 0.84 kg per litre of capacity.

- 8.7.2 Shells intended for the carriage of substances of items 6, 7 and 24 shall be hermetically closed<sup>(5)</sup> during carriage and the closures shall be protected by a locked cap.

9. *Special requirements applicable to Class 9:  
Miscellaneous dangerous substances and articles*

9.1 *Use*

Substances of items 1 and 2 of marg. 901 may be carried in tank wagons.

9.2 *Construction*

9.2.1 Shells intended for the carriage of substances of item 1 shall be designed in accordance with the requirements of the general part of this appendix.

9.2.2 Shells intended for the carriage of substances of item 2 shall be designed for a calculation pressure<sup>(14)</sup> of not less than 0.4 MPa (4 bar) (gauge pressure).

9.3 *Items of equipment*

9.3.1 Shells shall be capable of being hermetically closed.<sup>(5)</sup>

9.3.2 If shells are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.

9.4 *Type approval*

No special requirements.

9.5 *Tests*

9.5.1 Shells intended for the carriage of substances of item 2 shall be subjected to the initial and periodic hydraulic pressure tests at a pressure of at least 0.4 MPa (4 bar) (gauge pressure).

9.5.2 Shells intended for the carriage of substances of item 1 shall be subjected to the initial and periodic hydraulic pressure tests at their calculation pressure<sup>(14)</sup> as defined in 1.2.4.

9.6 *Marking*

No special requirements.

9.7 *Operation*

9.7.1 Shells shall be hermetically closed<sup>(5)</sup> during carriage.

9.7.2 Tank wagons approved for the carriage of substances of items 1 and 2 shall not be used for the carriage of foodstuffs, articles of consumption or animal feedstuffs.

<sup>(1)</sup> In the case of sheet metal the axis of the tensile test-piece shall be at right angles to the direction of rolling. The permanent elongation at fracture ( $l = 5 d$ ) shall be measured on test-pieces of circular cross-section in which the gauge length  $l$  is equal to five times the diameter  $d$ ; if test-pieces of rectangular section are used, the gauge length shall be calculated by the formula  $l = 5.65\sqrt{F_0}$  where  $F_0$  is the initial cross-sectional area of the test-piece.

<sup>(2)</sup> "Mild steel" means a steel having a minimum breaking strength between 360 N/mm<sup>2</sup> and 440 N/mm<sup>2</sup>.

<sup>(3)</sup> This formula is derived from the general formula

$$e_1 = e_0 \sqrt[3]{\frac{Rm_0 \times A_0}{Rm_1 \times A_1}}$$

where:  $Rm_0 = 360$

$A_0 = 27$  for the mild steel of reference

$Rm_1 =$  minimum tensile strength of the metal chosen, in N/mm<sup>2</sup>

$A_1 =$  minimum elongation of the metal chosen on fracture under tensile stress, in %.

<sup>(4)</sup> Save as may be otherwise provided in the case of shells intended for the carriage of certain crystallizable or highly viscous substances, of deeply refrigerated liquefied gases, or of powdery or granular substances.

<sup>(5)</sup> Hermetically closed shells means shells whose openings are hermetically closed and which are not equipped with safety valves, bursting discs or other similar safety devices. Shells having safety valves preceded by a bursting disc shall be deemed to be hermetically closed.

(Continued on p. 622)

Vol. 1397, 1-23353

(Continued from p. 621)

<sup>(6)</sup> The check of the design characteristics shall also include, for tank wagons with a minimum test pressure of 1 MPa (10 bar), sampling of weld test-pieces — work samples — in accordance with 1.2.8.4 and in accordance with the tests in Appendix II C.

<sup>(7)</sup> In special cases and with the agreement of the expert approved by the competent authority, the hydraulic pressure test may be replaced by a test using another liquid or a gas, where such an operation does not present any danger.

<sup>(8)</sup> A collective designation, covering substances of a similar kind and equally compatible with the characteristics of the shell, may be given instead of the name.

<sup>(9)</sup> Demountable tanks means tanks designed to fit the special apparatus of the wagon but which can only be removed from it after dismantling of their means of attachment.

<sup>(10)</sup> Gases identified by the letter "t" in the list of substances are deemed to be gases harmful to the respiratory organs or entailing a poison risk.

<sup>(11)</sup> The provisions of this appendix are not applicable to frames of cylinders.

<sup>(12)</sup> 1. The prescribed test pressures are:

(a) If the shell is equipped with thermal insulation, at least equal to the vapour pressure, reduced by 0.1 MPa (1 bar), of the liquid at 60°C, but not less than 1 MPa (10 bar);

(b) If the shell is not equipped with thermal insulation, at least equal to the vapour pressure, reduced by 0.1 MPa (1 bar), of the liquid at 65°C but not less than 1 MPa (10 bar).

2. In view of the high toxicity of phosgene of item 3 (at), the minimum test pressure for this gas is fixed at 1.5 MPa (15 bar) if the shell is equipped with thermal insulation and 1.7 MPa (17 bar) if it is not so equipped.

3. The maximum values in kg/litre prescribed for the degree of filling are calculated as follows: maximum mass of contents per litre of capacity =  $0.95 \times$  specific gravity of the liquid phase at 50°C.

<sup>(13)</sup> See Appendix VIII, marginal 1800 (1), Note.

<sup>(14)</sup> See 1.2.8.2.

<sup>(15)</sup> Substances whose kinematic viscosity at 20°C is less than 2,680 mm<sup>2</sup>/s shall be deemed to be liquids for the purposes of this provision.



[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]

COTIF CONVENTION: APPENDIX B

A N N E X II

(Article 8, I)

REGULATIONS CONCERNING THE INTERNATIONAL HAULAGE  
OF PRIVATE OWNERS' WAGONS BY RAIL (RIP)

*Article 1. PURPOSE OF THE REGULATIONS*

1. These regulations shall apply to all haulage of private owners' wagons, empty or loaded, accepted for international traffic in accordance with Article 2 of this annex and consigned under the conditions of the CIM Uniform Rules.

2. In the absence of specific provisions in these regulations, the other provisions of the Uniform Rules shall apply to the haulage referred to in paragraph 1 above.

*Article 2. ACCEPTANCE OF WAGONS FOR INTERNATIONAL TRAFFIC*

To be accepted for international traffic, wagons shall be registered in the name of a private party (whether an individual, a firm or a corporate body) by a railway to whose lines the Uniform Rules apply and shall be marked by that railway with the distinguishing mark [P].

In these regulations the private party, whose name shall be marked on the wagon, is referred to as the "owner".

*Article 3. USE OF WAGONS*

The consignor may only use the wagon for the carriage of goods for which it is designated in accordance with the contract of registration. The consignor shall be solely responsible for the consequences resulting from the failure to observe this provision.

*Article 4. SPECIAL APPARATUS*

If the wagon is equipped with special apparatus (refrigerating equipment, water tanks, machinery, etc.), the consignor shall be responsible for the servicing of such equipment or for arranging for it to be serviced. This duty shall pass to the consignee as soon as he exercises his rights under article 28 or 31 of the Uniform Rules.

*Article 5. PRESENTING OF WAGONS FOR HAULAGE*

1. The right to present a wagon for haulage shall be vested in the owner.

Any other consignor of a wagon, whether it be empty or loaded, shall present at the forwarding station, at the same time as the consignment note, an authority granted by the owner, which may relate to several wagons.

Such authority shall not be required if the consignor is the consignee of the wagon on its last journey and if, before time when the new contract of carriage is made, the station has not received by letter, by telegram or by telex from the owner an order not to despatch the wagon or wagons without his authority.

2. In the absence of the owner's order to the contrary, the railway shall be entitled to return to its home station automatically at the owner's expense, and under cover of a consignment note made out in his name and with his address:

— Any wagon which arrives empty if its loading has not been started within 15 days from the time it became available;

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.

— Any wagon which arrives loaded if it has not been reconsigned within 8 days from the time when its unloading was completed.

If the railway does not avail itself of this power it shall, on expiry of the foregoing periods, advise the owner of the whereabouts of the wagon; in which case the railway shall not be entitled to return the wagon until the end of the eighth day following the despatch of advice to the owner.

This paragraph shall not apply to wagons within the country of the railway which has registered them nor to wagons on private sidings.

3. A hirer whose name is marked on the wagon with the consent of the registering railway shall, for the purpose of this Article, be deemed to be the owner.

#### *Article 6. PARTICULARS IN THE CONSIGNMENT NOTE*

1. In addition to the particulars required by the Uniform Rules, the consignor shall enter the following in the consignment note:

a) In the space provided for the description of the goods

— In the case of an empty wagon, the words “empty wagon P”;

— In the case of a loaded wagon, the words “loaded in wagon P” after the description of the goods,

b) The characteristics of the wagon in the space provided.

2. If the consignor of an empty wagon wishes to obtain a special guarantee of the transit period according to Article 14, he shall enter in the space in the consignment note provided for his declarations, the words “special guarantee of transit period”.

#### *Article 7. INTEREST IN DELIVERY*

1. The delivery of empty wagons shall not be subject to declaration of interest.

2. In the case of a loaded wagon, the declaration of interest in delivery shall only apply to the goods carried therein.

#### *Article 8. “CASH ON DELIVERY” CHARGES AND DISBURSEMENTS*

1. Empty wagons shall not be subject to “cash on delivery” charges and disbursements.

2. Loaded wagons may not be subject to a “cash on delivery” exceeding the value of the goods loaded therein.

#### *Article 9. EXTENSION OF TRANSIT PERIOD*

1. In addition to the cases provided for under Article 27.7 of the Uniform Rules, the transit period shall also be extended for the duration of any delay caused by damage to the wagon, unless the railway is liable for such damage under Article 12.

2. When the goods loaded in a damaged wagon are trans-shipped into another wagon, the delay shall terminate, in respect of the goods, at the time when, after trans-shipment, they can again be forwarded.

#### *Article 10. VERIFICATION OF DAMAGE TO WAGONS OR LOSS OF PARTS*

1. When damage to a wagon or loss of parts is discovered or presumed by the railway, or alleged by the party concerned, the railway shall immediately draw up, in accordance with Article 52 of the Uniform Rules, a report stating the nature of the damage or loss and, so far as possible, its cause and the time of its occurrence.

Such report shall be sent without delay to the registering railway, which shall send a copy of it to the owner. In the case of a wagon on which the name of a hirer is marked with the consent of the registering railway, a copy of the report shall be sent direct to this hirer.

2. If the wagon is loaded, a separate report shall, where necessary, be drawn up in respect of the goods in accordance with Article 52 of the Uniform Rules.

*Article 11. DAMAGE TO A WAGON PREVENTING CONTINUATION OF HAULAGE*

1. If a wagon consigned empty is so damaged as to prevent the continuation of haulage or to render the wagon unfit to carry a load, the station where the damage is discovered shall without delay advise the consignor and the owner by telegram or by telex, indicating as far as possible the nature of the damage.

2. Any empty wagon which is withdrawn from service shall be put into a fit state to run by the railway, unless the damage is so serious that it has to be loaded onto another wagon.

In order to render the wagon fit to run, the railway may of its own accord carry out repairs up to a limit agreed in the contract of registration.

These provisions shall apply without prejudice to the question of liability.

3. If the railway carries out repairs in accordance with paragraph 2, and if such work is expected to take more than four days to complete, the railway shall request the consignor by telegram or by telex to advise whether, when the work has been completed, the contract of carriage is to be carried out or modified.

If no instructions have been received from the consignor before the completion of the work, the contract of carriage shall be carried.

4. If the railway does not carry out the repairs of its own accord the station where the damage is discovered shall request the consignor's instructions by telegram or by telex, directly and without delay. If the consignor is not also the owner, a copy of this request shall be transmitted without delay to the owner by telegram or telex.

In the absence of instructions from the consignor within a period of eight days from the date of despatch of the telegram or telex message, the railway shall be entitled of its own accord, after having, if need be, put the wagon in a fit state to run, to return it to its home station under a consignment note made out in the name of and with the address of the owner.

The reasons for its return shall be stated in the consignment note after the words "empty wagon P".

5. If damage prevents the continuation of the forwarding of a wagon consigned loaded and unloading becomes necessary, this Article shall apply to the unloaded wagon.

If the wagon can be repaired without unloading, paragraphs 1, 2, 3, 6 and 7 of this Article shall apply.

6. The carriage and other charges which have accrued up to the station at which the wagon was stopped, the cost of notifying the consignor and the owner, as well as any charges for complying with the consignor's instructions or for returning the wagon to its home station shall be charged against the consignment.

7. The hirer whose name is marked on the wagon with the consent of the registering railway shall, for the purpose of this Article, be deemed to be the owner.

*Article 12. LIABILITY OF THE RAILWAY FOR LOSS OR DAMAGE TO THE WAGON OR ITS PARTS. LIABILITY OF THE OWNER FOR DAMAGE CAUSED BY THE WAGON*

1. In the case of loss or damage to the wagon or forwarding its parts sustained between the time of acceptance for forwarding and the time of delivery, the railway shall be liable unless it proves that the loss or damage was not caused by fault on its part.

2. In the case of loss of the wagon, compensation shall be limited to the value of the wagon; the basis of the calculation shall be determined in the contract of registration.

In the case of damage, compensation shall be calculated in accordance with the provisions of the contract of registration.

3. In the case of loss or damage to removable parts, the railway shall only be liable if such parts are listed on both sides of the wagon. The railway shall not be liable for the loss of or damage to loose equipment.

4. Unless the claimant proves that the damage was caused by wrongful act or neglect of the railway, the railway shall only be liable

— For damage to receptacles made of pottery, glass, terra-cotta, etc., if the damage is connected with damage to the wagon itself for which the railway is liable under the foregoing provisions;

— For damage to receptacles with interior linings (enamel, ebonite, etc.) if the receptacles show signs of external damage for which the railway is liable under the foregoing provisions.

5. The owner shall be deemed to be the consignor or the consignee, as the case may be, in respect of compensation for loss or damage to the wagon or its parts. Claims shall only be made to the registering railway and legal proceedings shall only be instituted against that railway which shall be treated as if it were the railway liable.

6. Legal proceedings instituted by the railway against the owner for damage caused by the wagon during forwarding shall be governed by the contract of registration. Only the registering railway shall be entitled to assert the rights of other railways against the owner.

7. The period of limitation for legal proceedings instituted under paragraphs 1 to 6 shall be three years.

This period runs:

— In the case of legal proceedings instituted by the owner against the railway under paragraphs 1 to 5, from the day on which the loss or damage to the wagon was established, taking account, where appropriate, of the provisions of paragraph 1 of Article 13.

— In the case of legal proceedings instituted by the railway against the owner under paragraph 6, from the day on which the damage occurred.

#### *Article 13. PRESUMPTION OF LOSS OF WAGON*

1. The person entitled may, without having to provide further proof, consider the wagon to be lost when it has not been delivered to the consignee nor put at his disposal within three months following the expiry of the transit period.

Such period shall be extended by the period during which the wagon is immobilised through any cause not attributable to the railway or through damage.

2. If a wagon which has been considered lost is recovered after compensation has been paid, the owner may require, within a period of 6 months from his receipt of notice to that effect from the railway of registration, that the wagon be returned to him free of charge at its home station against refund of the compensation.

#### *Article 14. COMPENSATION FOR EXCEEDING THE TRANSIT PERIOD*

1. If the railway is responsible for exceeding the transit period for an empty or loaded wagon, it must pay the person entitled a sum of money by way of liquidated damages for each complete day, or fraction thereof, of delay, irrespective of any compensation which may be due for exceeding the transit period for goods loaded in the wagon.

Such sum shall be fixed at:

- a) 4.50 units of account for modern bogie wagons and for similar wagons, as defined in the contract of registration,
- b) 3 units of account for other wagons.

2. If the exceeding of the transit period is due to wilful misconduct or gross negligence on the part of the railway, the liquidated damages shall be at the rate of 9 units of account for the wagons referred to in paragraph 1 (a) and at the rate of 6.50 units of account for the wagons referred to in paragraph 1 (b).

3. The consignor of an empty wagon may request a special guarantee of the transit period. A charge of one unit of account per 100 kilometres or fraction thereof shall then be made, subject to a minimum of 10 units of account. The whole amount of such charges shall always be paid by the consignor when the charges are paid under the conditions laid down in Article 15 (2) (a), 4 of the Uniform Rules.

If the transit period is exceeded, the railway shall pay by way of liquidated damages the sum of 9 units of account per day for the wagons referred to in paragraph 1 (a) and the sum of 6.50 units of account per day for the wagons referred to in paragraph 1 (b), subject to a minimum of 20 units of account.

[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]

COTIF CONVENTION: APPENDIX B

### A N N E X III

(Article 8, 2)

## REGULATIONS CONCERNING THE INTERNATIONAL CARRIAGE OF CONTAINERS BY RAIL (RICO)

### CHAPTER I. GENERAL PROVISIONS

#### *Article 1. PURPOSE OF THE REGULATIONS*

1. These regulations shall apply to containers which are tendered for carriage under the conditions of the CIM Uniform Rules.

These containers shall belong to a railway or to private owners (whether physical persons or other subjects of law) and, in the latter case, shall either be approved by the railway or shall comply with the international standards of construction applicable to large containers.

2. For the purpose of these regulations, the term "container" shall mean an article of transport equipment (container, tank, or other similar structure)

- Of a permanent character and accordingly strong enough to be suitable for repeated use,
- Specially designed to facilitate the carriage of goods, by one or more modes of transport, without the need for the contents to be trans-shipped,
- Fitted with devices to facilitate ready handling and securing,
- Having an internal volume of not less than one cubic metre and of a size not exceeding the dimensions prescribed by the railway.

The term "large containers" means containers with an internal volume of more than 3 cubic metres and a length of 6 metres (20 feet) and over.

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.

The term "container" shall include the accessories and equipment of the container, appropriate for the type concerned, provided that such accessories are carried with the container. It shall not cover vehicles, accessories and equipment of vehicles, or conventional packaging.

*Article 2. GENERAL PROVISIONS*

1. Except as otherwise provided in the tariffs, the contents of a container can be the subject of only one contract of carriage.

2. In the absence of special provisions in these regulations, the other provisions of the Uniform Rules shall apply to the carriage of containers whether empty or loaded.

*Article 3. DOOR-TO-DOOR CARRIAGE*

In the case of containers to be collected by the railway at the consignor's premises, the contract of carriage shall be deemed to be made at the consignor's premises. In the case of containers to be delivered to the consignee's premises, the contract of carriage shall be deemed to be terminated at the consignee's premises.

CHAPTER II. RAILWAY-OWNED CONTAINERS

*Article 4. PROVISION, RETURN AND CHARGES*

A charge may be made for the use of containers and the amount of such charge shall be fixed by the tariffs. Furthermore, the tariffs shall determine the conditions under which the containers will be made available, the period within which they are to be returned and the charges which shall be made for exceeding this period.

*Article 5. PARTICULARS IN THE CONSIGNMENT NOTE*

In addition to the particulars required by the Uniform Rules, the consignor shall enter in the consignment note, in the spaces provided for this purpose, the category of the container, its marks, its number, its tare in kilogrammes and, where appropriate, other characteristics of its structure.

The tare of containers shall not include the mass of special internal and removable fittings which are for the purpose of packing or securing.

*Article 6. HANDLING AND CLEANING*

The tariffs shall determine the conditions under which the operations of loading and unloading are carried out. "Loading" includes placing the container on a wagon and operations ancillary thereto, in particular the securing of the container.

The consignee shall be responsible for returning the container in a perfectly clean condition. If this has not been done, the railway shall be entitled to make a charge of which the amount shall be fixed by the tariffs.

*Article 7. RE-USE*

Containers delivered loaded shall not be re-used by consignees on further loads except with the consent of the railway which has so delivered them.

*Article 8. LOSS OF AND DAMAGE TO CONTAINERS*

1. Any person accepting a container, empty or loaded, from the railway shall check the condition of the container at the time it is placed at his disposal; he shall be liable for all damage found to exist on return of the container to the railway which was not indicated when the container was put at his disposal, unless he proves that the damage existed at that time or resulted from circumstances which he could not avoid, and the consequences of which he was unable to prevent.

2. The consignor shall be liable for the loss of or damage to a container arising during the performance of the contract of carriage if it results from his actions or from those of persons acting on his behalf.

3. If the container is not returned within thirty days from the day on which it was delivered to the consignor or consignee, the railway may deem it to be lost and demand payment of its value.

### CHAPTER III. PRIVATELY-OWNED CONTAINERS

#### *Article 9. APPROVAL*

Privately-owned containers may be approved by a railway to whose lines the Uniform Rules apply, if they comply with the conditions laid down for construction and marking. Approved containers, other than large containers, shall be provided by the railway with the distinguishing mark [P].

#### *Article 10. PARTICULARS IN THE CONSIGNMENT NOTE*

In addition to the particulars required by the Uniform Rules, the consignor shall enter in the consignment note, in the spaces provided for this purpose, the following particulars:

- The category of the container, its number, its tare in kilogrammes, and, where appropriate, other characteristics of the container,
- In the case of approved containers, the mark of the railway system which has issued the approval, and, except for large containers, the letter “P”,
- In the case of empty containers, as a description of goods, either the words “empty approved container” or the words “empty large container”.

#### *Article 11. “CASH ON DELIVERY” CHARGES*

Empty containers shall not be subject to “cash on delivery” charges.

#### *Article 12. SPECIAL EQUIPMENT*

If containers are equipped with special apparatus (refrigerating equipment, water tanks, machinery, etc.), the consignor shall be responsible for the servicing of such equipment or for arranging for it to be serviced. This duty shall pass to the consignee as soon as he exercises his rights under Article 28 or 31 of the Uniform Rules.

#### *Article 13. RETURN OF EMPTY CONTAINERS OR RE-USE*

After the delivery of the container, and in the absence of special agreements, the railway shall not be bound to take any action to secure the return of the empty container or its re-use as a loaded container.

#### *Article 14. COMPENSATION FOR LOSS OF OR DAMAGE TO THE CONTAINER*

Compensation payable in accordance with Article 40 of the Uniform Rules for the loss of the container shall be calculated according to the value of the container.

Compensation payable in accordance with Article 42 of the Uniform Rules for damage to the container shall be calculated according to the cost of repair.

#### *Article 15. COMPENSATION FOR EXCEEDING THE TRANSIT PERIOD*

If the transit period is exceeded, the railway may, apart from the provisions of the Uniform Rules, provide for the payment of special compensation to the owner or the hirer of the container by special agreement with him.

RESERVATION MADE  
UPON SIGNATURE

CZECHOSLOVAKIA

[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]

The Czechoslovak Socialist Republic, in accordance with Article 12, § 3 of the Convention concerning International Carriage by Rail (COTIF), concluded at Berne on 9 May 1980, will not apply Article 12, § 1 thereof and, in accordance with Article 3, § 1 of Appendix A — CIV Uniform Regulations, will not apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in case of death or of personal injury to passengers, when such passengers are nationals of the Czechoslovak Socialist Republic or have their usual place of residence in the Czechoslovak Socialist Republic.

RÉSERVE FAITE LORS  
DE LA SIGNATURE

TCHÉCOSLOVAQUIE

« Conformément à l'article 12, § 3 de la Convention relative aux transports internationaux ferroviaires (COTIF), conclue le 9 mai 1980 à Berne, la République Socialiste Tchécoslovaque n'appliquera pas son article 12, § 1 et, conformément à l'article 3, § 1 de l'Appendice A — Règles uniformes de la CIV, elle n'appliquera pas aux voyageurs victimes d'accidents survenus sur son territoire l'ensemble des dispositions concernant la responsabilité du chemin de fer en cas de mort et de blessures de voyageurs, lorsque ceux-ci sont des ressortissants de la République Socialiste Tchécoslovaque et des personnes ayant leur résidence permanente en République Socialiste Tchécoslovaque. »

RESERVATIONS AND DECLARATIONS  
MADE UPON RATIFICATION  
OR ACCESSION (a)

ALBANIA (a)

RÉSERVES ET DÉCLARATIONS  
FAITES LORS DE LA RATIFICATION  
OU DE L'ADHÉSION (a)

ALBANIE (a)

[ALBANIAN TEXT — TEXTE ALBANAIS]

“a) Linjat hekurudhore te Republikes Popullore Socialiste te Shqiperise jane te hapura vetem per trafikun nderkombetar te mallrave;

b) Aderimi i Republikes Popullore Socialiste te Shqiperise do te jete efektiv me lidhjen e hekurudhave shqiptare me rrjetin nderkombetar hekurudhor.”  
dhe me kete rezerve

“Republika Popullore Socialiste e Shqiperise deklaroi se per shqyrtimin e nje geshetjeje ne arbitrazh eshte i domosdoshem pelqimi paraprak i paleve ne mos-marveshje.”

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.



## [TRANSLATION]

(a) The railway lines of the Socialist People's Republic of Albania are open only for international goods traffic;

(b) The accession of the Socialist People's Republic of Albania will be effective after the Albanian railways are linked with the international railway network.

The Socialist People's Republic of Albania declares that, in order to refer a dispute to an arbitration tribunal, the consent of all parties to the dispute must be given in each individual case.

*AUSTRIA*

## [TRANSLATION — TRADUCTION]

In accordance with article 3, paragraph 1, of annex A to the Convention, the Republic of Austria reserves the right not to apply the provisions concerning the liability of the railway in case of death of, or personal injury to, passengers, when the accident occurred in its territory and such passengers are Austrian nationals or have their usual place of residence in Austria.

*BULGARIA*

## [TRANSLATION — TRADUCTION]

In accordance with the provisions of article 12, paragraph 3, of the Convention, the People's Republic of Bulgaria will not apply the provisions of article 12, paragraph 1.

In accordance with the provisions of article 3, paragraph 1, of the Uniform Rules concerning the Contract for International Carriage of Passengers and

[TRADUCTION<sup>1</sup> — TRANSLATION<sup>2</sup>]

a) Les lignes ferroviaires de la République populaire socialiste d'Albanie sont ouvertes seulement pour le trafic international des marchandises;

b) L'adhésion de la République populaire socialiste d'Albanie sera effective après la liaison des chemins de fer albanais avec le réseau ferroviaire international.

La République populaire socialiste d'Albanie déclare que, pour saisir un tribunal arbitral d'un différend, l'accord de toutes les parties au différend est nécessaire dans chaque cas particulier.

*AUTRICHE*

« La République d'Autriche se réserve le droit, conformément au paragraphe 1 de l'article 3 de l'annexe A à la Convention, de ne pas appliquer les dispositions concernant la responsabilité civile des chemins de fer en cas de mort ou blessures de voyageurs, lorsque l'accident est survenu sur son territoire et le voyageur est ressortissant autrichien ou séjourne en Autriche de façon habituelle. »

*BULGARIE*

« En conformité avec les dispositions de l'art. 12 § 3 de la Convention, la République Populaire de Bulgarie n'appliquera pas les dispositions de l'art. 12 § 1.

« En conformité avec les dispositions de l'art. 3 § 1 des Règles uniformes concernant le contrat de transport international ferroviaire des voyageurs et des

<sup>1</sup> Traduction fournie par le Gouvernement suisse.

<sup>2</sup> Translation supplied by the Government of Switzerland.

Luggage by Rail, the People's Republic of Bulgaria reserves the right not to apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in case of death of, or personal injury to, passengers, when such passengers are Bulgarian nationals or have their usual place of residence in the People's Republic of Bulgaria.

bagages, la République Populaire de Bulgarie se réserve le droit de ne pas appliquer aux voyageurs victimes d'accidents survenus sur son territoire l'ensemble des dispositions relatives à la responsabilité du chemin de fer en cas de mort ou de blessures de voyageurs, lorsque ceux-ci sont des ressortissants bulgares ou des personnes ayant leur résidence habituelle en République Populaire de Bulgarie. »

*CZECHOSLOVAKIA*

*TCHÉCOSLOVAQUIE*

[CZECH TEXT — TEXTE TCHÈQUE]

“Podle článku 12 § 3 Úmluvy o mezinárodní železniční přepravě (COTIF) a podle článku 3 § 1 Přípojku A — Jednotné právní předpisy pro Šmlouvu o mezinárodní přepravě cestujících a zavazadel (CIV) — nebude Československá socialistická republika používat článek 12 § 1 Úmluvy o mezinárodní železniční přepravě (COTIF) a veškerá ustanovení o odpovědnosti železnic za usmrcení a zranění cestujících, pokud se bude jednat o občany Československé socialistické republiky a cestující mající v Československé socialistické republice trvalý pobyt, jestliže k úrazu došlo na jejím území.”

[TRANSLATION]

[TRADUCTION<sup>1</sup> — TRANSLATION<sup>2</sup>]

In accordance with article 12, paragraph 3, of the Convention concerning International Carriage by Rail (COTIF) and in accordance with article 3, paragraph 1, of Appendix A — Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV), the Czechoslovak Socialist Republic will not apply article 12, paragraph 1, of the Convention concerning International Carriage by Rail (COTIF) and will not apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in case of death of, or personal injury to, passengers, when such passengers are nationals of the Czechoslovak Socialist Republic or have permanent residence in the Czechoslovak Socialist Republic.

Conformément à l'article 12 § 3 de la Convention relative aux transports internationaux ferroviaires (COTIF) et conformément à l'article 3 § 1 d l'Appendice A — Règles uniformes concernant le contrat de transport international ferroviaire des voyageurs et des bagages (CIV), la République Socialiste Tchèqueoslovaque n'appliquera pas l'article 12 § 1 de la Convention relative aux transports internationaux ferroviaires (COTIF) et toutes les stipulations concernant la responsabilité des chemins de fer pour la mort ou les blessures causées aux voyageurs s'il s'agit des citoyens de la République Socialiste Tchèqueoslovaque et des voyageurs ayant leur résidence permanente en République Socialiste Tchèqueoslovaque, si l'accident a eu lieu sur son territoire.

<sup>1</sup> Traduction fournie par le Gouvernement suisse.

<sup>2</sup> Translation supplied by the Government of Switzerland.

*DENMARK**DANEMARK*[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]

Denmark reserves the right, under the terms of Article 3 of the Uniform Rules concerning contracts for international carriage of passengers and luggage by rail (CIV), not to apply that Convention to passengers involved in accidents occurring in Danish territory, where the former are Danish citizens or persons normally resident in Denmark.

« Le Danemark se réserve, en vertu des termes de l'article 3 des Règles uniformes concernant le contrat de transport international ferroviaire des voyageurs et des bagages (CIV), le droit de ne pas appliquer ladite convention aux voyageurs victimes d'accidents survenus sur le territoire danois, lorsque ceux-ci sont citoyens danois ou des personnes ayant leur résidence habituelle au Danemark. »

*FINLAND**FINLANDE*

[TRANSLATION — TRADUCTION]

In accordance with article 3 of Appendix A of the Convention (Uniform Rules concerning the Contract for International Carriage of Passengers and Luggage by Rail (CIV)), Finland reserves the right not to apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in the case of the death of, or personal injury to, passengers, when such passengers are Finnish nationals or have their usual place of residence in Finland.

« Conformément à l'article 3 de l'Appendice A de la Convention (Règles Uniformes concernant le contrat de transport international ferroviaire de voyageurs et de bagages, CIV), la Finlande se réserve le droit de ne pas appliquer aux voyageurs victimes d'accidents survenus sur son territoire l'ensemble des dispositions relatives à la responsabilité du chemin de fer en cas de mort et de blessures de voyageurs, lorsque ceux-ci sont ses ressortissants ou des personnes ayant leur résidence habituelle en Finlande. »

*GERMAN DEMOCRATIC REPUBLIC**RÉPUBLIQUE DÉMOCRATIQUE  
ALLEMANDE*

[GERMAN TEXT — TEXTE ALLEMAND]

“Die Deutsche Demokratische Republik erklärt in Uebereinstimmung mit Artikel 12 § 3 des Uebereinkommens über den internationalen Eisenbahnverkehr (COTIF) vom 9. Mai 1980, dass sie sich durch Artikel 12 § 1 des Uebereinkommens bezüglich der Beilegung von Streitigkeiten zwischen den Mitgliedstaaten der Zwi-

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.

schenstaatlichen Organisation für den internationalen Eisenbahnverkehr (OTIF) durch eine schiedsgerichtliche Entscheidung nicht als gebunden betrachtet.”

“Die Deutsche Demokratische Republik erklärt in Übereinstimmung mit Artikel 3 § I des Anhangs A zum Übereinkommen über den internationalen Eisenbahnverkehr (COTIF) vom 9. Mai 1980, dass sie die Bestimmungen des Anhangs A zum Übereinkommen über den internationalen Eisenbahnverkehr (COTIF) vom 9. Mai 1980 über die Haftung der Eisenbahn bei Tötung und Verletzung von Reisenden nicht anwenden wird, wenn sich der Unfall auf dem Territorium der Deutschen Demokratischen Republik ereignet und der betroffene Reisende Bürger der Deutschen Demokratischen Republik ist oder in der Deutschen Demokratischen Republik seinen gewöhnlichen Aufenthalt hat.”

[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]

In accordance with the third paragraph of Article 12 of the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980, the German Democratic Republic states that it does not consider itself bound by the first paragraph of Article 12 of that Convention, which concerns the settlement of disputes between Member States of the Intergovernmental Organisation for International Carriage by Rail (OTIF) by a decision of the Arbitration Tribunal.

In accordance with the first paragraph of Article 3 of Appendix A to the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980, the German Democratic Republic states that it will not apply the provisions of Appendix A to the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980, on the liability of the railway in case of death or of personal injury to passengers, if the accident occurs in the territory of the German Democratic Republic and the passenger concerned is a citizen of the German Democratic Republic or is normally resident in that country.

[TRADUCTION]

Conformément au paragraphe 3 de l'article 12 de la Convention relative aux transports internationaux ferroviaires (COTIF) du 9 mai 1980, la République démocratique allemande déclare qu'elle ne se considère pas liée par le paragraphe 1 de l'article 12 de ladite Convention concernant le règlement des litiges entre les Etats membres de l'Organisation intergouvernementale pour les transports internationaux ferroviaires (OTIF) par une décision du tribunal arbitral.

Conformément au paragraphe 1 de l'article 3 de l'appendice A à la Convention relative aux transports internationaux ferroviaires (COTIF) du 9 mai 1980, la République démocratique allemande déclare qu'elle n'appliquera pas les dispositions de l'appendice A à la Convention relative aux transports internationaux ferroviaires (COTIF) du 9 mai 1980 concernant la responsabilité du chemin de fer en cas de mort et de blessures de voyageurs, si l'accident survient sur le territoire de la République démocratique allemande et si le voyageur concerné est un citoyen de la République démocratique allemande ou a sa résidence habituelle dans ce pays.

<sup>1</sup> Translation supplied by the Government of Switzerland.

<sup>2</sup> Traduction fournie par le Gouvernement suisse.

IRAQ

IRAQ

[ARABIC TEXT — TEXTE ARABE]

## ” تحفظات الجمهورية العراقية ”

- ١ لا تعتبر الجمهورية العراقية ملزمة بملص الفقرة ( ١ ) من المادة ١٢ من الاتفاقية التي تقضى بأن كل خلاف بين الاطراف المتعاقدة حول تفسير او تطبيق هذه الاتفاقية يمكن ان يحال الى محكمة تحكيمية بناء على طلب احد الاطراف، أن مثل هذه الخلافات لا يمكن ان تخضع للتحكيم الا باتفاق جميع اطراف الخلاف ولكل حالة على حدة وذلك تطبيقا للفقرة ( ٣ ) من المادة ( ١٢ ) من الاتفاقية •
- ٢ لا تطبق كافة احكام هذه الاتفاقية المتعلقة بمسؤولية السكك الحديدية في حالة وفاة المسافرين او اصابتهم بجروح على رعايا الجمهورية العراقية ورعايا الدول الاخرى المقيمين بصورة اعتيادية في العراق اذا كانوا ضحايا لحوادث تقذف داخل الاراضي العراقية •
- ٣ ان تعديق الجمهورية العراقية لا يعنى بحال من الاحوال الاعتراف بما يسمى ” اسرائيل ” ولا يؤدى الى دخولها فـسـى معاملات محامـا مما تتضمنه الاتفاقية والبروتوكول • “

[TRANSLATION<sup>1</sup> — TRADUCTION<sup>2</sup>]

[TRADUCTION]

*Reservations of the Republic of Iraq**Réserves de la République d'Iraq*

1) The Republic of Iraq is not considered abided to the text of para. (1) of the article (12) of the Convention which requires that any dispute between Member States arising from the interpretation or application of the Convention be referred to an Arbitration Tribunal at the request of one of the parties. Such disputes can not be referred to an Arbitration only by agreement between the parties concerned, and each case separately according to the application of para. (3) article (12) of the Convention.

2) Not all provisions of this Convention concerning the liability of railway apply to passengers of Iraqi nationals or nationals of other countries which their usual place of residence in Iraq, in case of death or injury if they were victims of accidents within the territory of Iraq.

3) The ratification of the agreement by the Republic of Iraq does not mean in all cases recognition of so called (Israel), and will not lead to enter in dealings with her according to contains of the agreement and the protocol.

1. La République d'Iraq ne se considère pas liée par les dispositions du paragraphe 1 de l'article 12 de la Convention, qui stipule que les litiges entre Etats membres, nés de l'interprétation ou de l'application de la Convention, sont, à la demande d'une des Parties, soumis à un tribunal arbitral. Ces litiges ne peuvent être soumis à arbitrage que par accord entre les Parties intéressées, et chaque cas sera traité séparément en vertu du paragraphe 3 de l'article 12 de la Convention.

2. Les dispositions de la Convention relatives à la responsabilité des chemins de fer ne s'appliquent pas toutes aux passagers qui sont des ressortissants irakiens ou des ressortissants d'autres pays résidant habituellement en Iraq, en cas de décès ou de blessure, s'ils sont victimes d'accidents à l'intérieur du territoire irakien.

3. La ratification de la Convention par la République d'Iraq ne signifie en aucune façon la reconnaissance d'Israël et ne conduira pas à l'établissement avec ce dernier de relations au titre de la Convention et du Protocole.

POLAND

POLOGNE

[POLISH TEXT — TEXTE POLONAIS]

“1. Polska Rzeczpospolita Ludowa oświadcza na podstawie artykułu 12 § 3 Konwencji, że nie będzie stosować postanowień zawartych w §§ 1 i 2 tego artykułu.

2. Polska Rzeczpospolita Ludowa oświadcza, na mocy artykułu 3 § 1 Przepisów Ujednoliconych CIV, że nie będzie stosować wszystkich postanowień dotyczących odpowiedzialności kolei za śmierć i zranienie podróżnych, jeżeli wypadek nastąpi na terytorium PRL, a podróżny jest obywatelem polskim lub ma w PRL miejsce stałego pobytu”.

<sup>1</sup> Translation supplied by the Government of Iraq.

<sup>2</sup> Traduction fournie par le Gouvernement irakien.

## [TRANSLATION]

1. The People's Republic of Poland declares, in accordance with article 12, paragraph 3, of the Convention, that it will not apply the provisions in paragraphs 1 and 2 of that article.

2. The People's Republic of Poland declares, in accordance with article 3, paragraph 1, of the CIV Uniform Rules, that it will not apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in case of death of, or personal injury to, passengers, when such passengers are Polish nationals or have their usual place of residence in Poland.

[TRADUCTION<sup>1</sup> — TRANSLATION<sup>2</sup>]

1. La République Populaire de Pologne déclare, en vertu de l'article 12 § 3 de la Convention, qu'elle n'appliquera pas les dispositions contenues dans § § 1 et 2 dudit article.

2. La République Populaire de Pologne déclare, en vertu de l'article 3 § 1 des règles uniformes CIV, qu'elle n'appliquera pas l'ensemble des dispositions relatives à la responsabilité du chemin de fer en cas de mort et de blessures de voyageurs, lorsque l'accident aurait lieu sur le territoire de la République Populaire de Pologne et le voyageur est le ressortissant polonais ou la personne ayant sa résidence habituelle dans la Pologne.

## ROMANIA

## ROUMANIE

## [ROMANIAN TEXT — TEXTE ROUMAIN]

a) "Republica Socialistă România declară că nu se consideră legată de prevederile articolului 12, paragraful 1 din Convenție, potrivit căroră orice diferend între părțile contractante privind interpretarea sau aplicarea acestei convenții, va putea fi supus arbitrajului spre soluționare, la cererea uneia din părți.

Republica Socialistă România consideră că asemenea diferende vor putea fi supuse arbitrajului numai cu consimțământul tuturor părților în litigiu, pentru fiecare caz în parte";

b) "Republica Socialistă România declară că nu se consideră legată de prevederile din Regulile uniforme privind contractul de transport internațional feroviar al călătorilor și bagajelor referitoare la răspunderea căii ferate în caz de moarte și de rănire a călătorilor victime ale unor accidente produse pe teritoriul său, când aceștia sînt cetățeni ai sai sau persoane care își au reședința obișnuită în Republica Socialistă România".

## [TRANSLATION]

(a) The Republic of Romania declares that it does not consider itself bound by the provisions of article 12, paragraph 1, of the Convention according to which any dispute between

[TRADUCTION<sup>1</sup> — TRANSLATION<sup>2</sup>]

a) La République Socialiste de Roumanie déclare qu'elle ne se considère pas liée par les dispositions de l'article 12, 1<sup>er</sup> paragraphe, de la Convention, selon lesquelles tout différend

<sup>1</sup> Traduction fournie par le Gouvernement suisse.

<sup>2</sup> Translation supplied by the Government of Switzerland.

the Contracting Parties concerning the interpretation or application of the Convention may, at the request of one of the parties, be referred to an arbitration tribunal.

The Socialist Republic of Romania considers that such disputes may be referred to an arbitration tribunal only with the consent of all parties to the dispute in each individual case.

(b) The Socialist Republic of Romania declares that it does not consider itself bound by the provisions of the Uniform Rules concerning the Contract for the International Carriage of Passengers and Luggage by Rail which refer to the liability, in accidents occurring in its territory, of the railway in the case of death of, or personal injury to, passengers, when such passengers are Romanian nationals or have their usual place of residence in the Socialist Republic of Romania.

### SWEDEN

[TRANSLATION — TRADUCTION]

Sweden declares, in accordance with article 3, paragraph 1, of the CIV Uniform Rules, that it will not apply to passengers involved in accidents occurring in its territory the whole of the provisions concerning the liability of the railway in case of death of, or personal injury to, passengers, when such passengers are nationals of Sweden or have their usual place of residence in Sweden.

entre les parties contractantes concernant l'interprétation ou l'application de cette Convention pourrait être soumis au règlement par arbitrage sur la demande de l'une des parties.

La République Socialiste de Roumanie estime que de pareils différends ne pourraient être soumis à l'arbitrage qu'avec l'accord de toutes les parties en litige, pour chaque cas séparément.

b) La République Socialiste de Roumanie déclare qu'elle ne se considère pas liée par les dispositions des Règles uniformes concernant le contrat de transport international ferroviaire des voyageurs et des bagages se rapportant à la responsabilité du chemin de fer en cas de mort et de blessures de voyageurs victimes d'accidents survenus sur son territoire, lorsque ceux-ci sont des citoyens roumains ou des personnes ayant leur résidence habituelle en République Socialiste de Roumanie.

### SUÈDE

« La Suède déclare, en vertu de l'article 3 § 1 des règles uniformes CIV, qu'elle n'appliquera pas l'ensemble des dispositions relatives à la responsabilité du chemin de fer en cas de mort et de blessures de voyageurs, lorsque l'accident aurait lieu sur son territoire et les voyageurs sont ses ressortissants ou des personnes ayant leur résidence habituelle en Suède. »



No. 23354

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**SENEGAL**

**Declaration recognizing as compulsory the jurisdiction of the International Court of Justice, in conformity with Article 36, paragraph 2, of the Statute of the International Court of Justice. Done at Dakar on 2 May 1985**

*Authentic text: French.*

*Registered ex officio on 3 May 1985.*

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**SÉNÉGAL**

**Déclaration reconnaissant comme obligatoire la juridiction de la Cour internationale de Justice, conformément au paragraphe 2 de l'Article 36 du Statut de la Cour internationale de Justice. En date à Dakar du 2 mai 1985**

*Texte authentique : français.*

*Enregistrée d'office le 3 mai 1985.*

DÉCLARATION<sup>1</sup> DU SÉNÉGAL RECONNAISSANT COMME OBLIGATOIRE LA JURIDICTION DE LA COUR INTERNATIONALE DE JUSTICE, CONFORMÉMENT AU PARAGRAPHE 2 DE L'ARTICLE 36 DU STATUT DE LA COUR INTERNATIONALE DE JUSTICE

RÉPUBLIQUE DU SÉNÉGAL

Un Peuple — Un But — Une Foi

MINISTÈRE DES AFFAIRES ÉTRANGÈRES

*Déclaration facultative de juridiction obligatoire*

J'ai l'honneur, au nom du Gouvernement de la République du Sénégal, de déclarer que, conformément au paragraphe II de l'Article 36 du Statut de la Cour internationale de Justice, il accepte sous condition de réciprocité, comme obligatoire de plein droit et sans convention spéciale, à l'égard de tout autre Etat acceptant la même obligation, la juridiction de la Cour sur tous les différends d'ordre juridique ayant pour objet :

- L'interprétation d'un traité;
- Tout point de droit international;
- La réalité de tout fait qui s'il était établi, constituerait la violation d'un engagement international;
- La nature ou l'étendue de la réparation due pour la rupture d'un engagement international.

Cette présente déclaration est faite sous condition de réciprocité de la part de tous les Etats. Cependant, le Sénégal peut renoncer à la compétence de la Cour au sujet :

- Des différends pour lesquels les parties seraient convenues d'avoir recours à un autre mode de règlement;
- Des différends relatifs à des questions qui, d'après le droit international, relèvent de la compétence exclusive du Sénégal.

Enfin, le Gouvernement de la République du Sénégal se réserve le droit de compléter, modifier ou retirer les réserves ci-dessus, à tout moment, moyennant notification adressée au Secrétaire général de l'Organisation des Nations Unies.

Une telle notification prendrait effet à la date de sa réception par le Secrétaire général.

[Signé]

IBRAHIMA FALL  
Ministre des Affaires étrangères  
de la République du Sénégal

Son Excellence Monsieur Javier Pérez de Cuéllar  
Secrétaire général des Nations Unies  
New York

<sup>1</sup> La Déclaration a été déposée auprès du Secrétaire général de l'Organisation des Nations Unies le 3 mai 1985, pour prendre effet à cette même date.

[TRANSLATION — TRADUCTION]

DECLARATION<sup>1</sup> BY SENEGAL RECOGNIZING AS COMPULSORY  
THE JURISDICTION OF THE INTERNATIONAL COURT OF  
JUSTICE, IN CONFORMITY WITH ARTICLE 36, PARA-  
GRAPH 2, OF THE STATUTE OF THE INTERNATIONAL  
COURT OF JUSTICE

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REPUBLIC OF SENEGAL

One People — One Goal — One Faith

MINISTRY OF FOREIGN AFFAIRS

*Optional declaration of compulsory jurisdiction*

I have the honour, on behalf of the Government of the Republic of Senegal, to declare that, in accordance with Article 36, paragraph 2, of the Statute of the International Court of Justice, it accepts on condition of reciprocity as compulsory *ipso facto* and without special agreement, in relation to any other State accepting the same obligation, the jurisdiction of the Court in all legal disputes concerning:

- The interpretation of a treaty;
- Any question of international law;
- The existence of any fact which, if established, would constitute a breach of an international obligation;
- The nature or extent of the reparation to be made for the breach of an international obligation.

This declaration is made on condition of reciprocity on the part of all States. However, Senegal may waive the competence of the Court in regard to:

- Disputes concerning which the parties have agreed to have recourse to some other method of settlement;
- Disputes with regard to questions which by international law fall within the exclusive competence of Senegal.

Lastly, the Government of the Republic of Senegal reserves the right at any time, by means of a notification addressed to the Secretary-General of the United Nations, to add to, amend or withdraw the foregoing reservations.

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<sup>1</sup> The Declaration was deposited with the Secretary-General of the United Nations on 3 May 1985, to take effect on the same date.

Such notification shall be effective on the date of its receipt by the Secretary-General.

*[Signed]*

**IBRAHIMA FALL**  
Minister for Foreign Affairs  
of the Republic of Senegal

His Excellency Mr. Javier Pérez de Cuéllar  
Secretary-General of the United Nations  
New York

**No. 23355**

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**FRANCE  
and  
GERMAN DEMOCRATIC REPUBLIC**

**Agreement on cultural co-operation. Signed at Berlin on  
16 June 1980**

*Authentic texts: French and German.*

*Registered by France on 8 May 1985.*

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**FRANCE  
et  
RÉPUBLIQUE DÉMOCRATIQUE ALLEMANDE**

**Accord de coopération culturelle. Signé à Berlin le 16 juin  
1980**

*Textes authentiques : français et allemand.*

*Enregistré d'office par la France le 8 mai 1985.*

## ACCORD<sup>1</sup> DE COOPÉRATION CULTURELLE ENTRE LE GOUVERNEMENT DE LA RÉPUBLIQUE FRANÇAISE ET LE GOUVERNEMENT DE LA RÉPUBLIQUE DÉMOCRATIQUE ALLEMANDE

Le Gouvernement de la République Française et

Le Gouvernement de la République Démocratique Allemande,

Ayant à l'esprit l'Acte Final de la Conférence sur la Sécurité et la Coopération en Europe<sup>2</sup> et, tout particulièrement, celles de ses dispositions qui ont trait à la coopération et aux échanges dans le domaine de la culture,

Convaincus que la coopération culturelle entre les deux Etats contribuera au renforcement des relations amicales et de la compréhension mutuelle entre ceux-ci, dans l'intérêt de la paix,

Dans le souci de l'intérêt mutuel, le respect de la réciprocité et l'observation des législations en vigueur dans l'un et l'autre pays,

Désireux de donner à cette coopération une base appropriée, sont convenus de ce qui suit :

*Article 1.* Les Parties Contractantes favorisent le développement des échanges et de la coopération culturelle d'intérêt mutuel.

A cet effet, elles favorisent les relations entre organismes gouvernementaux, les activités culturelles des organismes non gouvernementaux s'exerçant dans les domaines couverts par le présent Accord, et les contacts entre les personnes concernées, à titre professionnel ou non, par la culture de l'un et l'autre pays.

*Article 2.* Les Parties Contractantes attachent de l'importance à la promotion de l'enseignement et de la recherche dans le domaine des langues française et allemande.

Elles soutiennent la coopération entre organismes compétents en la matière dans les deux pays.

Elles conviennent de s'employer à développer, par les moyens dont elles disposent, l'enseignement de la langue d'un pays dans l'autre, tant sur le plan scolaire et universitaire que sur le plan extrascolaire.

Elles s'efforcent de réserver à chacune des deux langues une place de choix dans leurs systèmes nationaux d'enseignement, de manière à créer les conditions les meilleures pour le développement de leur coopération.

Elles favorisent l'échange d'enseignants qui donnent respectivement des cours de français et d'allemand dans les universités et autres établissements d'enseignement supérieur ainsi que dans les établissements d'enseignement secondaire des deux pays.

Elles encouragent également l'échange de spécialistes de l'enseignement de la langue de leur pays.

<sup>1</sup> Entré en vigueur le 2 novembre 1981, date de réception de la dernière des notifications par lesquelles les Parties contractantes se sont informées de l'accomplissement des formalités constitutionnelles ou législatives requises, conformément à l'article 20.

<sup>2</sup> *Notes et Etudes documentaires*, n<sup>os</sup> 4271-4272 (15 mars 1976), p. 48 (La Documentation française).

*Article 3.* Les Parties Contractantes favorisent, après accord entre organismes compétents dans le domaine de l'enseignement, l'échange de publications administratives et pédagogiques, de manuels et de matériel d'enseignement, ainsi que de toute documentation appropriée relative à l'enseignement dans l'un et l'autre pays.

*Article 4.* Les Parties Contractantes encouragent la conclusion entre universités et autres établissements d'enseignement supérieur des deux pays, d'accords présentant un intérêt mutuel, définissant des programmes concrets et prévoyant leur financement. Ces accords sont portés à la connaissance de la Commission mixte de coopération culturelle, instituée par l'article 19 du présent Accord.

*Article 5.* Les Parties Contractantes encouragent l'échange, sur une base de réciprocité, entre autorités et institutions compétentes des deux pays :

- D'étudiants de troisième cycle, qui poursuivent leur formation dans des établissements d'enseignement supérieur;
- De stagiaires, qui poursuivent leur formation dans des établissements d'enseignement des arts;
- D'enseignants, chercheurs et spécialistes, qui effectuent des missions d'études, d'information ou de conférences, ainsi que des travaux de recherche en commun dans des établissements d'enseignement supérieur et autres organismes appropriés, dans les domaines non couverts par l'Accord de coopération scientifique et technique du 31 Août 1977 entre le Gouvernement de la République Française et le Gouvernement de la République Démocratique Allemande.

Ces échanges doivent permettre, en particulier, de dégager des secteurs de coopération culturelle d'intérêt mutuel.

*Article 6.* Les Parties Contractantes recommandent l'organisation d'échanges de jeunes gens. Ces échanges incluent des échanges de groupes d'étudiants et de groupes d'élèves, organisés sur la base de la réciprocité et par entente entre institutions et organisations compétentes dans l'un et l'autre pays.

*Article 7.* Les Parties Contractantes favorisent la coopération entre les organismes et institutions compétentes dans le domaine de la culture.

Elles favorisent un certain nombre d'invitations et de missions dans un pays de personnalités du monde culturel de l'autre pays. Ces invitations et missions sont organisées d'un commun accord par les organismes compétents des deux pays à l'initiative du pays d'accueil ou du pays d'envoi.

Elles favorisent d'un commun accord les échanges, sous toutes formes appropriées, d'informations et de documentation sur la vie culturelle des deux pays permettant une meilleure connaissance mutuelle de la culture de leurs pays respectifs.

*Article 8.* Les Parties Contractantes favorisent l'envoi dans l'autre pays d'enseignants, personnalités et spécialistes dans les domaines couverts par le présent Accord, qui participent à des réunions bilatérales ou multilatérales (colloques, congrès, séminaires, festivals, etc.) organisées dans l'un ou l'autre pays.

Elles encouragent l'échange d'une information réciproque dans ces domaines.

*Article 9.* Les Parties Contractantes favorisent l'échange et la diffusion, sur un plan commercial et non commercial, des livres, périodiques et autres publications culturelles, scientifiques et techniques d'un pays dans l'autre, en fonction de leurs possibilités et en accord avec les organismes compétents, notamment par les moyens suivants :

- Conclusion d'arrangements particuliers entre organismes et maisons d'édition des deux pays dans le dessein d'intensifier la traduction, l'édition et la coédition d'ouvrages de l'un et l'autre pays;
- Rencontres de travail entre spécialistes de l'édition et de la diffusion des deux pays;
- Expositions du livre d'un pays dans l'autre;
- Participation d'un pays aux foires internationales du livre organisées dans l'autre pays;
- Echanges réguliers de livres, périodiques et autres publications culturelles, scientifiques et techniques entre bibliothèques et autres institutions spécialisées dans l'un et l'autre pays;
- Encouragement de l'importation sur la base commerciale de livres, périodiques et autres publications de l'autre Etat et de la vente au public de ces livres, périodiques et autres publications.

*Article 10.* Les Parties Contractantes recommandent la réalisation de films de coproduction, l'accroissement des échanges de films sur une base commerciale ou non commerciale, les échanges de personnalités et de spécialistes du cinéma des deux pays.

Elles encouragent également l'organisation de grandes premières, ainsi que de journées ou semaines de films d'un pays dans l'autre, et la participation aux festivals du film organisés dans l'autre pays.

*Article 11.* Les Parties Contractantes encouragent les organismes de leurs pays respectifs compétents en matière de radiodiffusion et de télévision à développer leurs échanges et leur coopération, sur la base d'accords directs conclus entre eux.

*Article 12.* Les Parties Contractantes favorisent, dans la mesure de leurs possibilités, les échanges, organisés sur une base commerciale ou non commerciale, dans les divers domaines de l'activité artistique, classique et contemporaine : art dramatique, lyrique et chorégraphique, musique, variétés, arts plastiques.

*Article 13.* Les Parties Contractantes encouragent le développement des échanges et de la coopération dans le domaine du sport.

Les organismes compétents dans l'un et l'autre pays peuvent conclure des accords directs dans ce domaine.

*Article 14.* Les Parties Contractantes encouragent les rencontres entre représentants des organismes de tourisme dans l'un et l'autre pays et facilitent aux touristes d'un pays l'accès à la vie culturelle et sociale de l'autre pays.

*Article 15.* Les Parties Contractantes recommandent et facilitent le développement des échanges et de la coopération dans le domaine de la jeunesse.

Ces échanges et cette coopération se réalisent par entente mutuelle entre institutions et organismes compétents dans les deux pays.



*Article 16.* Les Parties Contractantes accordent aux ressortissants de l'autre pays, accueillis dans leurs pays respectifs en application du présent Accord, les facilités nécessaires conformément à la législation en vigueur dans leur pays.

Les ressortissants du pays d'envoi sont tenus d'observer les lois et règlements du pays d'accueil.

*Article 17.* Les Parties Contractantes, ayant en vue les objectifs du présent Accord et animées d'une volonté commune de faciliter l'accès de la culture d'un pays au public de l'autre pays, procèdent à l'ouverture de centres culturels, sur la base de la réciprocité.

Le statut et les modalités de fonctionnement de ces centres font l'objet d'un accord particulier.

*Article 18.* Les Parties Contractantes favorisent et soutiennent la coopération entre leurs commissions nationales pour l'U.N.E.S.C.O.

*Article 19.* Les Parties Contractantes arrêtent des programmes d'échanges et de coopération, afin d'assurer la mise en œuvre du présent Accord. Il est créé une Commission mixte de coopération culturelle dont les deux Présidents sont mandatés, à cet effet, par leurs Gouvernements respectifs.

La Commission mixte élabore ces programmes, en suit l'exécution et fixe les modalités pratiques des échanges et de la coopération. Elle se réunit, en règle générale, tous les deux ans. Les dates et lieux de ses réunions sont fixés d'un commun accord par la voie diplomatique. Elle peut constituer en son sein des sous-commissions et groupes mixtes de travail, dont les recommandations et propositions sont présentées à son approbation.

Elle connaît et oriente les activités qui s'exercent en application d'arrangements particuliers conclus dans le cadre du présent Accord.

Elle coordonne ses activités avec celles de la Commission mixte de coopération scientifique et technique créée par l'Accord de coopération scientifique et technique entre le Gouvernement de la République Française et le Gouvernement de la République Démocratique Allemande (article 4). Un lien spécifique est établi entre les deux Commissions, par une information réciproque et par la présence, dans chaque délégation, de membres communs.

*Article 20.* Chacune des Parties Contractantes notifie à l'autre l'accomplissement des formalités requises par sa Constitution ou par sa législation pour l'entrée en vigueur du présent Accord.

Cet Accord entre en vigueur à la date de réception de la dernière de ces notifications. Il est conclu pour une période de cinq années, renouvelable, par tacite reconduction, pour de nouvelles périodes de cinq années. Il peut être dénoncé par écrit, par l'une ou l'autre des Parties Contractantes avec un préavis de six mois.

FAIT à Berlin le 16 juin 1980 en double exemplaire original chacun en langues française et allemande, les deux textes faisant également foi.

Pour le Gouvernement  
de la République Française :

Pour le Gouvernement  
de la République démocratique  
Allemande :

[Signé — Signed]<sup>1</sup>

[Signé — Signed]<sup>2</sup>

<sup>1</sup> Signé par Henry Bayle — Signed by Henry Bayle.

<sup>2</sup> Signé par Oskar Fischer — Signed by Oskar Fischer.

[GERMAN TEXT — TEXTE ALLEMAND]

## ABKOMMEN ZWISCHEN DER REGIERUNG DER FRANZÖSISCHEN REPUBLIK UND DER REGIERUNG DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK ÜBER KULTURELLE ZUSAMMENARBEIT

Die Regierung der Französischen Republik und die Regierung der Deutschen Demokratischen Republik haben

eingedenk der Schlußakte der Konferenz über Sicherheit und Zusammenarbeit in Europa und insbesondere der Bestimmungen, die sich auf die Zusammenarbeit und den Austausch auf dem Gebiet der Kultur beziehen,

in der Überzeugung, daß die kulturelle Zusammenarbeit der beiden Staaten zur Stärkung der freundschaftlichen Beziehungen und des gegenseitigen Verständnisses zwischen ihnen im Interesse des Friedens beiträgt,

in dem Bemühen um das beiderseitige Interesse, in der Achtung der Gegenseitigkeit und in Einhaltung der in beiden Staaten jeweils gültigen gesetzlichen Bestimmungen,

von dem Wunsch geleitet, dieser kulturellen Zusammenarbeit die entsprechende Grundlage zu geben,

folgendes vereinbart:

*Artikel 1.* Die Vertragschließenden Seiten fördern die Entwicklung des Austausches und der kulturellen Zusammenarbeit im gegenseitigen Interesse.

Zu diesem Zweck fördern sie die Beziehungen zwischen staatlichen Organen, die kulturellen Aktivitäten der nichtstaatlichen Organisationen auf den Gebieten, die das vorliegende Abkommen erfaßt, sowie die Kontakte zwischen den Personen, die sich beruflich oder nicht beruflich mit der Kultur im jeweiligen Staat beschäftigen.

*Artikel 2.* Die Vertragschließenden Seiten messen der Förderung der Lehre und der Forschung auf dem Gebiet der französischen und deutschen Sprache Bedeutung bei.

Sie unterstützen die Zusammenarbeit zwischen den für diesen Bereich zuständigen Einrichtungen in beiden Staaten.

Sie kommen überein, ihren Beitrag dazu zu leisten, mit den ihnen zur Verfügung stehenden Mitteln den Unterricht der Sprache des einen Staates im anderen sowohl im Bereich der Volksbildung und des Hochschulwesens als auch in der außerschulischen Bildung zu entwickeln. Sie bemühen sich, beiden Sprachen einen ihnen gebührenden Platz in ihren nationalen Bildungssystemen einzuräumen, um die besten Bedingungen zur Entwicklung ihrer Zusammenarbeit zu schaffen.

Sie fördern den Austausch von Sprachlehrern, die die französische bzw. deutsche Sprache an Universitäten, anderen höheren Bildungseinrichtungen und Oberschulen des anderen Staates lehren.

Sie fördern ebenso den Austausch von Spezialisten der Sprachausbildung ihrer Staaten.

*Artikel 3.* Die Vertragschließenden Seiten fördern nach Übereinkunft zwischen den zuständigen Organen des Bildungswesens den Austausch von administrativen und pädagogischen Veröffentlichungen, von Schulbüchern und Lehrmitteln sowie entsprechenden Dokumentationen über das Bildungswesen in beiden Staaten.

*Artikel 4.* Die Vertragschließenden Seiten fördern den Abschluß von im gegenseitigen Interesse liegenden Vereinbarungen zwischen Universitäten und anderen Hochschuleinrichtungen beider Staaten, die Festlegungen von konkreten Programmen und deren Finanzierung beinhalten.

Diese Vereinbarungen werden der Gemischten Kommission für kulturelle Zusammenarbeit zur Kenntnis gegeben, die entsprechend Artikel 19 dieses Abkommens gebildet wird.

*Artikel 5.* Die Vertragschließenden Seiten fördern auf der Grundlage der Gegenseitigkeit zwischen den zuständigen Organen und Institutionen beider Staaten den Austausch von

- postgradualen Studierenden, die ihre Ausbildung an Hochschuleinrichtungen fortführen,
- Praktikanten, die ihre Ausbildung an künstlerischen Lehranstalten fortführen,
- Lehrkräften, Forschern und Spezialisten, die Studien-, Informations- und Vortragsreisen sowie Arbeiten an gemeinsamen Forschungsprojekten an Hochschulen oder anderen geeigneten Einrichtungen auf Gebieten durchführen, die nicht Gegenstand des Abkommens über wissenschaftlich-technische Zusammenarbeit zwischen der Regierung der Französischen Republik und der Regierung der Deutschen Demokratischen Republik vom 31. August 1977 sind.

Dieser Austausch soll insbesondere die Herausbildung von Gebieten des kulturellen Zusammenarbeitens, die im gegenseitigen Interesse liegen, unterstützen.

*Artikel 6.* Die Vertragschließenden Seiten empfehlen die Organisierung des Austausches von Jugendlichen, darunter Gruppen von Studenten und Schülern, auf der Grundlage der Gegenseitigkeit und der Vereinbarung zwischen den zuständigen Institutionen und Organisationen beider Staaten.

*Artikel 7.* Die Vertragschließenden Seiten fördern die Zusammenarbeit zwischen den zuständigen Organen und Einrichtungen auf dem Gebiet der Kultur.

Sie unterstützen eine bestimmte Zahl von Einladungen und Entsendungen von Persönlichkeiten des kulturellen Lebens eines Staates in den anderen. Diese Einladungen und Entsendungen werden in gegenseitigem Einverständnis von den zuständigen Einrichtungen beider Staaten auf Initiative des Empfangs- oder Entsendestaates organisiert.

Sie fördern in gegenseitigem Einvernehmen und in allen zweckmäßigen Formen den Austausch von Informationen und Dokumentationen über das kulturelle Leben der beiden Staaten, die es gestatten, eine gegenseitige bessere Kenntnis der Kultur des anderen Staates zu ermöglichen.

*Artikel 8.* Die Vertragschließenden Seiten fördern die Entsendung von Lehrkräften, Persönlichkeiten und Spezialisten der Gebiete, die von diesem Abkommen erfaßt sind, in den anderen Staat zur Teilnahme an zweiseitigen oder

multilateralen Zusammenkünften (Kolloquien, Kongressen, Seminaren, Festivals usw.), welche im jeweils anderen Staat durchgeführt werden.

Sie unterstützen den beiderseitigen Informationsaustausch auf diesen Gebieten.

*Artikel 9.* Die Vertragschließenden Seiten fördern im Einvernehmen mit den zuständigen Organen die Verbreitung und den Austausch von Büchern, Periodika und anderen kulturellen, wissenschaftlichen und technischen Publikationen des einen Staates im anderen entsprechend ihren Möglichkeiten auf kommerzieller und nichtkommerzieller Grundlage, insbesondere durch folgende Mittel:

- Abschluß besonderer Vereinbarungen zwischen Einrichtungen und Verlagen der beiden Staaten zum Zwecke der Förderung von Übersetzungen und der Herausgabe sowie gemeinsamen Herausgabe von Werken des jeweils anderen Staates,
- Arbeitstreffen von Fachleuten des Vertriebs- und Verlagswesens beider Länder,
- Ausstellungen von Büchern des einen Staates im anderen,
- Teilnahme an internationalen Buchmessen, die im anderen Staat organisiert werden,
- regelmäßiger Austausch von Büchern, Periodika und anderen kulturellen, wissenschaftlichen und technischen Publikationen zwischen Bibliotheken u. a. Facheinrichtungen beider Staaten,
- Förderung des Imports auf kommerzieller Grundlage von Büchern, Periodika und anderen Publikationen des anderen Staates und des Verkaufs dieser Bücher, Periodika und anderen Publikationen an die Öffentlichkeit.

*Artikel 10.* Die Vertragschließenden Seiten empfehlen die Koproduktion von Filmen, die Verstärkung des Austausches von Filmen auf kommerzieller oder nichtkommerzieller Grundlage, den Austausch von Persönlichkeiten und Spezialisten des Filmwesens beider Staaten.

Sie fördern gleichermaßen die Durchführung von festlichen Filmpremieren und von Filmtagen oder Filmwochen im jeweils anderen Staat sowie die Teilnahme an Filmfestivals, die im anderen Staat organisiert werden.

*Artikel 11.* Die Vertragschließenden Seiten unterstützen die zuständigen Organe ihrer Staaten für Rundfunk und Fernsehen bei der Entwicklung des Austausches und der Zusammenarbeit zwischen ihnen auf der Grundlage direkter Vereinbarungen.

*Artikel 12.* Die Vertragschließenden Seiten fördern im Rahmen ihrer Möglichkeiten den auf kommerzieller oder nichtkommerzieller Basis organisierten Austausch auf verschiedenen Gebieten der klassischen und zeitgenössischen künstlerischen Tätigkeit: des Theaters und Musiktheaters, des Balletts, der Musik der Unterhaltungskunst und der Bildenden Kunst.

*Artikel 13.* Die Vertragschließenden Seiten fördern die Entwicklung des Austausches und der Zusammenarbeit auf dem Gebiet des Sports.

Die zuständigen Organisationen beider Staaten können dazu direkte Vereinbarungen abschließen.

*Artikel 14.* Die Vertragschließenden Seiten fördern Begegnungen zwischen Vertretern der Tourismus-Einrichtungen beider Staaten und erleichtern den Touristen des einen Staates den Zugang zum kulturellen und gesellschaftlichen Leben des jeweils anderen Staates.

*Artikel 15.* Die Vertragschließenden Seiten empfehlen und erleichtern die Entwicklung des Austausches und der Zusammenarbeit auf dem Gebiet der Jugend.

Dieser Austausch und diese Zusammenarbeit werden im gegenseitigen Einvernehmen zwischen den dafür zuständigen Organen in beiden Staaten verwirklicht.

*Artikel 16.* Die Vertragschließenden Seiten gewähren den Staatsbürgern des anderen Staates, die in ihrem Staat in Anwendung dieses Abkommens empfangen werden, die notwendigen Erleichterungen entsprechend den in ihrem Staat geltenden Gesetzen.

Die Staatsbürger des Entsendestaates sind verpflichtet, die gesetzlichen Bestimmungen des Empfangsstaates einzuhalten.

*Artikel 17.* Die Vertragschließenden Seiten, eingedenk der Ziele dieses Abkommens und von dem gemeinsamen Wunsch geleitet, der Öffentlichkeit des einen Staates den Zugang zur Kultur des anderen Staates zu erleichtern, eröffnen Kulturzentren auf der Basis der Gegenseitigkeit.

Statut und Modalitäten der Arbeitsweise dieser Zentren sind Gegenstand einer gesonderten Vereinbarung.

*Artikel 18.* Die Vertragschließenden Seiten fördern und unterstützen die Zusammenarbeit zwischen den UNESCO-Kommissionen beider Staaten.

*Artikel 19.* Die Vertragschließenden Seiten vereinbaren zur Durchführung dieses Abkommens Programme für den Austausch und die Zusammenarbeit. Es wird eine Gemischte Kommission für kulturelle Zusammenarbeit geschaffen, deren beide Vorsitzende zu diesem Zweck von ihren jeweiligen Regierungen bevollmächtigt sind. Die Gemischte Kommission erarbeitet diese Programme, verfolgt deren Durchführung und legt die praktischen Modalitäten des Austausches und der Zusammenarbeit fest. Sie tagt in der Regel alle 2 Jahre. Zeitpunkt und Ort ihrer Zusammenkünfte werden nach gemeinsamem Einverständnis auf diplomatischem Wege festgelegt. Innerhalb dieser Kommission können Unterkommissionen und gemischte Arbeitsgruppen aufgestellt werden, deren Empfehlungen und Vorschläge ihr zur Billigung vorgelegt werden.

Sie nimmt zur Kenntnis und orientiert die Tätigkeiten, die sich aus besonderen Vereinbarungen, die im Rahmen dieses Abkommens abgeschlossen sind, ergeben.

Sie koordiniert ihre Aktivitäten mit denen der Gemischten Kommission für wissenschaftlich-technische Zusammenarbeit, die durch das Abkommen über wissenschaftlich-technische Zusammenarbeit zwischen der Regierung der Französischen Republik und der Regierung der Deutschen Demokratischen Republik (Artikel 4) gebildet wurde. Eine besondere Verbindung wird zwischen den beiden Kommissionen durch eine gegenseitige Information hergestellt und durch die Anwesenheit von gemeinsamen Mitgliedern in jeder der beiden Kommissionen.

*Artikel 20.* Die Vertragschließenden Seiten notifizieren einander die Erfüllung der Formalitäten, die von ihrer Verfassung oder Gesetzgebung für das Inkrafttreten des vorliegenden Abkommens gefordert werden.

Dieses Abkommen tritt nach Empfang der letzten dieser Notifizierungen in Kraft. Es wird für einen Zeitraum von 5 Jahren abgeschlossen, der sich stillschweigend jeweils für weitere Zeiträume von 5 Jahren verlängert. Es kann von jeder der Vertragschließenden Seiten mit einer Vorankündigungsfrist von 6 Monaten schriftlich gekündigt werden.

AUSGEFERTIGT in Berlin am 16. Juni 1980 in zwei Originalen, jedes in französischer und deutscher Sprache, wobei beide Texte gleichermaßen gültig sind.

Für die Regierung  
der Französischen Republik:

[Signed — Signé]<sup>1</sup>

Für die Regierung  
der Deutschen Demokratischen  
Republik:

[Signed — Signé]<sup>2</sup>

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<sup>1</sup> Signed by Henry Bayle — Signé par Henry Bayle.

<sup>2</sup> Signed by Oskar Fischer — Signé par Oskar Fischer.

[TRANSLATION — TRADUCTION]

AGREEMENT<sup>1</sup> ON CULTURAL CO-OPERATION BETWEEN THE  
GOVERNMENT OF THE FRENCH REPUBLIC AND THE GOV-  
ERNMENT OF THE GERMAN DEMOCRATIC REPUBLIC

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The Government of the French Republic and  
The Government of the German Democratic Republic,

Mindful of the Final Act of the Conference on Security and Co-operation in Europe<sup>2</sup> and, more particularly, those of its provisions relating to co-operation and exchanges in the field of culture,

Convinced that cultural co-operation between the two States will contribute to the strengthening of friendly relations and mutual understanding between them, in the interest of peace,

With a view to mutual interest, respect for reciprocity and compliance with the legislation in force in both countries,

Desiring to give this co-operation an appropriate basis, have agreed as follows:

*Article 1.* The Contracting Parties shall encourage the development of exchanges and cultural co-operation of mutual interest.

For that purpose, they shall encourage relations between governmental bodies, cultural activities of non-governmental bodies active in fields covered by this Agreement, and contacts between persons involved, professionally or otherwise, in the culture of one or the other country.

*Article 2.* The Contracting Parties shall attach importance to the promotion of education and research in the field of the French and German languages.

They shall support co-operation between bodies competent in the matter in both countries.

They agree to work towards developing, with the means at their disposal, the teaching of the language of each country in the other country, both in schools and universities and extramurally.

They shall endeavour to allot to each of the two languages a prime place in their national education systems, in order to create the best conditions for the development of their co-operation.

They shall encourage exchanges of teachers to give French and German classes respectively in the universities, the other institutions of higher education and the institutions of secondary education of the two countries.

They shall also encourage exchanges of specialists in the teaching of the language of their country.

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<sup>1</sup> Came into force on 2 November 1981, the date of receipt of the last of the notifications by which the Contracting Parties informed each other of the completion of the required constitutional or legal formalities, in accordance with article 20.

<sup>2</sup> *International Legal Materials*, vol. 14 (1975), p. 1292 (American Society of International Law).

*Article 3.* The Contracting Parties shall encourage, following agreement between the competent bodies in the field of education, the exchange of administrative and educational publications, educational handbooks and material, and of all appropriate documentation relating to education in both countries.

*Article 4.* The Contracting Parties shall encourage the conclusion between universities and other institutions of higher education in the two countries of agreements of a mutual interest, defining specific programmes and providing for their financing. These agreements shall be brought to the attention of the Joint Commission on Cultural Co-operation established under article 19 of this Agreement.

*Article 5.* The Contracting Parties shall encourage the exchange, on a reciprocal basis, between competent authorities and institutions of the two countries of:

- Postgraduate students pursuing their training in higher education institutions;
- Trainees pursuing their training in institutions for the teaching of the arts;
- Teachers, researchers and specialists engaged in missions for research, information or conference purposes, or engaged in joint research work in higher-education institutions and other appropriate bodies, in the fields not covered by the Agreement on scientific and technical co-operation of 31 August 1977 concluded between the Government of the French Republic and the Government of the German Democratic Republic.

These exchanges should, in particular, make it possible to define sectors of cultural co-operation of mutual interest.

*Article 6.* The Contracting Parties shall recommend the organization of youth exchanges. These exchanges shall include exchanges between groups of students and groups of pupils organized on the basis of reciprocity and by agreement between competent institutions and organizations in both countries.

*Article 7.* The Contracting Parties shall encourage co-operation between the bodies and institutions with competence in the field of culture.

They shall encourage invitations and missions to one country for persons from the world of culture of the other country. These invitations and missions shall be organized by mutual consent by the two countries' competent bodies at the initiative of the host country or the sending country.

They shall encourage, by mutual agreement, all appropriate types of exchanges of information and documentation on the cultural life of the two countries leading to better mutual knowledge of the culture of the respective country.

*Article 8.* The Contracting Parties shall encourage the sending to the other country of teachers, eminent persons and specialists in the fields covered by this Agreement who shall participate in bilateral or multilateral meetings (symposia, congresses, seminars, festivals, etc.) held in either country.

They shall encourage the exchange of reciprocal information in these fields.

*Article 9.* The Contracting Parties shall encourage the exchange and distribution, on a commercial and a non-commercial basis, of books, periodicals and other cultural, scientific and technical publications of one country in the other



country, in the light of their potential and by agreement with the competent bodies, by such means as:

- The conclusion of special arrangements between publishing houses and bodies of the two countries with a view to increasing the translation, publication and co-publication of works from each country;
- Working meetings between publication and distribution experts of each country;
- Exhibitions of books by one country in the other country;
- The participation of one country in international book fairs held in the other country;
- Regular exchanges of books, periodicals and other cultural, scientific and technical publications between libraries and other specialized institutions in each country;
- The encouragement of the commercial importation of books, periodicals and other publications of the other State and of the sale to the public of these books, periodicals and other publications.

*Article 10.* The Contracting Parties shall recommend the making of co-produced films, increased exchanges of films on a commercial or a non-commercial basis, and exchanges of eminent persons and experts from the world of the cinema in the two countries.

They shall also encourage the holding of premières and of film days or film weeks by one country in the other country and participation in film festivals held in the other country.

*Article 11.* The Contracting Parties shall encourage in their respective country the bodies competent in matters of radio broadcasting and television to develop exchanges and co-operation on the basis of direct agreements concluded between them.

*Article 12.* The Contracting Parties shall encourage, in so far as is possible, exchanges, organized on a commercial or a non-commercial basis, in the various fields of artistic activity, both classical and contemporary: the dramatic, vocal and choreographic arts, music, variety, and the plastic arts.

*Article 13.* The Contracting Parties shall encourage the development of exchanges and co-operation in the field of sport.

The competent bodies in both countries may conclude direct agreements in this area.

*Article 14.* The Contracting Parties shall encourage meetings between representatives of the bodies responsible for tourism in the two countries and shall foster access by tourists of one country to the cultural and social life of the other country.

*Article 15.* The Contracting Parties shall recommend and promote the development of exchanges and co-operation in the field of youth.

These exchanges and this co-operation shall take place by mutual agreement between competent institutions and bodies in the two countries.

*Article 16.* The Contracting Parties shall grant to nationals of the other country, who have been received in their respective country pursuant to this

Agreement, the necessary facilities in accordance with the legislation in force in their country.

Nationals of the sending country shall be required to comply with the laws and regulations of the host country.

*Article 17.* The Contracting Parties, having in mind the objectives of this Agreement and motivated by a common will to facilitate access to the culture of one country by the public of the other country, shall arrange for the opening of cultural centres on a reciprocal basis.

The statute and operational arrangements for the centres shall be the subject of a separate agreement.

*Article 18.* The Contracting Parties shall encourage and support co-operation between their national commissions for UNESCO.

*Article 19.* The Contracting Parties shall draw up exchange and co-operation programmes, in order to ensure implementation of this Agreement. A Joint Commission on Cultural Co-operation is hereby established, whose two Chairmen shall be appointed for that purpose by their respective Governments.

The Joint Commission shall draw up the said programmes, monitor their execution and establish the practical procedures for the exchanges and co-operation. It shall meet, as a general rule, every two years. The dates and venue of its meetings shall be fixed by mutual agreement through the diplomatic channel. It may establish sub-commissions and mixed working groups within the Commission, whose recommendations and proposals shall be submitted to the Commission for approval.

It shall discuss and provide guidance for the activities carried out in implementation of particular arrangements concluded under this Agreement.

It shall co-ordinate its activities with those of the Joint Commission on Scientific and Technical Co-operation, established by the Agreement on scientific and technical co-operation concluded between the Government of the French Republic and the Government of the German Democratic Republic (article 4). A specific link shall be established between these two Commissions through reciprocal information and through the presence of members in each delegation who serve on both Commissions.

*Article 20.* Each of the Contracting Parties shall notify the other of the completion of the formalities required by its Constitution or its legislation for the entry into force of this Agreement.

This Agreement shall enter into force on the date of receipt of the last such notification. It is concluded for a period of five years, automatically renewable for further periods of five years. It may be denounced in writing by either of the Contracting Parties with six months' notice.

DONE at Berlin on 16 June 1980 in duplicate in the French and German languages, both texts being equally authentic.

For the Government  
of the French Republic:  
[HENRY BAYLE]

For the Government  
of the German Democratic Republic:  
[OSKAR FISCHER]

No. 23356

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**FRANCE**  
**and**  
**GERMAN DEMOCRATIC REPUBLIC**

**Agreement concerning the statute and operational arrangements for the cultural centres established by the Agreement on cultural co-operation concluded between them. Signed at Berlin on 16 June 1980**

*Authentic texts: French and German.*

*Registered by France on 8 May 1985.*

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**FRANCE**  
**et**  
**RÉPUBLIQUE DÉMOCRATIQUE ALLEMANDE**

**Accord relatif au statut et aux modalités de fonctionnement des centres culturels institués par l'Accord de coopération culturelle conclu entre eux. Signé à Berlin le 16 juin 1980**

*Textes authentiques : français et allemand.*

*Enregistré par la France le 8 mai 1985.*

ACCORD<sup>1</sup> ENTRE LE GOUVERNEMENT DE LA RÉPUBLIQUE FRANÇAISE ET LE GOUVERNEMENT DE LA RÉPUBLIQUE DÉMOCRATIQUE ALLEMANDE RELATIF AU STATUT ET AUX MODALITÉS DE FONCTIONNEMENT DES CENTRES CULTURELS INSTITUÉS PAR L'ACCORD DE COOPÉRATION CULTURELLE<sup>2</sup> CONCLU ENTRE EUX

Désireux de promouvoir la connaissance réciproque des valeurs culturelles de la France et de la République Démocratique Allemande et de contribuer ainsi au développement de la coopération entre les deux pays, dans un esprit de respect mutuel,

Ayant à l'esprit l'Acte Final de la Conférence sur la Sécurité et la Coopération en Europe<sup>3</sup> et, tout particulièrement, celles de ses dispositions qui ont trait à la coopération et aux échanges dans le domaine de la culture,

Se référant aux objectifs ainsi qu'aux dispositions de l'Accord de coopération culturelle conclu entre le Gouvernement de la République Française et le Gouvernement de la République Démocratique Allemande, le 16 juin 1980<sup>2</sup> et, notamment, à son article 17 concernant l'ouverture de Centres culturels sur la base de la réciprocité,

Le Gouvernement de la République Française et le Gouvernement de la République Démocratique Allemande sont convenus de ce qui suit :

*Article 1.* 1) Les Centres culturels sont à vocation culturelle. Ils ont pour mission de promouvoir directement auprès du public les valeurs de chacun des deux pays dans le domaine de la culture.

2) Les activités des Centres culturels comprennent :

- L'enseignement des langues française et allemande;
- La présentation de films;
- Des manifestations artistiques telles que spectacles, concerts et expositions;
- Des manifestations diverses dans le domaine de la culture telles que conférences, colloques et autres rencontres;
- Le prêt de films, disques, diapositives et autres documents audiovisuels;
- L'ouverture d'une Salle de lecture permettant la consultation de livres, journaux et autres publications, ainsi que le prêt de livres et de publications non périodiques;
- La publication et la diffusion de programmes et d'informations culturelles;
- Ainsi que, le cas échéant, la vente d'objets présentant un intérêt artistique, conformément à la réglementation en vigueur dans l'un et l'autre pays et sur la base d'un arrangement particulier à conclure entre les Parties Contractantes.

<sup>1</sup> Entré en vigueur le 2 novembre 1981, date de réception de la dernière des notifications par lesquelles les Parties contractantes se sont informées de l'accomplissement des formalités constitutionnelles ou législatives requises, conformément à l'article 10.

<sup>2</sup> Voir p. 643 du présent volume.

<sup>3</sup> *Notes et Etudes documentaires*, n°s 4271-4272 (15 mars 1976), p. 48 (La Documentation française).

3) Les Parties Contractantes se donnent mutuellement connaissance des programmes et informations culturelles qui sont diffusés, conformément à l'alinéa 2 du présent article.

4) Les Centres culturels peuvent également apporter leur concours à des manifestations culturelles organisées dans le cadre des Programmes d'échanges et de coopération élaborés par la Commission mixte de coopération culturelle, instituée par l'article 19 de l'Accord de coopération culturelle.

*Article 2.* 1) A la tête du Centre culturel de la République Française est placé un directeur, assisté d'un directeur adjoint; tous deux sont ressortissants de la République Française et sont nommés par le Ministre français des Affaires Etrangères.

A la tête du Centre culturel de la République Démocratique Allemande est placé un directeur, assisté d'un directeur adjoint; tous deux sont ressortissants de la République Démocratique Allemande et sont nommés par le Ministre des Affaires Etrangères de la République Démocratique Allemande.

2) Les membres du personnel du Centre culturel de la République Française sont recrutés par le Ministère français des Affaires Etrangères et les membres du personnel du Centre culturel de la République Démocratique Allemande par le Ministère des Affaires Etrangères de la République Démocratique Allemande. Les membres du personnel des deux Centres culturels sont ressortissants de la République Française ou de la République Démocratique Allemande.

Les conditions d'emploi des ressortissants du pays d'accueil dans les Centres culturels sont régies par le droit commun en vigueur dans le pays d'accueil.

3) Les Ministères des Affaires Etrangères des deux pays s'informent mutuellement de la nomination des directeurs et des directeurs adjoints des Centres culturels ainsi que de la date de leur arrivée et de leur départ définitif. Ils s'informent également, mutuellement, du recrutement des membres du personnel des Centres culturels ainsi que de la date de leur arrivée et de leur départ définitif, et de la prise et de la fin de leurs fonctions aux Centres culturels.

*Article 3.* Les Parties Contractantes représentées, à cette fin, par les directeurs de leur Centre culturel, ont le droit de conclure des contrats de prestations de service liés aux activités des Centres culturels.

*Article 4.* 1) Chaque Partie Contractante accorde au directeur, au directeur adjoint et aux membres du personnel du Centre culturel de l'autre Partie, sur une base de réciprocité, toutes les facilités compatibles avec la législation du pays d'accueil, pour la délivrance d'un titre de séjour.

Ces personnes reçoivent, par l'entremise du Ministère des Affaires Etrangères du pays d'accueil, pour elles-mêmes, leur conjoint et leurs enfants mineurs, une carte de séjour temporaire gratuite.

2) Le directeur, le directeur adjoint et les membres du personnel du Centre culturel de la République Française, ainsi que leur conjoint et leurs enfants mineurs sont maintenus au régime de Sécurité sociale de la République Française.

Le directeur, le directeur adjoint et les membres du personnel du Centre culturel de la République Démocratique Allemande, ainsi que leur conjoint et leurs enfants mineurs, sont maintenus au régime de Sécurité sociale de la République Démocratique Allemande.

3) Chaque Partie Contractante accorde au directeur, au directeur adjoint et aux membres du personnel du Centre culturel de l'autre Partie, l'importation en franchise temporaire, pour la durée de leurs fonctions au Centre culturel, et la réexportation de leurs mobiliers et effets personnels en cours d'usage lors de leur première installation, ainsi que de leur véhicule automobile.

4) Le directeur, le directeur adjoint et les membres du personnel du Centre culturel de la République Française sont soumis à la législation française du travail.

Le directeur, le directeur-adjoint et les membres du personnel du Centre culturel de la République Démocratique Allemande sont soumis à la législation du travail de la République Démocratique Allemande.

5) Les dispositions prévues par les alinéas 1, 2, 3 et 4 du présent article ne sont applicables ni aux membres du personnel des Centres culturels qui sont ressortissants du pays d'accueil, ni aux membres qui, étant ressortissants de l'autre pays, ont la qualité de résidents permanents dans le pays d'accueil.

6) Les rémunérations, autres que les pensions, payées au directeur, au directeur adjoint et aux membres du personnel du Centre culturel d'un pays, au titre de leurs fonctions dans ce Centre culturel, sont imposables uniquement dans le pays d'envoi. Toutefois, ces rémunérations ne sont imposables que dans le pays d'accueil si les membres du personnel sont des ressortissants du pays d'accueil ou des résidents permanents dans ce pays.

*Article 5.* Les Centres culturels bénéficient, dans les limites et conditions fixées par la législation du pays d'accueil, de l'exonération de tous droits et taxes pour les objets de caractère culturel importés pour l'exécution du présent Accord.

*Article 6.* 1) Les locaux nécessaires à l'exercice des activités des Centres culturels sont choisis d'un commun accord par les Parties Contractantes.

2) La responsabilité et le financement des travaux d'installation des Centres culturels incombent au pays d'envoi.

*Article 7.* 1) Chaque Partie Contractante exonère l'autre, des impôts, droits et taxes, nationaux, régionaux et communaux dus au titre de l'acquisition, ou de la location de biens immobiliers destinés à l'installation des Centres culturels.

2) Tout transfert de propriété d'un bien immobilier destiné aux activités d'un Centre culturel d'une Partie Contractante, ou bien déjà utilisé à ces fins, est soumis à l'autorisation de l'autre Partie Contractante.

*Article 8.* Sans préjudice des dispositions du présent Accord, les Centres culturels sont tenus de respecter la législation interne du pays d'accueil.

*Article 9.* La Commission mixte de coopération culturelle est informée des activités des Centres culturels, lors de chacune de ses réunions.

Dans l'intervalle des réunions, les Parties Contractantes traitent par la voie diplomatique les questions relatives aux activités des Centres culturels.

*Article 10.* Chacune des Parties Contractantes notifie à l'autre l'accomplissement des formalités requises par sa Constitution ou sa législation pour l'entrée en vigueur du présent Accord.

Cet Accord entre en vigueur à la date de réception de la dernière de ces notifications. Il est conclu pour une période de cinq années, renouvelable par

tacite reconduction, pour de nouvelles périodes de cinq années. Il peut être dénoncé par écrit, par l'une ou l'autre des Parties Contractantes, avec un préavis de six mois.

FAIT à Berlin le 16 juin 1980 en double exemplaire original chacun en langues française et allemande les deux textes faisant également foi.

Pour le Gouvernement  
de la République Française :

[Signé]  
HENRY BAYLE

Pour le Gouvernement  
de la République Démocratique  
Allemande :

[Signé]  
OSKAR FISCHER

## [GERMAN TEXT — TEXTE ALLEMAND]

ABKOMMEN ZWISCHEN DER REGIERUNG DER FRANZÖSISCHEN REPUBLIK UND DER REGIERUNG DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK ÜBER STATUT UND MODALITÄTEN DER ARBEITSWEISE DER KULTURZENTREN, DEREN ERÖFFNUNG IN DEM VON BEIDEN SEITEN ABGESCHLOSSENEN ABKOMMEN ÜBER KULTURELLE ZUSAMMENARBEIT VEREINBART WURDE

Die Regierung der Französischen Republik und die Regierung der Deutschen Demokratischen Republik haben

geleitet von dem Wunsch, das Wissen über die kulturellen Werte Frankreichs beziehungsweise der Deutschen Demokratischen Republik gegenseitig zu verbreiten und somit zur Entwicklung der Zusammenarbeit zwischen beiden Staaten im Geiste der gegenseitigen Achtung beizutragen,

eingedenk der Schlußakte der Konferenz über Sicherheit und Zusammenarbeit in Europa und insbesondere der Bestimmungen, die sich auf die Zusammenarbeit und den Austausch auf dem Gebiet der Kultur beziehen,

unter Bezugnahme auf die Ziele und Festlegungen des am . . . abgeschlossenen Abkommens zwischen der Regierung der Französischen Republik und der Regierung der Deutschen Demokratischen Republik über kulturelle Zusammenarbeit und insbesondere auf Artikel 17 dieses Abkommens bezüglich der Eröffnung von Kulturzentren auf der Basis der Gegenseitigkeit

folgendes vereinbart:

*Artikel 1.* (1) Die Kulturzentren dienen kulturellen Zwecken. Es ist ihre Aufgabe, der Öffentlichkeit direkt die kulturellen Werte ihres jeweiligen Staates näherzubringen.

(2) Die Aktivitäten der Kulturzentren umfassen:

- Unterricht in der französischen beziehungsweise deutschen Sprache;
- Filmverführungen;
- künstlerische Veranstaltungen wie Theateraufführungen, Konzerte und Ausstellungen;
- verschiedene Veranstaltungen auf dem Gebiete der Kultur wie Vorträge, Kolloquien und andere Zusammenkünfte;
- Ausleihe von Filmen, Schallplatten, Diapositiven und anderen Bild- und Tonträgern;
- Einrichtung eines Lesesaales, der die Einsichtnahme in Bücher, Zeitschriften und andere Publikationen sowie die Ausleihe von Büchern und nichtperiodisch erscheinenden Publikationen ermöglicht;
- Veröffentlichung und Verbreitung von Programmen und kulturellen Informationen;



— sowie gegebenenfalls Verkauf von Gegenständen künstlerischer Bedeutung entsprechend den gesetzlichen Bestimmungen, die im jeweiligen Staat gelten, und auf der Grundlage einer zwischen den vertragschließenden Seiten abzuschließenden gesonderten Vereinbarung.

(3) Die vertragschließenden Seiten bringen einander die Programme und kulturellen Informationen, die gemäß Absatz 2 dieses Artikels verbreitet werden, zur Kenntnis.

(4) Die Kulturzentren können sich ebenfalls an kulturellen Veranstaltungen beteiligen, die im Rahmen der Programme für den Austausch und die Zusammenarbeit durchgeführt werden, die von der durch Artikel 19 des Abkommens über kulturelle Zusammenarbeit gebildeten Gemischten Kommission für kulturelle Zusammenarbeit erarbeitet werden.

*Artikel 2.* (1) Das Kulturzentrum der Französischen Republik wird von einem Direktor, unterstützt von einem stellvertretenden Direktor, geleitet; beide sind Staatsbürger der Französischen Republik und werden vom Minister für Auswärtige Angelegenheiten der Französischen Republik ernannt.

Das Kulturzentrum der Deutschen Demokratischen Republik wird von einem Direktor, unterstützt von einem stellvertretenden Direktor, geleitet; beide sind Staatsbürger der Deutschen Demokratischen Republik und werden vom Minister für Auswärtige Angelegenheiten der Deutschen Demokratischen Republik ernannt.

(2) Die Mitarbeiter des Kulturzentrums der Französischen Republik werden vom Ministerium für Auswärtige Angelegenheiten der Französischen Republik und die Mitarbeiter des Kulturzentrums der Deutschen Demokratischen Republik werden vom Ministerium für Auswärtige Angelegenheiten der Deutschen Demokratischen Republik eingestellt. Die Mitarbeiter der beiden Kulturzentren sind Staatsbürger der Französischen Republik oder der Deutschen Demokratischen Republik.

Für Staatsbürger des Empfangsstaates erfolgt ihre Beschäftigung in den Kulturzentren entsprechend den allgemeinen Bestimmungen des Empfangsstaates.

(3) Die Ministerien für Auswärtige Angelegenheiten der beiden Staaten informieren einander über die Ernennung der Direktoren und der stellvertretenden Direktoren der Kulturzentren sowie über den Zeitpunkt ihrer Einreise und endgültigen Ausreise. Sie informieren einander ebenfalls über die Einstellung der Mitarbeiter der Kulturzentren sowie über den Zeitpunkt ihrer Einreise und endgültigen Ausreise und über Aufnahme und Beendigung ihrer Tätigkeit im Kulturzentrum.

*Artikel 3.* Die vertragschließenden Seiten, zu diesem Zweck durch die Direktoren ihrer Kulturzentren vertreten, haben das Recht, Verträge über Dienstleistungen abzuschließen, die mit der Tätigkeit der Kulturzentren in Verbindung stehen.

*Artikel 4.* (1) Jede vertragschließende Seite gewährt dem Direktor, dem stellvertretenden Direktor und den Mitarbeitern des Kulturzentrums der anderen Seite auf der Grundlage der Gegenseitigkeit und in Übereinstimmung mit den Rechtsvorschriften des Empfangsstaates jegliche Erleichterung zur Ausstellung von Aufenthaltsgenehmigungen.

Diese Personen erhalten unentgeltlich über das Ministerium für Auswärtige Angelegenheiten des Empfangsstaates für sich, ihre Ehegatten und ihre minderjährigen Kinder einen zeitlich begrenzten Aufenthaltsausweis.

(2) Der Direktor, der stellvertretende Direktor und die Mitarbeiter des Kulturzentrums der Französischen Republik sowie deren Ehegatten und minderjährige Kinder unterliegen der Ordnung der Sozialversicherung der Französischen Republik.

Der Direktor, der stellvertretende Direktor und die Mitarbeiter des Kulturzentrums der Deutschen Demokratischen Republik sowie deren Ehegatten und minderjährige Kinder unterliegen der Ordnung der Sozialversicherung der Deutschen Demokratischen Republik.

(3) Jede vertragschließende Seite gewährt dem Direktor, dem stellvertretenden Direktor und den Mitarbeitern des Kulturzentrums der anderen Seite für die Dauer ihrer Tätigkeit im Kulturzentrum eine zeitlich begrenzte zollfreie Einfuhr und Wiederauf fuhr ihres Mobiliars und ihrer persönlichen Gegenstände zur Ersteinrichtung sowie ihres Personenkraftwagens.

(4) Der Direktor, der stellvertretende Direktor und die Mitarbeiter des Kulturzentrums der Französischen Republik unterliegen der Arbeitsgesetzgebung der Französischen Republik.

Der Direktor, der stellvertretende Direktor und die Mitarbeiter des Kulturzentrums der Deutschen Demokratischen Republik unterliegen der Arbeitsgesetzgebung der Deutschen Demokratischen Republik.

(5) Die in den Absätzen 1, 2, 3 und 4 dieses Artikels getroffenen Festlegungen finden keine Anwendung auf Mitarbeiter der Kulturzentren, die Staatsbürger des Empfangsstaates sind und auf Staatsbürger des Entsendestaates, die ihren ständigen Wohnsitz im Empfangsstaat haben.

(6) Die Vergütung, außer Renten, die an den Direktor, den stellvertretenden Direktor und Mitarbeiter des Kulturzentrums eines Staates für deren Tätigkeit in diesem Kulturzentrum gezahlt wird, ist nur im Entsendestaat steuerpflichtig. Jedoch ist die Vergütung nur im Empfangsstaat steuerpflichtig, wenn der Mitarbeiter Staatsbürger des Empfangsstaates ist oder seinen ständigen Wohnsitz im Empfangsstaat hat.

*Artikel 5.* Den Kulturzentren wird in den Grenzen und unter den Bedingungen der Rechtsvorschriften des Empfangsstaates die Befreiung von allen Abgaben und Gebühren für Kulturgüter gewährt, die in Realisierung dieses Abkommens eingeführt werden.

*Artikel 6.* (1) Die zur Ausübung der Tätigkeit der Kulturzentren erforderlichen Räumlichkeiten werden von den vertragschließenden Seiten gemeinsam ausgewählt.

(2) Die Verantwortung und die Kosten für die Einrichtung und den Umbau der Kulturzentren gehen zu Lasten der entsendenden Seite.

*Artikel 7.* (1) Jede vertragschließende Seite befreit die andere Seite von nationalen, regionalen und kommunalen Steuern, Abgaben und Gebühren, die beim Erwerb oder Mieten von Immobilien, die für die Einrichtung der Kulturzentren vorgesehen sind, entstehen.

(2) Jede Veränderung der Eigentumsverhältnisse an den Immobilien, die für die Tätigkeit eines Kulturzentrums einer vertragschließenden Seite vorgesehen

sind oder bereits zu diesem Zweck genutzt werden, bedarf der Genehmigung der anderen vertragschließenden Seite.

*Artikel 8.* Unbeschadet der Bestimmungen dieses Abkommens sind durch die Kulturzentren die innerstaatlichen Rechtsvorschriften des Empfangsstaates einzuhalten.

*Artikel 9.* Die Gemischte Kommission für kulturelle Zusammenarbeit wird auf jeder ihrer Zusammenkünfte über die Aktivitäten der Kulturzentren informiert.

Zwischen den Zusammenkünften werden Fragen, die die Tätigkeit der Kulturzentren betreffen, von den vertragschließenden Seiten auf diplomatischem Wege behandelt.

*Artikel 10.* Die vertragschließenden Seiten notifizieren einander die Erfüllung der Formalitäten, die von ihrer Verfassung oder Gesetzgebung für das Inkrafttreten des vorliegenden Abkommens gefordert werden.

Dieses Abkommen tritt nach Empfang der letzten dieser Notifizierungen in Kraft. Es wird für einen Zeitraum von 5 Jahren abgeschlossen, der sich stillschweigend jeweils für weitere Zeiträume von 5 Jahren verlängert. Es kann von jeder der vertragschließenden Seiten mit einer Vorankündigungsfrist von 6 Monaten schriftlich gekündigt werden.

AUSGEFERTIGT in Berlin am 16. Juni 1980 in 2 Originalen, jedes in französischer und in deutscher Sprache, wobei beide Texte gleichermaßen gültig sind.

Für die Regierung  
der Französischen Republik:

[Signed — Signé]<sup>1</sup>

Für die Regierung  
der Deutschen Demokratischen  
Republik:

[Signed — Signé]<sup>2</sup>

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<sup>1</sup> Signed by Henry Bayle — Signé par Henry Bayle.

<sup>2</sup> Signed by Oskar Fischer — Signé par Oskar Fischer.

[TRANSLATION — TRADUCTION]

AGREEMENT<sup>1</sup> BETWEEN THE GOVERNMENT OF THE FRENCH REPUBLIC AND THE GOVERNMENT OF THE GERMAN DEMOCRATIC REPUBLIC CONCERNING THE STATUTE AND OPERATIONAL ARRANGEMENTS FOR THE CULTURAL CENTRES ESTABLISHED BY THE AGREEMENT ON CULTURAL CO-OPERATION<sup>2</sup> CONCLUDED BETWEEN THEM

Desiring to promote mutual understanding of the cultural values of France and the German Democratic Republic and thereby to contribute to the development of co-operation between the two countries in a spirit of mutual respect,

Mindful of the Final Act of the Conference on Security and Co-operation in Europe<sup>3</sup> and, more particularly, those of its provisions relating to co-operation and exchanges in the field of culture,

Referring to the objectives and provisions of the Agreement on cultural co-operation concluded between the Government of the French Republic and the Government of the German Democratic Republic on 16 June 1980<sup>2</sup> and, in particular, article 17 of that Agreement concerning the opening of cultural centres on a reciprocal basis,

The Government of the French Republic and the Government of the German Democratic Republic have agreed as follows:

*Article 1.* 1. The cultural centres shall be oriented towards culture. Their role shall be the direct promotion of public awareness of the values of each country in the field of culture.

2. The activities of the cultural centres shall comprise:

- The teaching of the French and German languages;
- The showing of films;
- Artistic events such as plays, concerts and exhibitions;
- Various events in the field of culture such as conferences, symposia and other meetings;
- The lending of films, records, slides and other audio-visual material;
- The opening of a reading room in which books, newspapers and other publications may be consulted and books and publications other than periodicals borrowed;
- The publication and dissemination of cultural programmes and information;
- And, as and when appropriate, the sale of objects of artistic interest in accordance with the regulations in force in the two countries and on the basis of a special arrangement to be concluded between the Contracting Parties.

<sup>1</sup> Came into force on 2 November 1981, the date of receipt of the last of the notifications by which the Contracting Parties informed each other of the completion of the required constitutional or legal formalities, in accordance with article 10.

<sup>2</sup> See p. 643 of this volume.

<sup>3</sup> *International Legal Materials*, vol. 14 (1975), p. 1292 (American Society of International Law).

3. The Contracting Parties shall inform each other of the cultural programmes and information disseminated in accordance with paragraph 2 of this article.

4. The cultural centres may also contribute to cultural events organized under the programmes of exchanges and co-operation drawn up by the Joint Commission on Cultural Co-operation established under article 19 of the Agreement on cultural co-operation.

*Article 2.* 1. The cultural centre of the French Republic shall be headed by a director, assisted by a deputy director; both shall be nationals of the French Republic and shall be appointed by the French Minister for Foreign Affairs.

The cultural centre of the German Democratic Republic shall be headed by a director, assisted by a deputy director; both shall be nationals of the German Democratic Republic and appointed by the Minister for Foreign Affairs of the German Democratic Republic.

2. The members of staff of the cultural centre of the French Republic shall be recruited by the French Ministry of Foreign Affairs and the members of staff of the cultural centre of the German Democratic Republic by the Ministry of Foreign Affairs of the German Democratic Republic. The members of staff of the two cultural centres shall be nationals of the French Republic or of the German Democratic Republic.

The conditions of employment of the nationals of the host country in the cultural centres shall be determined by the ordinary law in force in the host country.

3. The Ministers for Foreign Affairs of the two countries shall inform each other of the appointment of the directors and deputy directors of the cultural centres and of the dates of their arrival and final departure. They shall also inform each other of the recruitment of the members of staff of the cultural centres, of the dates of their arrival and final departure, and of the dates of their taking up and completing their duties in the cultural centres.

*Article 3.* The Contracting Parties, represented for this purpose by the directors of the cultural centres, shall have the right to conclude contracts for the provision of services related to the activities of the cultural centres.

*Article 4.* 1. Each Contracting Party shall make available to the director, deputy director and members of staff of the cultural centre of the other party, on a basis of reciprocity, all facilities compatible with the legislation of the host country for the issue of a residence permit.

Those persons shall receive free of charge, through the Ministry of Foreign Affairs of the host country, temporary residence permits for themselves, their spouses and their minor children.

2. The director, deputy director and members of staff of the cultural centre of the French Republic, and their spouses and minor children, shall remain in the social security system of the French Republic.

The director, deputy director and members of staff of the cultural centre of the German Democratic Republic, and their spouses and minor children, shall remain in the social security system of the German Democratic Republic.

3. Each Contracting Party shall afford the director, deputy director and members of staff of the cultural centre of the other Party the right temporarily to import free of duty, for the duration of their service in the cultural centre, and to re-export their furniture and personal effects in use at the time of their initial installation, and their motor vehicle.

4. The director, deputy director and members of staff of the cultural centre of the French Republic shall be subject to French labour legislation.

The director, deputy director and members of staff of the cultural centre of the German Democratic Republic shall be subject to the labour legislation of the German Democratic Republic.

5. The provisions of paragraphs 1, 2, 3 and 4 of this article are not applicable either to members of staff of the cultural centres who are nationals of the host country or to members who, while being nationals of the other country, have the status of permanent residents in the host country.

6. Remuneration other than pensions paid to the director, deputy director and members of staff of the cultural centre of a country in respect of their duties in that cultural centre shall be taxable only in the sending country. However, that remuneration shall be taxable only in the host country if the members of staff are nationals of the host country or permanent residents in that country.

*Article 5.* The cultural centres shall, within the limits and conditions set by the legislation of the host country, be exempt from all duties and charges for objects of a cultural nature imported in order to implement this Agreement.

*Article 6.* 1. The premises needed for carrying out the activities of the cultural centres shall be selected by mutual agreement of the Contracting Parties.

2. Responsibility for the installation of the cultural centres and the financing thereof shall be borne by the country of origin.

*Article 7.* 1. Each Contracting Party shall exempt the other from national, regional and communal taxes, duties and charges in respect of the acquisition or rental of real estate for the purpose of installing the cultural centres.

2. Any transfer of ownership of real estate intended for the activities of a cultural centre of a Contracting Party or already being used for that purpose shall be subject to the authorization of the other Contracting Party.

*Article 8.* Without prejudice to the provisions of this Agreement, the cultural centres shall be required to observe the domestic legislation of the host country.

*Article 9.* The Joint Commission on Cultural Co-operation shall be informed of the activities of the cultural centres at each of its meetings.

In the periods between meetings, the Contracting Parties shall deal with matters relating to the activities of the cultural centres through the diplomatic channel.

*Article 10.* Each Contracting Party shall notify the other of the completion of the formalities required by its Constitution or its legislation for the entry into force of this Agreement.

This Agreement shall enter into force on the date of receipt of the last such notification. It is concluded for a period of five years, automatically renewable for

further periods of five years. It may be denounced in writing by either of the Contracting Parties with six months' notice.

DONE at Berlin on 16 June 1980 in duplicate in the French and German languages, both texts being equally authentic.

For the Government  
of the French Republic:

[*Signed*]

HENRY BAYLE

For the Government  
of the German Democratic Republic:

[*Signed*]

OSKAR FISCHER





No. 23357

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**UNITED NATIONS**  
**and**  
**TUNISIA**

**Letter of agreement regarding the extraordinary session of the Special Committee of the Twenty-Four in connection with the observance of the twenty-fifth anniversary of the Declaration on the Granting of Independence to Colonial Countries and Peoples, to be held at Tunis from 13 to 17 May 1985. Tunis, 13 May 1985**

*Authentic text: French.*

*Registered ex officio on 13 May 1985.*

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**ORGANISATION DES NATIONS UNIES**  
**et**  
**TUNISIE**

**Lettre d'accord relative à la session extraordinaire du Comité spécial des Vingt-Quatre dans le cadre du vingt-cinquième anniversaire de la Déclaration sur l'octroi de l'indépendance aux pays et aux peuples coloniaux, devant avoir lieu à Tunis du 13 au 17 mai 1985. Tunis, 13 mai 1985**

*Texte authentique : français.*

*Enregistrée d'office le 13 mai 1985.*

[TRANSLATION — TRADUCTION]

LETTER OF AGREEMENT<sup>1</sup> BETWEEN THE UNITED NATIONS AND THE GOVERNMENT OF THE REPUBLIC OF TUNISIA REGARDING THE EXTRAORDINARY SESSION OF THE SPECIAL COMMITTEE OF THE TWENTY-FOUR IN CONNECTION WITH THE OBSERVANCE OF THE TWENTY-FIFTH ANNIVERSARY OF THE DECLARATION ON THE GRANTING OF INDEPENDENCE TO COLONIAL COUNTRIES AND PEOPLES,<sup>2</sup> TO BE HELD AT TUNIS FROM 13 TO 17 MAY 1985

LETTRE D'ACCORD<sup>1</sup> ENTRE L'ORGANISATION DES NATIONS UNIES ET LE GOUVERNEMENT DE LA RÉPUBLIQUE TUNISIENNE RELATIVE À LA SESSION EXTRAORDINAIRE DU COMITÉ SPÉCIAL DES VINGT-QUATRE DANS LE CADRE DU VINGT-CINQUIÈME ANNIVERSAIRE DE LA DÉCLARATION SUR L'OCTROI DE L'INDÉPENDANCE AUX PAYS ET AUX PEUPLES COLONIAUX<sup>2</sup>, DEVANT AVOIR LIEU À TUNIS DU 13 AU 17 MAI 1985

*Publication effected in accordance with article 12 (2) of the General Assembly regulations to give effect to Article 102 of the Charter of the United Nations as amended in the last instance by General Assembly resolution 33/141 A of 19 December 1978.*

*Publication effectuée conformément au paragraphe 2 de l'article 12 du règlement de l'Assemblée générale destiné à mettre en application l'Article 102 de la Charte des Nations Unies tel qu'amendé en dernier lieu par la résolution 33/141 A de l'Assemblée générale en date du 19 décembre 1978.*

<sup>1</sup> Came into force on 13 May 1985 by counter-signature.  
<sup>2</sup> See United Nations resolution 1514 (XV) of 14 December 1960 in *Official Records of the General Assembly, Fifteenth Session, Supplement No. 16 (A/4684)*, p. 66.

<sup>1</sup> Entrée en vigueur le 13 mai 1985 par contreseing.  
<sup>2</sup> Voir résolution 1514 (XV) de l'Organisation des Nations Unies en date du 14 décembre 1960, dans les *Documents officiels de l'Assemblée générale, quinzième session, Supplément n° 16 (A/4684)*, p. 70.

No. 23358

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**UNITED NATIONS  
and  
FRANCE**

**Agreement regarding arrangements for the eleventh session  
of the World Food Council of the United Nations.  
Signed at Paris on 15 May 1985**

*Authentic text: French.*

*Registered ex officio on 15 May 1985.*

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**ORGANISATION DES NATIONS UNIES  
et  
FRANCE**

**Accord concernant les dispositions à prendre en vue de la  
onzième session du Conseil mondial de l'alimentation  
des Nations Unies. Signé à Paris le 15 mai 1985**

*Texte authentique : français.*

*Enregistré d'office le 15 mai 1985.*

[TRANSLATION — TRADUCTION]

AGREEMENT<sup>1</sup> BETWEEN THE UNITED NATIONS AND THE GOVERNMENT OF THE FRENCH REPUBLIC REGARDING ARRANGEMENTS FOR THE ELEVENTH SESSION OF THE WORLD FOOD COUNCIL OF THE UNITED NATIONS

ACCORD<sup>1</sup> ENTRE L'ORGANISATION DES NATIONS UNIES ET LE GOUVERNEMENT DE LA RÉPUBLIQUE FRANÇAISE CONCERNANT LES DISPOSITIONS À PRENDRE EN VUE DE LA ONZIÈME SESSION DU CONSEIL MONDIAL DE L'ALIMENTATION DES NATIONS UNIES

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*Publication effected in accordance with article 12 (2) of the General Assembly regulations to give effect to Article 102 of the Charter of the United Nations as amended in the last instance by General Assembly resolution 33/141 A of 19 December 1978.*

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*Publication effectuée conformément au paragraphe 2 de l'article 12 du règlement de l'Assemblée générale destiné à mettre en application l'Article 102 de la Charte des Nations Unies tel qu'amendé en dernier lieu par la résolution 33/141 A de l'Assemblée générale en date du 19 décembre 1978.*

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<sup>1</sup> Came into force on 15 May 1985 by signature, in accordance with article IX (2).

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<sup>1</sup> Entré en vigueur le 15 mai 1985 par la signature, conformément au paragraphe 2 de l'article IX.

No. 23359

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**CHINA  
and  
YUGOSLAVIA**

**Agreement concerning co-operation in the fields of public health, medical science and pharmacy. Signed at Belgrade on 7 July 1984**

*Authentic texts: Chinese and Serbo-Croatian.*

*Registered by China on 17 May 1985.*

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**CHINE  
et  
YUGOSLAVIE**

**Accord relatif à la coopération dans les domaines de la santé publique, des sciences médicales et de la pharmacie. Signé à Belgrade le 7 juillet 1984**

*Textes authentiques : chinois et serbo-croate.*

*Enregistré par la Chine le 17 mai 1985.*

## [CHINESE TEXT — TEXTE CHINOIS]

中华人民共和国政府与南斯拉夫社会主义  
联邦共和国议会联邦执委会  
关于在卫生、医学和药学方面合作的协定

中华人民共和国政府与南斯拉夫社会主义联邦共和国议会联邦执委会(以下简称缔约双方),为了开展在卫生、医学和药学等方面的合作,加强两国之间的友好合作关系,达成协议如下:

第 一 条

为增进相互了解和交流经验,双方将促进各自有关的卫生、医学、科研、教育等机构在下列领域发展直接合作:卫生服务工作的组织、传统医学、计划生育、血液学、输血学、免疫生物学、病毒学、内分泌学、糖尿病学、矫形学、康复医学、药理学和药学、医学工程、卫生干部培训以及双方感兴趣的其他领域。

第 二 条

为了实现第一条所述的目标,缔约双方将促进专家、考察组、研究人员、大学特别是医学院校教师的互访,并且开展相互感兴趣的其他形式的合作。

第 三 条

缔约各方将根据各自现行的条件和规定,促进本国卫生、医学和药学方面的专家到对方进行短期进修,同时双方促进本国机构接受对方人员进修。

#### 第 四 条

缔约双方将促进双方感兴趣的信息、出版物或专业和学术刊物的交换。

#### 第 五 条

缔约双方将促进两国专家参加在两国举行的国际专业或科学大会。

#### 第 六 条

为了更好地相互了解在卫生、医学和药学方面取得的研究成就，双方将各自促进有关机构到对方举办上述领域方面的展览会。

#### 第 七 条

为了实施本协定的条款，缔约双方同意两国有关的机构可以签订定期合作计划，以确定合作的规模、条件、方式和期限。

#### 第 八 条

缔约双方同意，本协定条款的实施，在中国由中华人民共和国卫生部关注，在南斯拉夫由南斯拉夫社会主义联邦共和国劳动、卫生、社会保障委员会关注。

#### 第 九 条

本协定自缔约双方履行各自国家的法律程序并相互通知之日起生效，有效期五年。如缔约任何一方均未在期满前六个月以书面通知另一方终止本协

定，则本协定将自动延长一年，并依此法顺延。

本协定于一九八四年七月七日在贝尔格莱德签订，一式两份，每份都用中文和塞尔维亚—克罗地亚文写成，两种文本具有同等效力。

中华人民共和国政府代表  
卫生部部长 崔月犁医师



南斯拉夫社会主义联邦共和国  
议会联邦执委会代表  
联邦执委会委员  
联邦劳动、卫生、社会保障  
委员会主席  
乔尔杰·亚科夫列维奇医师





## [SERBO-CROATIAN TEXT — TEXTE SERBO-CROATE]

## SPORAZUM O SARADNJI U OBLASTI ZDRAVSTVA, MEDICINSKIH NAUKA I FARMACIJE IZMEDJU VLADE NARODNE REPUBLIKE KINE I SAVEZNOG IZVRŠNOG VEĆA SKUPŠTINE SOCIJALISTIČKE FEDERATIVNE REPUBLIKE JUGOSLAVIJE

Vlada Narodne Republike Kine i Savezno izvršno veće Skupštine Socijalističke Federativne Republike Jugoslavije (u daljem tekstu: "dve strane") u želji da razvijaju saradnju u oblasti zdravstva, medicinskih nauka i farmacije i time doprinesu unapredjenju prijateljskih odnosa i saradnje izmedju dve zemlje, dogovorili su se o sledećem:

*Član 1.* U cilju medjusobnog upoznavanja i razmene iskustava, dve strane će podsticati svoje odgovarajuće zainteresovane zdravstvene, medicinske, naučno-istraživačke, obrazovne i druge organizacije da uspostavljaju i razvijaju neposrednu saradnju u sledećim oblastima: organizacija zdravstvene zaštite, tradicionalna medicina, planiranje porodice, hematologija, transfuziologija, imunobiologija, virusologija, endokrinologija, dijabetologija, ortopedija, rehabilitacija, farmakologija i farmacija, medicinski inženjering, obuka medicinskih kadrova, kao i u drugim oblastima od zajedničkog interesa.

*Član 2.* Radi realizacije ciljeva iz člana 1. Sporazuma, dve strane će podsticati razmenu stručnjaka, studijskih grupa, naučnih radnika, univerzitetskih predavača, posebno sa medicinskih fakulteta, a podstićaće i razvijanje drugih oblika saradnje od uzajamnog interesa.

*Član 3.* Dve strane će, u skladu sa postojećim uslovima i važećim propisima u zemlji, podsticati svoje stručnjake iz oblasti zdravstva, medicinskih nauka i farmacije na kratkoročnu obuku u zemlji druge strane. Dve strane će istovremeno podsticati svoje organizacije da omogućavaju prihvatanje ovih stručnjaka na obuku.

*Član 4.* Dve strane će podsticati razmenu informacija, publikacija i druge stručne i naučne literature od uzajamnog interesa.

*Član 5.* Dve strane će podsticati učešće svojih stručnjaka na međunarodnim stručnim i naučnim skupovima koji se održavaju u dve zemlje.

*Član 6.* Dve strane će podsticati zainteresovane organizacije, da u cilju uzajamnog upoznavanja sa dostignućima druge strane u oblasti zdravstva, medicinskih nauka i farmacije, organizuju iz ovih oblasti izložbe u drugoj zemlji.

*Član 7.* Dve strane su se saglasile da, u cilju izvršenja odredaba ovog Sporazuma, njihovi nadležni organi mogu zaključivati periodične planove saradnje kojima će se utvrditi, obim, uslovi, način i trajanje saradnje.

*Član 8.* Dve strane su se saglasile da će se za sprovođenje odredaba ovog Sporazuma starati Ministarstvo za zdravstvo Narodne Republike Kine i Savezni komitet za rad, zdravstvo i socijalnu zaštitu Socijalističke Federativne Republike Jugoslavije.

Član 9. Ovaj Sporazum stupiće na snagu kada dve strane obaveste jedna drugu da su završene procedure predviđene nacionalnim zakonodavstvima dve zemlje i ostaće na snazi pet godina.

Ovaj Sporazum će se automatski produžavati svake godine ukoliko ga jedna od dve strane pismeno ne otkáže šest meseci pre isteka svakog perioda važnosti.

SAČINJENO I POTPISANO u Beogradu, dana 7. jula 1984. godine u dva originala na kineskom i srpskohrvatskom jeziku, pri čemu su oba primerka autentična.

Za Savezno Izvršno Veće  
Skupstine Socijalističke Federativne  
Republike Jugoslavije:

[Signed — Signé]

Dr. DJORDJE JAKOVLJEVIĆ  
Član Saveznog Izvršnog Veća I Pred-  
sednik Saveznog Komiteta za Rad,  
Zdravstvo I Socijalnu Zaštitu

Za vladu Narodne  
Republike Kine:

[Signed — Signé]

Dr. CUI YUELI  
Ministar za Zdravstvo

## [TRANSLATION — TRADUCTION]

**AGREEMENT<sup>1</sup> CONCERNING CO-OPERATION IN THE FIELDS OF PUBLIC HEALTH, MEDICAL SCIENCE AND PHARMACY BETWEEN THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA AND THE FEDERAL EXECUTIVE COUNCIL OF THE ASSEMBLY OF THE SOCIALIST FEDERAL REPUBLIC OF YUGOSLAVIA**

The Government of the People's Republic of China and the Federal Executive Council of the Assembly of the Socialist Federal Republic of Yugoslavia (hereinafter referred to as "the two Parties"), desiring to develop co-operation in the fields of public health, medical science and pharmacy and thereby promote friendly relations and co-operation between the two countries, have agreed as follows:

*Article 1.* For the purpose of promoting mutual understanding and the exchange of experience, the two Parties shall encourage their respective competent public health, medical, scientific research, educational and other organizations to establish and develop direct co-operation in the following fields: the organization of health care, traditional medicine, family planning, haematology, transfusion techniques, immunobiology, virology, endocrinology, the study of diabetes, orthopaedics, rehabilitative medicine, pharmacology and pharmacy, medical engineering, the training of medical personnel and other fields of mutual interest.

*Article 2.* In order to achieve the goals stated in article 1 of the Agreement, the two Parties shall encourage the exchange of specialists, research teams, scientific personnel and university instructors, particularly those of medical schools, and shall also encourage the development of other forms of co-operation that are of mutual interest.

*Article 3.* Each Party shall, in conformity with the provisions and regulations in force in its country, encourage its specialists in the field of public health, medical science and pharmacy to undertake short-term training in the territory of the other Party. The two Parties shall at the same time encourage their organizations to facilitate the admission of such specialists for training.

*Article 4.* The two Parties shall encourage the exchange of information, publications and other specialized and scientific literature that is of mutual interest.

*Article 5.* The two Parties shall encourage the participation of their specialists in international specialized and scientific gatherings held in the two countries.

*Article 6.* Each Party shall encourage its competent organizations, for the purpose of gaining knowledge of the other Party's achievements in the fields of public health, medical science and pharmacy, to organize exhibitions relating to those fields in the other country.

<sup>1</sup> Came into force on 27 March 1985, the date on which the Parties informed each other (on 31 January and 27 March 1985) of the completion of the required procedures, in accordance with article 9.

*Article 7.* The two Parties have agreed that, for the purpose of implementing the provisions of this Agreement, their competent authorities may conclude periodic plans for co-operation which shall specify the extent, conditions, form and duration of such co-operation.

*Article 8.* The two Parties have agreed that in China the Ministry for Public Health of the People's Republic of China and in Yugoslavia the Federal Committee for Labour, Public Health and Social Welfare of the Socialist Federal Republic of Yugoslavia shall be responsible for implementing the provisions of this Agreement.

*Article 9.* This Agreement shall enter into force on the date on which the two Parties inform each other of the completion of the procedures provided for under the domestic legislation of the two countries and shall remain in force for five years.

This Agreement shall be automatically extended each year unless one of the two Parties denounces it in writing six months before the expiry of each period of validity.

DONE AND SIGNED at Belgrade on 7 July 1984, in duplicate in the Chinese and Serbo-Croatian languages, both texts being equally authentic.

For the Government  
of the People's Republic  
of China:

[Signed]

Dr. CUI YUELI  
Minister of Health

For the Federal Executive Council of  
the Assembly of the Socialist Federal  
Republic of Yugoslavia:

[Signed]

Dr. DJORDJE JAKOVLJEVIĆ  
Member of the Federal Executive  
Council and Chairman of the Federal  
Committee for Labour, Public  
Health and Social Welfare

[TRADUCTION — TRANSLATION]

ACCORD<sup>1</sup> ENTRE LE GOUVERNEMENT DE LA RÉPUBLIQUE POPULAIRE DE CHINE ET LE CONSEIL EXÉCUTIF FÉDÉRAL DE L'ASSEMBLÉE DE LA RÉPUBLIQUE FÉDÉRATIVE SOCIALISTE DE YOUGOSLAVIE RELATIF À LA COOPÉRATION DANS LES DOMAINES DE LA SANTÉ PUBLIQUE, DES SCIENCES MÉDICALES ET DE LA PHARMACIE

Le Gouvernement de la République populaire de Chine et le Conseil exécutif fédéral de l'Assemblée de la République fédérative socialiste de Yougoslavie (ci-après dénommés « les deux Parties »), désireux de développer la coopération dans les domaines de la santé publique, des sciences médicales et de la pharmacie et de promouvoir ainsi les relations amicales et la coopération entre les deux pays, sont convenus de ce qui suit :

*Article premier.* En vue de promouvoir la compréhension mutuelle et l'échange de données d'expérience, les deux Parties s'engagent à encourager les institutions de leurs pays compétentes dans les domaines de la santé publique, de la médecine, de la recherche scientifique, de l'éducation et autres domaines, à établir et développer des liens de coopération directe dans les domaines ci-après : organisation des services de santé publique, médecine traditionnelle, planification familiale, hématologie, techniques de transfusion, immunobiologie, virologie, endocrinologie, étude du diabète, orthopédie, médecine rééducative, pharmacologie et pharmacie, génie médical, formation du personnel médical et autres domaines d'intérêt réciproque.

*Article 2.* En vue de réaliser les objectifs énoncés à l'article premier du présent Accord, les deux Parties favoriseront l'échange de spécialistes, d'équipes de recherche, de personnel scientifique et d'enseignants universitaires, notamment ceux des facultés de médecine, et encourageront le développement de toute autre forme de coopération d'intérêt réciproque.

*Article 3.* Chaque Partie s'engage, dans le respect des dispositions et réglementations en vigueur dans son pays, à encourager les spécialistes de son pays en matière de santé publique, de sciences médicales et de pharmacie à suivre des stages de formation de courte durée sur le territoire de l'autre Partie. Les deux Parties encourageront également leurs institutions à faciliter l'admission de ces spécialistes aux fins de la formation.

*Article 4.* Les deux Parties encourageront l'échange de renseignements et de publications et d'ouvrages scientifiques et spécialisés d'intérêt réciproque.

*Article 5.* Les deux Parties inciteront les spécialistes de leur pays à participer à des réunions internationales scientifiques et spécialisées tenues dans les deux pays.

<sup>1</sup> Entré en vigueur le 27 mars 1985, date à laquelle les Parties se sont notifié (les 31 janvier et 27 mars 1985) l'accomplissement des procédures requises, conformément à l'article 9.

*Article 6.* Afin de mieux connaître les réalisations de l'autre pays, chaque Partie encouragera les institutions compétentes de son propre pays à organiser, dans l'autre pays, des expositions intéressant la santé publique, les sciences médicales et la pharmacie.

*Article 7.* Les deux Parties sont convenues que, aux fins de l'application des dispositions du présent Accord, les autorités compétentes seront habilitées à établir périodiquement des plans déterminant la portée, les conditions, la forme et la durée des activités de coopération.

*Article 8.* Les deux Parties sont convenues que les autorités responsables de l'exécution du présent Accord seront, en ce qui concerne la République populaire de Chine, le Ministère de la santé publique et, en ce qui concerne la République fédérative socialiste de Yougoslavie, la Commission fédérale du travail, de la santé publique et de la protection sociale.

*Article 9.* Le présent Accord entrera en vigueur à la date à laquelle les Parties procéderont à l'échange des notifications d'approbation conformément à la législation nationale des deux pays et demeurera en vigueur pour une durée de cinq ans à compter de cette date.

Si aucune des Parties ne dénonce l'Accord par écrit six mois avant l'expiration de la période de validité, l'Accord sera automatiquement prorogé pour une période d'un an.

FAIT ET SIGNÉ à Belgrade, le 7 juillet 1984, en double exemplaire, en langues chinoise et serbo-croate, les deux textes faisant également foi.

Pour le Gouvernement  
de la République populaire  
de Chine

[Signé]

CUI YUELI  
Ministre de la santé

Pour le Conseil exécutif fédéral de  
l'Assemblée de la République fédé-  
rative socialiste de Yougoslavie :

[Signé]

DJORDJE JAKOVljević  
Membre du Conseil exécutif fédéral et  
Président de la Commission fédérale  
du travail, de la santé publique et de  
la protection sociale

**No. 23360**

—

**CHINA  
and  
POLAND**

**Consular Convention. Signed at Beijing on 14 July 1984**

*Authentic texts: Chinese and Polish.*

*Registered by China on 17 May 1985.*

—————

**CHINE  
et  
POLOGNE**

**Convention consulaire. Signée à Beijing le 14 juillet 1984**

*Textes authentiques : chinois et polonais.*

*Enregistrée par la Chine le 17 mai 1985.*

[CHINESE TEXT — TEXTE CHINOIS]

## 中华人民共和国政府和波兰人民 共和国政府领事条约

中华人民共和国政府和波兰人民共和国政府，  
为调整和加强两国领事关系，以利于两国在相互尊重  
主权、互不干涉内政和平等互利的原则基础上发展相互间  
的友好合作关系，

决定缔结本条约，并各派全权代表如下：

中华人民共和国政府特派外交部副部长钱其琛；

波兰人民共和国政府特派外交部副部长埃尔奈斯特·  
库查。

双方全权代表互相校阅全权证书，认为妥善后，议定  
下列各条：

### 第 一 条

#### 定 义

就本条约而言，下列各项用语的含义为：

(一)“领馆”指任何总领事馆、领事馆、副领事馆或领  
事代理处；



(二)“领区”指为领馆执行领事职务而设定的区域；

(三)“领馆馆长”指派遣国委派担任此职的人员；

(四)“领事官员”指包括领馆馆长在内的担任此职执行领事职务的任何人员；

(五)“领馆工作人员”指在领馆内从事行政、技术或服务工作的人员；

(六)“领馆成员”指领事官员和领馆工作人员；

(七)“私人服务人员”指领馆成员雇用的专为其私人服务的人员；

(八)“家庭成员”指领馆成员的配偶和与其共同生活的子女；

(九)“领馆馆舍”指专供领馆使用的建筑物或部分建筑物及其附属的土地，不论其所有权属谁；

(十)“领馆档案”指领馆的一切文书、文件、函电、簿册、胶片、照片、胶带、登记册、图章、明密电码、记录卡片以及用来保护和保存它们的任何器具；

(十一)“派遣国船舶”指悬挂派遣国国旗的任何一个用于水上航行的浮动物，不包括军舰；

(十二)“派遣国飞机”指在派遣国登记并载有登记标志的任何航空器，不包括军用航空器；

(十三)“派遣国国民”指具有派遣国国籍的自然人，如果适用的话，也指该国法人。

## 第一章 领馆的设立和领馆成员的委派

### 第 二 条

#### 领馆的设立

一、派遣国须经接受国同意才得在接受国境内设立领馆。

二、领馆所在地、领馆等级和领区的确定，以及确定后的任何变更，须经派遣国和接受国双方同意。

### 第 三 条

#### 领馆馆长的任命和接受

一、领馆馆长由派遣国任命。派遣国应通过外交途径向接受国外交部递交任命领馆馆长的委任书，委任书中应载明领馆馆长的姓名、职衔、领馆所在地、领馆等级和领区。

二、接受国在接到任命领馆馆长的委任书后，应尽快发给领事证书。如接受国拒绝发给领事证书，无须向派遣国说明拒绝的理由。

三、领馆馆长在接受国确认，即发给领事证书后，才可执行职务。

四、在接受国发给领事证书前，经接受国同意，领馆馆长可暂时执行职务。遇此情形，本条约的各项规定亦适用之。

#### 第 四 条

##### 暂时代理领馆馆长职务

一、领馆馆长因故不能执行职务或职位空缺时，派遣国可指派在接受国内的领馆的一名领事官员或在接受国的派遣国使馆的一名外交人员暂时代理领馆馆长职务。派遣国应事先将代理领馆馆长的姓名和原职衔通知接受国外交部。

二、代理领馆馆长享有领馆馆长根据本条约规定所享有的便利、特权和豁免。

三、根据本条第一款被指派担任代理领馆馆长的外交人员继续享有外交特权和豁免。

## 第 五 条

### 通知领区当局

接受国在发给领馆馆长领事证书或准许其暂时执行职务后，应尽快通知领区内的主管当局，并采取必要措施以使领馆馆长能执行职务和享受本条约规定的便利、特权和豁免。

## 第 六 条

### 通知到达和离境

派遣国应在适当的时候将下列事项书面通知接受国外交部或领区内主管当局：

(一) 领馆成员的任命、姓名、国籍、职衔、到达日期、最后离境或职务终止，以及他们在领馆工作期间发生的影响其身份的变更；

(二) 领馆成员的家庭成员的姓名、国籍、到达和最后离境，以及他(她)成为或不再是家庭成员的事实；

(三) 私人服务人员的姓名、国籍、职务、到达和最后离境，以及服务的终止；

(四) 身为接受国国民或永久居民的领馆工作人员的受雇和解雇。

## 第七 条

### 领馆成员和私人服务人员的国籍

一、领事官员应是派遣国的国民，且不得是接受国的永久居民。

二、领馆工作人员和私人服务人员应是派遣国国民或接受国国民。

## 第八 条

### 身 份 证

一、接受国主管机关应免费发给每个领馆成员及其家庭成员身份证。

二、本条第一款的规定不适用于接受国国民或接受国永久居民。

## 第九 条

### 领馆成员职务的终止

一、接受国可随时通过外交途径通知派遣国撤销领馆馆长的领事证书，宣告某一领事官员为不受欢迎的人或某一领馆工作人员为不能接受的人，并无须说明理由。遇此情形，派遣国应召回上述人员或终止其在领馆的职务。

二、领馆成员的职务，除其他情形外，有下列情形之一即告终止：

(一)接受国撤销领事证书；

(二)接受国通知派遣国某一领事官员为不受欢迎的人或某一领馆工作人员为不能接受的人；

(三)派遣国通知接受国其职务已经终止。

## 第二章 领事职务

### 第十 条

#### 领事官员的职务

领事官员的职务是：

(一)保护派遣国及其国民在接受国的权益，并向派遣国国民提供协助；

(二)促进派遣国和接受国之间的经济、贸易、文化、科学、旅游友好关系的发展；

(三)用一切合法手段调查接受国政治、经济、贸易、文化、科学和旅游方面的情况，并向派遣国政府报告；

(四)执行派遣国授权的不为接受国法律规章所禁止或不为接受国所反对的其他职务。

## 第十一条

### 同派遣国国民联系

一、领事官员有权在领区内同任一派遣国国民进行联系和会见，并为其提供帮助和司法协助。

二、接受国不应以任何方式限制派遣国国民同领馆进行联系或进入领馆。

## 第十二条

### 代表派遣国国民

遇有派遣国国民因不在接受国境内或其他原因不能在适当的时间内维护自己的权益时，领事官员在接受国法律规章允许的范围内有权在接受国法院或其他机关面前代表该国民或为其安排适当的代表，直至该国民指定了自己的代表或由其本人负责维护其权益时为止。

## 第十三条

### 登记国民和发给证件

一、领事官员有权：

(一) 登记派遣国国民；

(二)登记派遣国国民的出生和死亡并发给相应的证明，但此项登记不得解除派遣国国民遵守接受国有关法律规章的义务；

(三)根据派遣国法律办理派遣国国民间与结婚有关的事项并发给结婚证；

(四)发给派遣国国民护照或其他旅行证件，延长其有效期，加注或注销上述证件；

(五)颁发签证或延长其有效期。

二、应领事官员请求，接受国主管机关应迅速免费提供有关派遣国国民身份状况的证明。

## 第十四条

### 公证和认证

一、领事官员有权：

(一)证明派遣国国民的各种文书；证明副本、节本、译本或影印本与原本相符；证明派遣国国民在各种文书上的签字；

(二)认证派遣国或接受国机关颁发的文件上的签字和印章；



(三)把各种文书译成派遣国或接受国的官方文字，并证明译本与原本相符；

(四)接收和证明派遣国国民的声明书；

(五)接收、代写和证明派遣国国民依本国立法所作的遗嘱和其他单方法律行为书；

(六)颁发和认证货物产地证明书；

(七)执行派遣国所委托的其他公证和认证职务。

二、在其内容不违反接受国法律的情况下，由派遣国领事官员出具的文书、公证或认证的文书如在接受国使用，应与接受国主管当局出具的文书、公证或认证的文书具有同等效力。

## 第十五条

### 保管证件和物品

一、在符合接受国法律规章的情况下，领事官员有权临时保管派遣国国民的证件、现款或贵重物品。

二、领事官员也有权接收派遣国国民在接受国遗失的物品，以便转交失主。

三、遇有非永久居住在接受国的派遣国国民在接受国死亡，接受国主管机关应保护死者遗留在该国的所有物，

并将其交给领事官员，无须经过司法程序。领事官员应偿付死者在接受国的所有欠款，但以这些财产的价值为限。

## 第十六条

### 建立监护或委托关系

一、在接受国境内永久居住的派遣国国民需要建立监护或委托关系时，接受国主管机关应通知领事官员。

二、领事官员应就本条第一款所指事项同接受国主管机关进行合作，必要时，可推荐监护人或委托人。

## 第十七条

### 拘捕通知和探视

一、遇有派遣国国民被拘禁、逮捕或以任何其他方式剥夺自由，接受国主管机关应尽速通知领事官员，通知不得迟于采取该措施后的第七天。

二、领事官员有权探视被拘禁、逮捕或以任何其他方式剥夺自由的派遣国国民，以便同其交谈，为其提供协助，包括法律辩护并与其通讯。探视应尽速进行，但自通知之日起三天后接受国主管机关不应拒绝探视，以后在合理期限内可继续再行探视。

三、领事官员有权探视在接受国被监禁的派遣国国民。

四、接受国主管当局应将本条规定的各项权利告知有权享受此权利的当事人。

五、本条所规定的各项权利应依接受国法律规章行使之。但接受国法律规章的适用应不限制这些权利的实施。

## 第十八条

### 事故和死亡通知

一、遇有造成派遣国国民死亡或重伤的事故，接受国主管机关应迅速通知领事官员。

二、接受国主管机关获悉派遣国国民在接受国死亡时，应立即通知领事官员并应领事官员请求免费提供死亡证书或其他证明死亡文件的副本或抄本。

## 第十九条

### 关于遗产的职务

一、如派遣国国民作为遗产继承人或遗赠受领人，有权继承或受领一位死者在接受国境内的遗产，不论死者为何国国籍，接受国主管机关应尽快将该国民开始办理继承和受领遗产事宜通知领事官员。

二、如派遣国国民在接受国死亡并在接受国留有遗产，接受国主管机关应将该国民的遗产内容、遗产所在地、受权接受遗产人的所在地通知领事官员。如死者立有遗嘱，经领事官员请求，接受国主管机关应将遗嘱的副本送交领事官员。

三、遇有派遣国国民有权或声称有权继承在接受国境内的某项遗产，但本人不在或不能出席诉讼，领事官员可直接或通过其代表在接受国法院或其他机关面前代表该国民，并无需出示授权书，直至该国民本人或他指定的代表担负起保护其权益时为止。领事官员代表派遣国国民时，应遵守接受国的法律规章。

四、接受国主管机关应采取本国法律规章规定的一切适当措施保护本条第二款所述的遗产，并将所采取的措施通知领事官员。清点、封存、拆封、变卖或采取某种措施保护遗产时，领事官员有权到场。

五、继承诉讼或其他正式程序一经结束，接受国主管机关应立即通知领事官员，并尽速将领事官员所代表的当事人所继承的遗产或遗产份额在减除债务和税款后转交领事官员。

六、領事官員有權領取在接受國無永久住所的派遣國國民應獲得的遺產份額或遺贈，以及屬於遺產的撫恤金、賠償金、養老金、保險金及其他應收款，以便轉交有權接受該遺產的國民。

七、領事官員將本條第五、六款所提及的財產和現金轉出接受國時，應遵守接受國的法律規章。

## 第二十条

### 送 达 文 件

應派遣國主管當局請求，領事官員有權在接受國法律規章允許的範圍內向派遣國國民獲取自願提供的證詞或向他們轉送司法文書和非司法文書。

## 第二十一条

### 協助派遣國船舶

一、領事官員有權向在接受國領海、內水、港口或其他停泊處的派遣國的船舶提供一切協助。

二、在執行本條第一款的職務時，領事官員有權：

(一)登訪船舶，听取關於船舶、貨物及航行的陳述；

(二)接受船長或任何船員的訪問，並在必要時，為船長或船員安排就醫或遣送回國；

(三)接受、查验、认证、颁发或延长与船舶有关的证书和其他文件；

(四)根据派遣国的法律，调解船长同船员或船员同船员之间的纠纷，包括工作合同或工作条件的纠纷；

(五)按照派遣国法律规章对船舶实行监督和检查，调查航行期间发生的事故，采取措施确保船上纪律和秩序；

(六)对有涉于接受国法庭和其他机关的船长和船员给予照顾和协助，包括提供法律协助、译员或其他人员；

(七)在与接受国法律规章不相抵触的情况下，采取派遣国海事法规规定的任何其他措施。

三、领事官员在执行本条职务时，应遵守接受国法律规章。

四、接受国主管机关应尊重领事官员按照派遣国法律规章对派遣国船舶及船员所采取的一切措施。领事官员在执行本条职务时可请求接受国主管机关提供协助。

## 第二十二条

### 受损坏的派遣国船舶

一、遇有派遣国船舶在接受国内水或领海内沉没、触

礁或其他重大海损事故，接受国主管机关应尽快通知领事官员。

二、遇有本条第一款所述事故，领事官员有权对船舶和船员提供协助，并可请求接受国给予协助。

三、遇有本条第一款所述事故，接受国主管机关除应采取一切必要措施组织抢救船员和乘客外，还应根据船长或领事官员的请求，对抢救和保护船舶、船上设备或货物以及与船舶分离的但属于船舶的物品或货物给予必要的协助。

四、遇有派遣国船舶沉没，船上设备、货物、贮存物或其他物品在接受国海岸、海岸附近或港口被发现或被带入，而船长、船长代表或保险公司的代表均不在场或无能力采取相应措施，接受国主管机关应尽快通知领事官员。领事官员可代表船主采取如船主在场时所能采取的一切措施。

五、在接受国主管机关确定派遣国船舶事故、触礁或沉没原因的诉讼中，领事官员有权在场。

六、对在接受国境内的受损坏的派遣国船舶、船上设备、货物或其他物品，凡不在接受国出售或交付使用者，应免交关税或其他类似费用。

## 第二十三条

### 接受国机关协助派遣国船舶

一、接受国主管机关应对派遣国船舶提供必要的协助。

二、遇有非接受国国民的船员未经船长同意，在接受国境内离开派遣国船舶，接受国主管机关经船长或领事官员请求应协助寻找。

## 第二十四条

### 对派遣国船舶实行管辖

一、接受国主管机关对在其领海、内水和港口的派遣国船舶上发生的下列犯罪实行管辖：

(一)接受国国民所犯罪行或使该国国民受到损失的罪行；

(二)破坏接受国港口、领海或内水安宁和安全的罪行；

(三)破坏接受国有关海上卫生、生命安全、海关事务、移民、海洋污染或非法贩毒的法律规章的罪行。

二、接受国主管机关也有权根据本国法律规章对派遣国船舶上发生的本条第一款所列犯罪以外的破坏公共安



宁、接受国安全或危害该国利益的犯罪实行管辖，但非经船长或领事官员请求，不得干涉船上的内部事务。

三、接受国主管机关经船长或领事官员请求可在派遣国船舶上实行管辖。

四、接受国主管机关欲在派遣国船上对船长、船员或乘客实行强制性措施或占有船上财产时，应事先通知领事官员。如情况紧急，不能事先通知领事官员，接受国主管机关应尽快提供有关事实和采取行动的情况。

五、本条第四款的规定不适用于接受国主管机关对船舶实行的有关护照、海关或卫生的日常检查，也不适用于为在海上拯救人命或防止水域污染而采取的行动及经船长要求或同意所进行的调查。

## 第二十五条

### 登访外国船舶

经事先征得船长同意，领事官员有权登访将驶往派遣国港口或其他停泊处的悬挂除派遣国国旗以外的任何国旗的船舶。领事官员应遵守接受国港口的规定。

## 第二十六条

### 派遣国飞机

本条约第二十一条至第二十五条的规定也适用于派遣国飞机和派遣国企业租用的飞机。但此种适用不得违反接受国和派遣国之间有效的双边或双方参加的多边航空协定的规定。

## 第二十七条

### 在领区内外执行领事职务

领事官员在领区内执行领事职务。经接受国同意，领事官员也可在领区外执行领事职务。

## 第二十八条

### 同接受国机关联系

在执行职务时，领事官员可：

(一)同领区内的地方主管机关联系；

(二)如果接受国的法律规章和惯例或国际协定允许，同接受国中央主管机关联系。

## 第二十九条

### 遵守接受国法律规章

一、在不妨碍其特权和豁免的情况下，领馆成员及其家庭成员负有遵守接受国法律规章的义务。

二、领馆成员除了执行公务外，不应在接受国内为私人利益从事任何专业或商业活动。

三、领馆馆舍不得用于同执行领事职务不相符合的任何用途。

四、领馆使用的属于派遣国的交通工具和领馆成员及其家庭成员所有的交通工具应遵守接受国有关强制保险的规定。

## 第三十条

### 使馆执行领事职务

一、派遣国使馆可执行领事职务。遇此情形，则本条约的规定适用之。

二、派遣国使馆应将该馆执行领事职务的外交人员的姓名和职衔通知接受国外交部。

三、被委派执行领事职务的外交人员享有按其外交官身份所享有的特权和豁免。

### 第三章 领馆的便利、特权和豁免

#### 第三十一条

##### 领馆工作的便利

接受国应为领馆执行职务提供一切便利，并采取相应措施使领馆成员不受妨碍地执行职务。

#### 第三十二条

##### 领馆馆舍和住所的获得

一、派遣国或其代表有权购置、租用或以其他方式获得适合于领事用途的地皮、建筑物和住所，以及为领事用途进行建筑或修缮，但领馆成员是接受国国民或永久居民者，其住所不在此列。

二、派遣国在行使本条第一款规定的权利时，将遵守接受国有关购买和使用地皮、建筑和城市规划的法律规章。

三、接受国依照本国法律规章为派遣国领馆获得适当的领馆馆舍提供便利。必要时，接受国应协助派遣国为其领馆成员获得住所。

### 第三十三条

#### 国旗和国徽的使用

一、派遣国有权在领馆所在的建筑物及其正门和领馆馆长住所悬挂国徽，在领馆馆舍悬挂用派遣国和接受国文字书写的馆牌。

二、派遣国有权在领馆馆舍、领馆馆长住所和领馆馆长执行公务乘用的交通工具上悬挂派遣国国旗。

### 第三十四条

#### 领馆馆舍和领事官员的住所不得侵犯

一、领馆馆舍和领事官员的住所不得侵犯。接受国官员未经领馆馆长或在接受国的派遣国使馆馆长或他们两人中的任何一人授权的人的同意，不得进入领馆馆舍和领事官员的住所。

二、接受国应采取一切适当措施保护领馆馆舍免受入侵或损害以及防止任何对领馆的扰乱或有损其尊严的行为。

### 第三十五条

#### 档案不得侵犯

领馆档案无论何时，亦无论位于何处，均不得侵犯。

### 第三十六条

#### 通讯自由

一、接受国准许领馆为一切公务目的的自由通讯，并予以保护。领馆同派遣国政府及无论位于何处的该国使馆或其他领馆通讯，可采用一切适当的通讯手段，包括外交和领事信使，外交和领事邮袋以及明密码电信。领馆须经接受国同意才可安装和使用无线电台。

二、领馆来往的公文不得侵犯。

三、领事邮袋须加密封并附有可资识别的外部标志，并以装载公文及资料或专供领馆公务之用的物品为限。

四、领事邮袋不得开拆或扣留。

五、领事信使应持有官方证件，载明其身份及构成领事邮袋的包裹件数。领事信使只能是在接受国没有永久住所的派遣国国民。领事信使在执行公务时，应受接受国保护，享有人身不受侵犯权，不受拘留、逮捕或任何其他方式的限制人身自由。

六、领事邮袋可委托派遣国船舶的船长或飞机的机长携带。该船长或机长应持有载明构成领事邮袋包裹件数的官方证件，但不得视为领事信使。经与接受国主管机关作出安排，领事官员可直接向船长或机长交接领事邮袋。

### 第三十七条

#### 免 予 征 用

领馆馆舍、馆舍设备以及领馆的财产与交通工具应免受为国防或公用目的而实施的任何方式的征用。如为这种目的确有征用的必要时，应采取一切可能的步骤以免领馆职务的执行受到妨碍，并应向派遣国迅速地付出充分和有效的补偿。

### 第三十八条

#### 领馆馆舍、住所和交通工具免除捐税

一、派遣国所有的或租用的领馆馆舍和领事官员的住所，以及领馆的一切交通工具应在接受国免缴一切国家、地方或城市的捐税，但对提供特定服务仍应照付费用。

二、本条第一款所述捐税的免除，不适用于同派遣国或其代表订立契约的人依接受国法律规章应缴的捐税。

### 第三十九条

#### 领馆规费和手续费

一、领馆可在接受国境内按照派遣国法律规章收取领馆办事规费和手续费。

二、本条第一款所述规费和手续费在接受国内应免缴一切捐税。

## 第四章 领馆成员的特权和豁免

### 第四十条

#### 对领馆成员的保护

接受国应给予领馆成员应有的尊重，并采取一切措施防止其人身、自由或尊严受到侵犯。

### 第四十一条

#### 行动自由

在遵守接受国因国家安全禁止或限制进入地区的法律规章的前提下，接受国应保证所有领馆成员在其境内的行动自由和旅行自由。



## 第四十二条

### 管 辖 豁 免

一、领事官员不受接受国刑事、民事和行政管辖。他们的人身不受侵犯，因而不受拘留、逮捕或任何其他方式的限制人身自由。

二、领馆工作人员执行公务的行为不受接受国刑事、民事和行政管辖。

三、本条第一款和第二款的规定不适用于下列民事诉讼：

(一)因领馆成员未明示或默示以派遣国代表身份订立的契约所引起的诉讼；

(二)因车辆、船舶或飞机在接受国发生事故造成损害所引起的诉讼；

(三)领馆成员不代表派遣国，仅以私人身份作为继承人、受遗赠人、遗嘱执行人、遗产管理人或监护人所涉及的诉讼。

四、接受国主管机关如对领馆工作人员起诉或实行拘留、逮捕或任何其他方式的剥夺人身自由时，应尽速通知领馆馆长。在诉讼程序中，接受国应对领馆工作人员给予适当的尊重，并应避免妨碍其执行公务。

### 第四十三条

#### 作证的义务

一、领馆成员可被要求作为证人到接受国司法或其他有关机关作证。如果领事官员拒绝到场或作证，不得对其施行强制措施或处罚。除本条第三款所述情形外，领馆工作人员不得拒绝作证。

二、接受国主管机关要求领馆成员作证时，不应妨碍其执行公务。在可能情形下，可在领馆或领馆成员的住所录取证词，或接受其书面陈述。

三、领馆成员没有义务就其执行公务有关的事项作证或交出属于领馆档案的公文或其他文件。

四、领馆成员没有义务以鉴定人身份就派遣国法律提供证词。

### 第四十四条

#### 免除个人劳务和捐献

接受国应免除领馆成员一切个人劳务及各种公共服务，并免除诸如征用、捐献及屯宿等军事义务。接受国应

免除领馆成员有关接受国法律规章关于办理外侨登记、居留许可、工作许可及其他有关外侨的手续的义务。

## 第四十五条

### 领馆成员免税

一、领馆成员应免缴接受国有关国家、地方或城市的捐税，但下列捐税除外：

(一)通常计入在商品价格和服务费中的间接税；

(二)对在接受国境内的私有不动产征收的捐税；

(三)接受国征收的遗产税、遗产取得税或继承税及让与税，但本条约第四十七条的规定不在此限；

(四)对在接受国取得的各种私人收入的捐税；

(五)对提供特定服务所收取的费用；

(六)注册费、法院手续费、抵押税和印花税。但本条约第三十八条的规定不在此限。

二、领馆成员如其所雇人员的工资薪给不在接受国内免除所得税时，应履行该国有关征收所得税的法律规章对雇用人所规定的义务。

## 第四十六条

### 免缴关税和免受海关查验

一、接受国依本国法律规章，准许下列物品进出口，并免除一切关税和其他有关税款，但保管、运输和类似服务费除外：

(一) 领馆公用物品及交通工具；

(二) 领事官员的私用物品及交通工具，包括初到任安家所用物品。消费品不得超过有关领事官员直接需要的数量；

(三) 领馆工作人员初到任时进口的物品及交通工具。

二、领事官员的私人行李应免于海关查验。只有在有重大理由认为其中装有不属本条第一款第(二)项中所述的物品，或接受国的法律规章禁止进出口的物品，或为检疫规章所管制的物品时，才可查验。但这种查验应在有关领事官员或其代表在场时进行。

## 第四十七条

### 领馆成员的遗产

遇领馆成员或其家庭成员或私人服务人员死亡，死者如果不是接受国的国民或永久居民，接受国应：

(一)准许将死者的动产运出境外，其中不包括在接受国境内获得的动产而在死者死亡时为禁止出口者；

(二)免除死者在接受国遗留的动产的遗产税或遗产让与税。

#### 第四十八条

##### 领馆成员的家庭成员和私人 服务人员的特权和豁免

一、领馆成员的家庭成员分别享有领馆成员根据本条约规定所享有的特权和豁免。本规定不适用于身为接受国国民、接受国永久居民或在接受国从事有薪职业者。

二、身为接受国国民或永久居民的领馆工作人员不享有本条约规定的特权和豁免，但本条约第四十三条第三款的规定不在此限。

三、除本条约第四十七条的规定外，私人服务人员不享有本条约规定的特权和豁免。

## 第四十九条

### 特权和豁免的放弃

一、派遣国可放弃本条约第四十二条和第四十三条规定的特权和豁免。放弃应明确表示，并书面通知接受国。

二、领馆成员或其家庭成员如就其本可免受管辖的事项提出诉讼，就不得对于同主诉直接有关的反诉援用管辖豁免。

三、司法或行政诉讼程序上管辖豁免之放弃，不得视为对执行判决亦默示放弃豁免。对执行判决放弃豁免应另行为之。

## 第五章 最后条款

### 第五十条

#### 批准、生效和终止

一、本条约须经批准，批准书在华沙互换。本条约自互换批准书之日起第三十天开始生效。

二、缔约任何一方可书面通知另一方要求终止本条约，本条约在发出终止通知之日起十二个月后失效，否则本条约永远有效。

本条约于一九八四年七月十七日在北京签订，一式两份，每份都用中文和波兰文写成，两种文本具有同等效力。

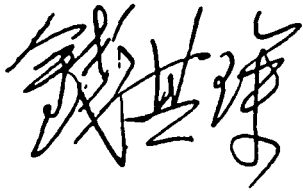
双方全权代表分别在本条约上签字盖章，以昭信守。

中华人民共和国政府

波兰人民共和国政府

全 权 代 表

全 权 代 表



[POLISH TEXT — TEXTE POLONAIS]

## KONWENCJA KONSULARNA MIĘDZY RZĄDEM POLSKIEJ RZECZYPOSPOLITEJ LUDOWEJ A RZĄDEM CHIŃSKIEJ REPUBLICI LUDOWEJ

Rząd Polskiej Rzeczypospolitej Ludowej i Rząd Chińskiej Republiki Ludowej,

kierując się pragnieniem uregulowania i umocnienia stosunków konsularnych w celu rozwoju stosunków przyjaźni i współpracy między obydwojma Państwami, na podstawie zasad wzajemnego poszanowania suwerenności, nieingerencji w sprawy wewnętrzne drugiego Państwa, równości i wzajemnej korzyści,

postanowiły zawrzeć niniejszą Konwencję konsularną i w tym celu wyznaczyły Pełnomocników:

Rząd Polskiej Rzeczypospolitej Ludowej:

Ernesta Kuczę, Podsekretarza Stanu w Ministerstwie Spraw Zagranicznych,

Rząd Chińskiej Republiki Ludowej:

Qian Qichena, Wiceministra Spraw Zagranicznych,

którzy po wymianie swych pełnomocnictw, uznanych za dobre i sporządzone w należytej formie, zgodzili się na następujące postanowienia:

### *Artykuł 1. DEFINICJE*

Dla celów niniejszej Konwencji następujące wyrażenia mają niżej określone znaczenie:

- 1) “urząd konsularny” oznacza każdy konsulat generalny, konsulat, wicekonsulat lub agencję konsularną;
- 2) “okręg konsularny” oznacza terytorium wyznaczone urzędowi konsularnemu do wykonywania funkcji konsularnych;
- 3) “kierownik urzędu konsularnego” oznacza osobę powołaną przez Państwo wysyłające do działania w tym charakterze;
- 4) “urzędnik konsularny” oznacza każdą osobę, łącznie z kierownikiem urzędu konsularnego, powołaną w tym charakterze do wykonywania funkcji konsularnych;
- 5) “pracownik konsularny” oznacza każdą osobę wykonującą czynności administracyjne, techniczne lub usługowe w urzędzie konsularnym;
- 6) “członkowie urzędu konsularnego” oznacza urzędników konsularnych i pracowników konsularnych;
- 7) “członek personelu prywatnego” oznacza osobę zatrudnioną wyłącznie w służbie prywatnej członka urzędu konsularnego;
- 8) “członek rodziny” oznacza małżonka członka urzędu konsularnego i jego dzieci, pod warunkiem, że pozostają oni z nim we wspólnocie domowej;
- 9) “pomieszczenia konsularne” oznacza budynki lub części budynków i tereny przyległe do nich, niezależnie od tego, czyją są własnością, używane wyłącznie do celów urzędu konsularnego;



10) "archiwa konsularne" oznacza wszystkie pisma, dokumenty, korespondencję, książki, filmy, fotografie, taśmy magnetofonowe, rejestry i pieczęcie urzędu konsularnego oraz szyfry i kody, kartoteki, jak również meble przeznaczone do ich zabezpieczenia i przechowywania;

11) "Statek Państwa wysyłającego" oznacza każdą jednostkę pływającą używaną do żeglugi na wodach, podnoszącą banderę Państwa wysyłającego, z wyjątkiem okrętów wojennych;

12) "Statek powietrzny Państwa wysyłającego" oznacza każdą jednostkę latającą, zarejestrowaną w Państwie wysyłającym i uprawnioną do używania oznaki przynależności państwowej tego Państwa, z wyjątkiem wojskowej jednostki latającej;

13) "Obywatel Państwa wysyłającego" oznacza osobę fizyczną posiadającą obywatelstwo Państwa wysyłającego i odpowiednio osobę prawną tego Państwa.

## ROZDZIAŁ PIERWSZY. USTANAWIANIE URZĘDÓW KONSULARNYCH ORAZ MIANOWANIE CZŁONKÓW URZĘDÓW KONSULARNYCH

### Artykuł 2. USTANAWIANIE URZĘDÓW KONSULARNYCH

1. Urząd konsularny Państwa wysyłającego może być ustanowiony na terytorium Państwa przyjmującego jedynie za zgodą tego Państwa.

2. Ustalenie siedziby urzędu konsularnego, jego klasy i okręgu konsularnego, jak również wszelkie późniejsze zmiany, będą dokonywane w drodze porozumienia między Państwem wysyłającym a Państwem przyjmującym.

### Artykuł 3. MIANOWANIE I DOPUSZCZANIE KIEROWNIKÓW URZĘDÓW KONSULARNYCH

1. Kierownicy urzędów konsularnych są mianowani przez Państwo wysyłające. Państwo wysyłające przekaże, w drodze dyplomatycznej, Ministerstwu Spraw Zagranicznych Państwa przyjmującego listy komisyjne dotyczące mianowania kierownika urzędu konsularnego. Listy komisyjne zawierają imię i nazwisko, stopień kierownika urzędu konsularnego, siedzibę i klasę urzędu konsularnego jak również okręg konsularny.

2. Po otrzymaniu listów komisyjnych o mianowaniu kierownika urzędu konsularnego, Państwo przyjmujące powinno niezwłocznie udzielić exequatur. Jeżeli Państwo przyjmujące odmawia udzielenia exequatur, nie jest obowiązane do podania Państwu wysyłającemu przyczyn odmowy.

3. Kierownik urzędu konsularnego będzie dopuszczony do wykonywania swych funkcji na mocy upoważnienia Państwa przyjmującego, zwanego exequatur.

4. Do czasu udzielenia exequatur kierownik urzędu konsularnego może być tymczasowo dopuszczony do wykonywania swych funkcji za zgodą Państwa przyjmującego. W takim przypadku mają zastosowanie postanowienia niniejszej Konwencji.

### Artykuł 4. TYMCZASOWE WYKONYWANIE FUNKCJI KIEROWNIKA URZĘDU KONSULARNEGO

1. Jeżeli z jakichkolwiek przyczyn kierownik urzędu konsularnego nie może wykonywać swych funkcji lub jeżeli jego stanowisko nie jest tymczasowo obsad-

zone, Państwo wysyłające może wyznaczyć dla pełnienia funkcji tymczasowego kierownika urzędu konsularnego w Państwie przyjmującym urzędnika konsularnego urzędu konsularnego w Państwie przyjmującym albo członka personelu dyplomatycznego swego przedstawicielstwa dyplomatycznego w tym Państwie. Państwo wysyłające uprzednio notyfikuje Ministerstwu Spraw Zagranicznych Państwa przyjmującego imię i nazwisko oraz ostatni stopień osoby tymczasowo wykonywującej funkcje kierownika urzędu konsularnego.

2. Tymczasowemu kierownikowi urzędu konsularnego przysługują te same ułatwienia, przywileje i immunitety z jakich korzysta kierownik urzędu konsularnego zgodnie z niniejszą Konwencją.

3. Członek personelu dyplomatycznego, wyznaczony do pełnienia funkcji kierownika urzędu konsularnego na podstawie ustępu 1, będzie nadal korzystał z przysługujących mu przywilejów i immunitetów dyplomatycznych.

#### *Artykuł 5. ZAWIADAMIANIE ORGANÓW OKRĘGU KONSULARNEGO*

Po udzieleniu exequatur przez Państwo przyjmujące lub z chwilą, gdy kierownik urzędu konsularnego zostanie dopuszczony, choćby tymczasowo, do wykonywania swych funkcji, Państwo przyjmujące powinno niezwłocznie zawiadomić o tym właściwe organy okręgu konsularnego. Powinno ono również zapewnić podjęcie niezbędnych środków dla umożliwienia kierownikowi urzędu konsularnego wywiązywania się z obowiązków urzędowych i korzystania z ułatwień przywilejów i immunitetów przewidzianych w niniejszej Konwencji.

#### *Artykuł 6. NOTYFIKOWANIE O PRZYJAZDACH I WYJAZDACH*

Państwo wysyłające notyfikuje w odpowiednim czasie, Ministerstwu Spraw Zagranicznych Państwa przyjmującego lub właściwym organom okręgu konsularnego, co następuje:

- 1) nominację członków urzędu konsularnego, imię i nazwisko, obywatelstwo, stopień, datę przyjazdu, datę ostatecznego wyjazdu lub zakończenia wykonywania funkcji, jak również inne zmiany mające wpływ na ich status w czasie zatrudnienia w urzędzie konsularnym;
- 2) przybycie i ostateczny wyjazd członka rodziny członka urzędu konsularnego, jego imię i nazwisko, obywatelstwo oraz fakt, że dana osoba staje się lub przestaje być członkiem rodziny;
- 3) przybycie i ostateczny wyjazd członków personelu prywatnego, ich imiona i nazwiska, obywatelstwo, wykonywane funkcje oraz fakt zakończenia ich służby;
- 4) zatrudnienie i zwolnienie pracowników konsularnych posiadających obywatelstwo Państwa przyjmującego lub mających miejsce stałego pobytu w tym Państwie.

#### *Artykuł 7. OBYWATELSTWO CZŁONKÓW URZĘDU KONSULARNEGO ORAZ CZŁONKÓW PERSONELU PRYWATNEGO*

1. Urzędnik konsularny powinien mieć obywatelstwo Państwa wysyłającego i nie może posiadać miejsca stałego pobytu w Państwie przyjmującym.

2. Pracownik konsularny i członek personelu prywatnego powinien być obywatelem Państwa wysyłającego lub Państwa przyjmującego.

### *Artykuł 8.* DOKUMENTY TOŻSAMOŚCI

1. Właściwe organy Państwa przyjmującego wydają bezpłatnie dokumenty tożsamości każdemu członkowi urzędu konsularnego, jak również członkom jego rodziny.

2. Postanowień ustępu 1 nie stosuje się do obywateli Państwa przyjmującego lub osób posiadających miejsce stałego pobytu w tym Państwie.

### *Artykuł 9.* ZAKOŃCZENIE WYKONYWANIA FUNKCJI CZŁONKÓW URZĘDU KONSULARNEGO

1. Państwo przyjmujące może w każdej chwili, bez obowiązku uzasadniania swej decyzji, powiadomić w drodze dyplomatycznej Państwo wysyłające o tym, że exequatur udzielone kierownikowi urzędu konsularnego zostało cofnięte albo, że urzędnik konsularny został uznany za *persona non grata* lub że pracownik konsularny jest osobą niepożądaną. W tym przypadku Państwo wysyłające odwoła daną osobę albo położy kres jej funkcjom w urzędzie konsularnym.

2. Wykonywanie funkcji członka urzędu konsularnego ulega zakończeniu między innymi przez:

- 1) cofnięcie exequatur przez Państwo przyjmujące;
- 2) notyfikację przez Państwo przyjmujące Państwu wysyłającemu, że dany urzędnik konsularny został uznany za *persona non grata* lub że dany pracownik konsularny został uznany za osobę niepożądaną;
- 3) notyfikację przez Państwo wysyłające Państwu przyjmującemu, że funkcje danej osoby uległy zakończeniu.

## ROZDZIAŁ DRUGI. FUNKCJE KONSULARNE

### *Artykuł 10.* FUNKCJE URZĘDNIKA KONSULARNEGO

Funkcje urzędnika konsularnego polegają na:

- 1) ochronie praw i interesów Państwa wysyłającego i jego obywateli w Państwie przyjmującym, jak również udzielaniu pomocy obywatelom Państwa wysyłającego;
- 2) przyczynianiu się do rozwoju przyjaznych stosunków między Państwem wysyłającym a Państwem przyjmującym w dziedzinie gospodarczej, handlowej, kulturalnej, naukowej i turystycznej;
- 3) uzyskiwaniu za pomocą wszelkich legalnych środków informacji o Państwie przyjmującym w zakresie polityki, gospodarki, handlu, kultury, nauki, turystyki i zdawaniu z tego sprawy rządowi Państwa wysyłającego;
- 4) wykonywaniu innych funkcji powierzonych przez Państwo wysyłające, których nie zakazują ustawy i inne przepisy Państwa przyjmującego lub którym Państwo to się nie sprzeciwia.

### *Artykuł 11.* POROZUMIEWANIE SIĘ Z OBYWATELAMI PAŃSTWA WYSYLAJĄCEGO

1. Urzędnik konsularny ma prawo porozumiewać się i spotykać z każdym obywatelem Państwa wysyłającego w swoim okręgu konsularnym oraz udzielać mu pomocy i zapewniać opiekę prawną.

2. Państwo przyjmujące nie będzie w żaden sposób ograniczać możliwości porozumiewania się obywatela Państwa wysyłającego z urzędem konsularnym ani jego dostępu do tego urzędu.

#### *Artykuł 12. ZASTĘPSTWO OBYWATELI PAŃSTWA WYSYLAJĄCEGO*

W przypadku, gdy obywatel Państwa wysyłającego nie może, w odpowiednim czasie, podjąć się ochrony swych praw i interesów z powodu nieobecności w Państwie przyjmującym lub z jakiegokolwiek innej przyczyny, urzędnik konsularny ma prawo, zgodnie z ustawami i innymi przepisami Państwa przyjmującego, zastępować danego obywatela przed sądami lub innymi organami Państwa przyjmującego lub zapewnić mu odpowiednie zastępstwo aż do czasu, gdy obywatel ten wyznaczy swego pełnomocnika lub sam zapewni ochronę swych praw i interesów.

#### *Artykuł 13. PROWADZENIE REJESTRU OBYWATELI I WYDAWANIE DOKUMENTÓW*

1. Urzędnik konsularny ma prawo:

- 1) prowadzić rejestr obywateli Państwa wysyłającego;
- 2) prowadzić rejestr urodzeń i zgonów obywateli Państwa wysyłającego i wydawać odpowiednie dokumenty. Nie zwalnia to jednak obywateli Państwa wysyłającego od obowiązku przestrzegania odpowiednich ustaw i innych przepisów Państwa przyjmującego;
- 3) wykonywać wszelkie czynności dotyczące zawierania związków małżeńskich między obywatelami Państwa wysyłającego i wydawać dokumenty zawarcia związku małżeńskiego zgodnie z prawem Państwa wysyłającego;
- 4) wydawać obywatelom Państwa wysyłającego paszporty lub inne dokumenty podróży, przedłużać ich ważność, dokonywać w nich zmian lub je unieważniać;
- 5) wydawać lub przedłużać wizy.

2. Właściwe organy Państwa przyjmującego, na żądanie urzędnika konsularnego, będą bezwzględnie i nieodpłatnie przysyłać do celów urzędowych, odpowiednie dokumenty dotyczące obywateli Państwa wysyłającego.

#### *Artykuł 14. FUNKCJE NOTARIALNE I LEGALIZACJA*

1. Urzędnik konsularny ma prawo:

- 1) uwierzytelniać wszelkie dokumenty obywateli Państwa wysyłającego, jak również poświadczać zgodność z oryginałem wszelkich kopii, wyciągów i fotokopii lub tłumaczeń takich dokumentów oraz uwierzytelniać własnoręczność podpisów obywateli Państwa wysyłającego na wszelkiego rodzaju dokumentach;
- 2) uwierzytelniać podpisy oraz pieczęcie na dokumentach wydanych przez organy Państwa wysyłającego lub Państwa przyjmującego;
- 3) tłumaczyć wszelkiego rodzaju dokumenty na język urzędowy Państwa wysyłającego lub Państwa przyjmującego oraz poświadczać zgodność tłumaczeń z oryginałem;
- 4) przyjmować i uwierzytelniać oświadczenia obywateli Państwa wysyłającego;

- 5) przyjmować, sporządzać i uwierzytelniać rozporządzenia ostatniej woli i inne dokumenty stwierdzające jednostronne czynności prawne obywateli Państwa wysyłającego dokonane zgodnie z ustawodawstwem tego Państwa;
- 6) wydawać i uwierzytelniać dokumenty miejsca pochodzenia towarów;
- 7) wykonywać inne funkcje notarialne i legalizacyjne powierzone przez Państwo wysyłające.

2. Dokument sporządzony, poświadczony lub zalegalizowany przez urzędnika konsularnego Państwa wysyłającego będzie miał taką samą ważność i moc w Państwie przyjmującym jak dokumenty sporządzone, poświadczone lub zalegalizowane przez właściwe organy tego Państwa, o ile jego treść nie jest sprzeczna z ustawami i innymi przepisami Państwa przyjmującego.

#### *Artykuł 15. PRZYJMIOWANIE DO DEPOZYTU DOKUMENTÓW I PRZEDMIOTÓW*

1. Urzędnik konsularny ma prawo, zgodnie z ustawami i innymi przepisami Państwa przyjmującego, przyjmować do depozytu dokumenty, pieniądze lub przedmioty wartościowe od obywatela Państwa wysyłającego.

2. Urzędnik konsularny ma również prawo przyjmować przedmioty zagubione w Państwie przyjmującym przez obywatela Państwa wysyłającego, w celu przekazania ich właścicielowi.

3. W przypadku śmierci obywatela Państwa wysyłającego w Państwie przyjmującym, który nie posiadał miejsca stałego pobytu w tym Państwie właściwe organy Państwa przyjmującego zaopiekują się własnością zmarłego pozostawioną w tym Państwie i przekażą ją, bez postępowania prawnego, urzędnikowi konsularnemu. Urzędnik konsularny spłaci wszelkie długi pozostawione przez zmarłego w Państwie przyjmującym, do łącznej sumy wartości tych przedmiotów.

#### *Artykuł 16. USTANOWIENIE OPIEKI LUB KURATELI*

1. Właściwe organy Państwa przyjmującego powiadomią urzędnika konsularnego o potrzebie ustanowienia opieki lub kurateli nad obywatelem Państwa wysyłającego posiadającym miejsce stałego pobytu w Państwie przyjmującym.

2. Urzędnik konsularny będzie współdziałał w sprawach wymienionych w ustępie 1 z właściwymi organami Państwa przyjmującego, a w razie potrzeby zaproponuje osobę, która pełniłaby obowiązki opiekuna lub kuratora.

#### *Artykuł 17. POWIADOMIENIA O ARESZTOWANIU I ODWIEDZINY*

1. W przypadku zatrzymania, aresztowania lub pozbawienia wolności w jakiegokolwiek innej formie obywatela Państwa wysyłającego, właściwe organy Państwa przyjmującego zawiadomią niezwłocznie urzędnika konsularnego, nie później niż w terminie siedmiu dni od dnia, w którym zastosowano te środki.

2. Urzędnik konsularny ma prawo odwiedzać obywatela Państwa wysyłającego zatrzymanego, aresztowanego lub pozbawionego wolności w jakiegokolwiek innej formie w celu przeprowadzenia z nim rozmów, udzielania pomocy w tym również obrony prawnej, a także z nim korespondować. Widzenie odbędzie się niezwłocznie, jednakże właściwe organy Państwa przyjmującego nie powinny odmówić widzenia po upływie trzech dni od dnia, w którym nastąpiło zawiadomienie. Następne odwiedziny mogą odbywać się w rozsądnych okresach czasu.

3. Urzędnik konsularny ma prawo odwiedzać obywatela Państwa wysyłającego odbywającego karę pozbawienia wolności w Państwie przyjmującym.

4. Właściwe organy Państwa przyjmującego będą informować osoby, których dotyczą postanowienia niniejszego artykułu, o wszystkich uprawnieniach, które im przysługują zgodnie z tymi postanowieniami.

5. Uprawnienia określone w niniejszym artykule będą wykonywane zgodnie z ustawami i innymi przepisami Państwa przyjmującego z zastrzeżeniem, że nie uchylają one tych uprawnień.

#### *Artykuł 18. ZAWIADOMIENIE O WYPADKACH I ZGONACH*

1. Właściwe organy Państwa przyjmującego zawiadomią niezwłocznie urzędnika konsularnego o wypadkach, w wyniku których obywatele Państwa wysyłającego ponieśli śmierć lub doznali ciężkich uszkodzeń ciała.

2. Po otrzymaniu informacji o zgonie obywatela Państwa wysyłającego w Państwie przyjmującym, właściwe organy Państwa przyjmującego zawiadomią niezwłocznie urzędnika konsularnego o zgonie obywatela Państwa wysyłającego i na wniosek urzędnika konsularnego przekażą mu bezpłatnie akt zgonu lub kopię albo odpis innego dokumentu potwierdzającego zgon.

#### *Artykuł 19. FUNKCJE W SPRAWACH SPADKOWYCH*

1. Jeżeli obywatel Państwa wysyłającego powołany do spadku jako spadkobierca lub zapisobierca jest uprawniony do dziedziczenia lub otrzymania spadku po zmarłym w Państwie przyjmującym, niezależnie od obywatelstwa osoby zmarłej, właściwe organy Państwa przyjmującego poinformują niezwłocznie urzędnika konsularnego o otwarciu spadku.

2. W przypadku zgonu w Państwie przyjmującym obywatela Państwa wysyłającego, który pozostawił spadek w Państwie przyjmującym, właściwe organy Państwa przyjmującego poinformują niezwłocznie urzędnika konsularnego o składzie masy spadkowej i miejscu położenia spadku, a także o miejscu pobytu osób uprawnionych do spadku. Jeżeli zmarły pozostawił testament, właściwe organy Państwa przyjmującego przekażą odpis testamentu urzędnikowi konsularnemu, na jego prośbę.

3. Urzędnik konsularny jest upoważniony, bez potrzeby przedstawiania pełnomocnictwa, do reprezentowania bezpośrednio lub za pośrednictwem swego przedstawiciela przed sądem i innymi organami Państwa przyjmującego, obywatela Państwa wysyłającego, który jest uprawniony do spadku lub ma roszczenie do spadku w Państwie przyjmującym, jeżeli obywatel ten jest nieobecny lub nie może uczestniczyć w postępowaniu spadkowym. Przedstawicielstwo wygaśnie, gdy obywatel lub jego przedstawiciel podejmą się sami ochrony swoich praw i interesów. Urzędnik konsularny powinien przestrzegać ustaw i innych przepisów obowiązujących w Państwie przyjmującym podczas reprezentowania obywatela Państwa wysyłającego.

4. Właściwe organy Państwa przyjmującego podejmą, zgodnie ze swoimi ustawami i innymi przepisami wszelkie odpowiednie środki dla zabezpieczenia spadku, o którym mowa w ustępie 2 i poinformują niezwłocznie urzędnika konsularnego o podjętych środkach. Urzędnik konsularny ma prawo być obecny przy inwentaryzacji, nałożeniu i zdjęciu pieczęci oraz przy sprzedaży mienia wchodzącego w skład spadku, a także w razie podjęcia środków dla zabezpieczenia spadku.

5. Z chwilą zakończenia postępowania spadkowego lub innych czynności urzędowych, właściwe organy Państwa przyjmującego zawiadomią o tym niezwłocznie urzędnika konsularnego i po uregulowaniu długów, opłat i podatków przekażą mu niezwłocznie spadek lub udziały spadkowe osób, które reprezentuje.

6. Urzędnik konsularny ma prawo otrzymania w celu przekazania osobom uprawnionym, nie mającym miejsca stałego pobytu w Państwie przyjmującym, pieniędzy lub innego mienia należnego z tytułu spadku, odszkodowań, rent, polis ubezpieczeniowych i wszelkich innych należności.

7. Przekazanie mienia i należności z Państwa przyjmującego, stosownie do ustępów 5 i 6, może być dokonane przez urzędnika konsularnego jedynie zgodnie z ustawami i innymi przepisami tego Państwa.

#### *Artykuł 20. DORĘCZANIE DOKUMENTÓW*

Urzędnik konsularny ma prawo, na wniosek właściwych organów Państwa wysyłającego, przyjmować zgodnie z ustawami i innymi przepisami Państwa przyjmującego od obywateli Państwa wysyłającego dobrowolne zeznania lub doręczać im pisma sądowe i pozasądowe.

#### *Artykuł 21. UDZIELANIE POMOCY STATKOM PAŃSTWA WYSYŁAJĄCEGO*

1. Urzędnik konsularny ma prawo udzielania wszelkiej pomocy statkom Państwa wysyłającego, które znajdują się na morzu terytorialnym, wodach wewnętrznych, portach lub innych miejscach zakotwiczenia w Państwie przyjmującym.

2. Urzędnik konsularny, podczas wykonywania funkcji wymienionych w ustępie 1, ma prawo:

- 1) wejść na statek i przyjmować oświadczenia dotyczące statku, przewożonego towaru i podróży;
- 2) przyjąć wizytę kapitana lub jakiegokolwiek członka załogi, a w przypadku koniecznym zorganizować umieszczenie ich w szpitalu lub powrót do kraju;
- 3) przyjmować, skontrolować, poświadczать, wystawiać albo przedłużać świadectwa lub inne dokumenty dotyczące statku;
- 4) załatwiać spory między kapitanem a członkami załogi lub między członkami załogi, włącznie ze sporami dotyczącymi umów o pracę lub warunków pracy, zgodnie z ustawodawstwem Państwa wysyłającego;
- 5) zgodnie z ustawami i innymi przepisami Państwa wysyłającego prowadzić nadzór i inspekcję statku, prowadzić dochodzenie w sprawie zdarzeń, jakie miały miejsce podczas rejsu, podjąć kroki w celu zapewnienia dyscypliny i porządku na statku;
- 6) udzielać kapitanowi lub innym członkom załogi opieki i pomocy w ich stosunkach z sądami i innymi organami Państwa przyjmującego i w tym celu zapewnić im opiekę prawną, pomoc tłumacza lub jakiegokolwiek innej osoby;
- 7) dokonywać wszelkich innych czynności przewidzianych przez prawo Państwa wysyłającego w sprawach morskich pod warunkiem, że nie są one sprzeczne z ustawami i innymi przepisami Państwa przyjmującego.

3. Podczas pełnienia funkcji wymienionych w niniejszym artykule urzędnik konsularny jest zobowiązany do przestrzegania ustaw i innych przepisów Państwa przyjmującego.

4. Właściwe organy Państwa przyjmującego uznają wszelkie środki podjęte przez urzędnika konsularnego, zgodnie z ustawami i innym przepisami Państwa wysyłającego, w stosunku do statków tego Państwa i ich załóg. Przy wykonywaniu takich funkcji urzędnik konsularny może zwracać się o pomoc do właściwych organów Państwa przyjmującego.

#### *Artykuł 22. USZKODZONE STATKI PAŃSTWA WYSYLAJĄCEGO*

1. Jeżeli statek Państwa wysyłającego uległ zatonięciu lub osiadł na mieliźnie albo też doznał innego poważnego uszkodzenia na wodach wewnętrznych lub morzu terytorialnym Państwa przyjmującego, właściwe organy Państwa przyjmującego poinformują o tym niezwłocznie urzędnika konsularnego.

2. W przypadkach wymienionych w ustępie 1, urzędnik konsularny ma prawo udzielić pomocy statkowi oraz jego załodze, a także domagać się pomocy od Państwa przyjmującego.

3. W przypadkach wymienionych w ustępie 1 właściwe organy Państwa przyjmującego podejmą wszelkie niezbędne środki w celu zorganizowania ratowania pasażerów i członków załogi. Niezależnie od tego na żądanie kapitana statku lub urzędnika konsularnego udzielą niezbędnej pomocy dla ratowania i ochrony statku, jego wyposażenia lub ładunku, a także przedmiotów stanowiących część statku lub jego ładunku, które znalazły się poza statkiem.

4. W przypadku gdy wyposażenie, ładunek, zapasy lub inne przedmioty pochodzące z rozbitego statku Państwa wysyłającego zostaną znalezione na brzegu lub w jego pobliżu albo zostaną dostarczone do portu Państwa przyjmującego, w razie nieobecności kapitana, jego przedstawiciela, przedstawiciela urzędu ubezpieczeniowego lub w braku możliwości podjęcia przez nich odpowiednich środków, właściwe organy Państwa przyjmującego poinformują o tym niezwłocznie urzędnika konsularnego, który jest upoważniony do podjęcia takich środków, jakie mógłby podjąć właściciel, gdyby był obecny.

5. Urzędnik konsularny ma prawo być obecny w postępowaniu wszczętym w celu ustalenia przez właściwe organy Państwa przyjmującego przyczyn awarii statku, osadzenia na mieliźnie lub jego zatonięcia.

6. Statek, który uległ uszkodzeniu, jego wyposażenie, ładunek lub inne przedmioty nie podlegają opłatom celnym lub innym podobnym opłatom na terytorium Państwa przyjmującego, o ile nie zostały dostarczone na sprzedaż lub do użytku w tym Państwie.

#### *Artykuł 23. POMOC UDZIELANA STATKOM PAŃSTWA WYSYLAJĄCEGO PRZEZ ORGANY PAŃSTWA PRZYJMUJĄCEGO*

1. Właściwe organy Państwa przyjmującego udzielą niezbędnej pomocy statkom Państwa wysyłającego.

2. W przypadku gdy członek załogi, który nie jest obywatelem Państwa przyjmującego, opuści statek Państwa wysyłającego na terytorium Państwa przyjmującego bez zgody kapitana, właściwe organy tego Państwa udzielą pomocy w poszukiwaniu takiej osoby, na prośbę kapitana lub urzędnika konsularnego.



*Artykuł 24.* SPRAWOWANIE JURYSDYKCJI NA POKŁADZIE STATKU  
PAŃSTWA WYSYLAJĄCEGO

1. Właściwe organy Państwa przyjmującego mogą wykonywać swoją jurysdykcję co do przestępstw popełnionych na pokładzie statku Państwa wysyłającego znajdującego się na morzu terytorialnym, wodach wewnętrznych lub w porcie, w razie:

- 1) przestępstwa popełnionego przez obywatela Państwa przyjmującego lub na szkodę obywatela tego Państwa;
- 2) przestępstwa naruszającego spokój i bezpieczeństwo portu, na morzu terytorialnym lub na wodach wewnętrznych Państwa przyjmującego;
- 3) przestępstwa naruszającego ustawy lub inne przepisy Państwa przyjmującego dotyczące ochrony zdrowia, bezpieczeństwa życia na morzu, spraw celnych, imigracyjnych, zanieczyszczenia morza lub nielegalnego przewozu albo sprzedaży narkotyków.

2. Niezależnie od postanowień przewidzianych w ustępie 1, właściwe organy Państwa przyjmującego, zgodnie ze swymi ustawami i innymi przepisami, mają prawo również wykonywać swoją jurysdykcję co do przestępstw naruszających spokój publiczny, bezpieczeństwo Państwa przyjmującego lub wyrządzających szkodę interesom tego Państwa. Jednakże bez zgody urzędnika konsularnego lub kapitana statku nie mogą ingerować w wewnętrzne sprawy tego statku.

3. Właściwe organy Państwa przyjmującego mogą na prośbę kapitana statku lub urzędnika konsularnego wykonywać swoją jurysdykcję na pokładzie statku Państwa wysyłającego.

4. W razie gdy właściwe organy Państwa przyjmującego zamierzają zastosować środki przymusu na statku Państwa wysyłającego przeciwko kapitanowi statku, członkom załogi lub pasażerom statku albo zając znajdujące się na nim mienie powinny uprzednio zawiadomić o tym urzędnika konsularnego. W przypadku pilności sprawy, gdy uprzednie zawiadomienie urzędnika konsularnego jest niemożliwe, właściwe organy Państwa przyjmującego powinny niezwłocznie udzielić informacji o związanych z tym faktach i podjętych krokach.

5. Postanowienia ustępu 4 nie mają zastosowania w przypadkach przeprowadzonej przez właściwe organy Państwa przyjmującego zwykłej kontroli w sprawach paszportowych, celnych, sanitarnych, ani przy podejmowaniu działań dla ratowania życia na morzu, bądź zapobiegania zanieczyszczaniu wód, oraz w czasie dochodzenia podjętego na żądanie lub za zgodą kapitana statku.

*Artykuł 25.* WIZYTY NA STATKACH PAŃSTW OBCYCH

Po uprzedniej zgodzie kapitana statku, urzędnik konsularny ma prawo odwiedzić statek, podnoszący banderę jakiegokolwiek innego państwa niż banderę Państwa wysyłającego, płynący do portu lub innego miejsca zakotwiczenia w Państwie wysyłającym. Urzędnik konsularny jest obowiązany przestrzegać przepisów obowiązujące na terenie portu.

*Artykuł 26.* STATKI POWIETRZNE PAŃSTWA WYSYLAJĄCEGO

Postanowienia artykułów 21-25 niniejszej Konwencji będą stosowane również do statków powietrznych Państwa wysyłającego, jak również statków powietrznych czarterowanych przez przedsiębiorstwa Państwa wysyłającego, o ile

obowiązujące wielostronne umowy lotnicze, których stronami są Państwo przyjmujące i Państwo wysyłające, lub dwustronne umowy, nie stanowią inaczej.

*Artykuł 27. WYKONYWANIE FUNKCJI KONSULARNYCH  
W OKRĘGU KONSULARNYM I POZA NIM*

Urzędnik konsularny wykonuje funkcje konsularne w swym okręgu konsularnym. Za zgodą Państwa przyjmującego może również wykonywać funkcje konsularne poza tym okręgiem.

*Artykuł 28. POROZUMIEWANIE SIĘ Z ORGANAMI PAŃSTWA PRZYJMUJĄCEGO*

Przy wykonywaniu swych funkcji urzędnik konsularny może zwracać się do:

- 1) właściwych miejscowych organów swojego okręgu konsularnego;
- 2) właściwych naczelnych organów Państwa przyjmującego, jeżeli zezwalają na to ustawy i inne przepisy oraz zwyczaje tego Państwa albo umowy międzynarodowe.

*Artykuł 29. PRZESTRZEGANIE USTAW I INNYCH PRZEPISÓW  
PAŃSTWA PRZYJMUJĄCEGO*

1. Członkowie urzędu konsularnego oraz członkowie ich rodzin są obowiązani, bez uszczerbku dla ich przywilejów i immunitetów, przestrzegać ustaw i innych przepisów Państwa przyjmującego.

2. Członkowie urzędu konsularnego nie będą wykonywać w Państwie przyjmującym, poza swoimi funkcjami urzędowymi, żadnej działalności zawodowej lub handlowej dla zysku osobistego.

3. Pomieszczenia konsularne nie powinny być używane w sposób niezgodny z wykonywaniem funkcji konsularnych.

4. Środki transportu będące własnością Państwa wysyłającego używane przez urząd konsularny i środki transportu członków urzędu konsularnego i członków ich rodzin podlegają przepisom Państwa przyjmującego w zakresie obowiązkowego ubezpieczenia.

*Artykuł 30. WYKONYWANIE FUNKCJI KONSULARNYCH  
PRZEZ PRZEDSTAWICIELSTWO DYPLMATYCZNE*

1. Przedstawicielstwo dyplmatyczne Państwa wysyłającego może wykonywać funkcje konsularne. W tym przypadku obowiązują postanowienia niniejszej Konwencji.

2. Przedstawicielstwo dyplmatyczne Państwa wysyłającego notyfikuje Ministerstwu Spraw Zagranicznych Państwa przyjmującego imiona, nazwiska i rangę członków przedstawicielstwa dyplmatycznego przydzielonych do wykonywania funkcji konsularnych.

3. Członkowie przedstawicielstwa dyplmatycznego przydzieleni do wykonywania funkcji konsularnych korzystają z przywilejów i immunitetów przysługujących im na podstawie ich statusu dyplmatycznego.

## ROZDZIAŁ TRZECI. UŁATWIENIA, PRZYWIŁĘJE I IMMUNITETY DOTYCZĄCĘ URZĘDÓW KONSULARNYCH

### *Artykuł 31.* UŁATWIENIA W DZIAŁALNOŚCI URZĘDU KONSULARNEGO

Państwo przyjmujące udziela wszelkich ułatwień w wykonywaniu funkcji urzędu konsularnego i zastosuje odpowiednie środki w celu umożliwienia członkom urzędu konsularnego wykonywania ich funkcji bez przeszkód.

### *Artykuł 32.* NABYWANIE POMIESZCZEŃ KONSULARNYCH I MIESZKAŃ

1. Państwo wysyłające lub jego przedstawiciele mają prawo do nabywania na własność, wynajmowania lub nabywania w inny sposób gruntów, budynków i mieszkań dla potrzeb urzędu konsularnego z wyjątkiem mieszkań członków urzędu konsularnego będących obywatelami Państwa przyjmującego lub osób mających w nim miejsce stałego pobytu oraz budowy i przebudowy budynków niezbędnych dla tych potrzeb.

2. Wykonując uprawnienia wymienione w ustępie 1, Państwo wysyłające będzie przestrzegało ustaw i innych przepisów Państwa przyjmującego w zakresie prawa dotyczącego nabywania i użytkowania gruntów, prawa budowlanego, urbanistyki i planowania przestrzennego.

3. Państwo przyjmujące, zgodnie ze swymi ustawami i innymi przepisami, ułatwi urzędowi konsularnemu Państwa wysyłającego nabywanie odpowiednich pomieszczeń przeznaczonych dla potrzeb urzędu konsularnego. W razie potrzeby Państwo przyjmujące udzieli pomocy Państwu wysyłającemu w nabywaniu mieszkań dla członków urzędu konsularnego.

### *Artykuł 33.* UŻYWANIE FLAGI I GODŁA PAŃSTWOWEGO

1. Państwo wysyłające ma prawo umieszczać godło na budynku zajmowanym przez urząd konsularny i na jego drzwiach wejściowych, jak również na rezydencji kierownika urzędu oraz na budynku urzędu konsularnego odpowiedni napis oznaczający urząd konsularny w językach Państwa wysyłającego i Państwa przyjmującego.

2. Państwo wysyłające ma prawo wywieszać swoją flagę na budynku urzędu konsularnego i na rezydencji kierownika urzędu konsularnego, a także na środkach jego transportu w czasie, gdy są używane do celów urzędowych.

### *Artykuł 34.* NIETYKALNOŚĆ POMIESZCZEŃ KONSULARNYCH ORAZ MIESZKAŃ URZĘDNIKÓW KONSULARNYCH

1. Pomieszczenia konsularne oraz mieszkania urzędników konsularnych są nietykalne. Organy Państwa przyjmującego nie mogą do nich wkraczać bez zgody kierownika urzędu konsularnego lub kierownika przedstawicielstwa dyplomatycznego Państwa wysyłającego w Państwie przyjmującym lub bez uzyskania na to zgody upoważnionej osoby przez któregośkolwiek z nich.

2. Państwo przyjmujące podejmie wszelkie właściwe środki dla ochrony pomieszczeń konsularnych przed wtargnięciem lub szkodą oraz dla zapobieżenia jakiegokolwiek zakłóceniu spokoju urzędu konsularnego lub uchybieniu jego godności.

### *Artykuł 35.* NIETYKALNOŚĆ ARCHIWÓW

Archiwa konsularne są nietykalne w każdym czasie i niezależnie od tego, gdzie się znajdują.

### *Artykuł 36.* SWOBODA POROZUMIEWANIA SIĘ

1. Państwo przyjmujące dopuszcza i ochrania swobodę porozumiewania się urzędu konsularnego do wszelkich celów urzędowych. Przy porozumiewaniu się z rządem, przedstawicielstwami dyplomatycznymi oraz innymi urzędami konsularnymi Państwa wysyłającego bez względu na to, gdzie się znajdują, urząd konsularny może używać wszelkich odpowiednich środków łączności, łącznie z kurierami dyplomatycznymi lub konsularnymi, pocztą dyplomatyczną lub konsularną oraz korespondencją sporządzoną kodem lub szyfrem. Urząd konsularny może zainstalować nadajnik radiowy i używać go jedynie za zgodą Państwa przyjmującego.

2. Korespondencja urzędowa urzędu konsularnego jest nietykalna.

3. Poczta konsularna powinna być opieczętowana i posiadać widoczne zewnętrzne oznaczenia jej charakteru i może zawierać tylko korespondencję urzędową i dokumenty lub przedmioty przeznaczone wyłącznie do użytku urzędowego urzędu konsularnego.

4. Poczta konsularna nie będzie otwierana lub zatrzymywana.

5. Kurier konsularny powinien być zaopatrzony w urzędowy dokument stwierdzający jego status i określający liczbę paczek stanowiących pocztę konsularną. Kurier konsularny może być tylko obywatelem Państwa wysyłającego nie posiadającym miejsca stałego pobytu w Państwie przyjmującym. W czasie wykonywania swych obowiązków służbowych kurier konsularny znajduje się pod ochroną Państwa przyjmującego i korzysta z nietykalności osobistej oraz nie będzie podlegał zatrzymaniu, aresztowaniu ani ograniczeniu wolności osobistej w jakiegokolwiek innej formie.

6. Poczta konsularna może być powierzona kapitanowi statku lub statku powietrznego Państwa wysyłającego. Kapitan ten będzie zaopatrzony w urzędowy dokument określający liczbę paczek stanowiących pocztę konsularną. Nie będzie on jednakże uważany za kuriera konsularnego. Na podstawie porozumienia z właściwymi organami Państwa przyjmującego, urzędnik konsularny może bezpośrednio odebrać pocztę konsularną lub przekazać ją kapitanowi statku.

### *Artykuł 37.* ZWOLNIENIE OD REKWIZYCJI

Pomieszczenia konsularne, ich urządzenia, mienie urzędu konsularnego, jak również jego środki transportu nie podlegają żadnej formie rekwizycji dla celów obrony narodowej lub użyteczności publicznej. Jeżeli na te cele niezbędne jest wyłączenie, powinny być przedsięwzięte wszelkie odpowiednie środki dla uniknięcia utrudnienia wykonywania funkcji konsularnych i powinno być niezwłocznie wypłacone Państwu wysyłającemu pełne i efektywne odszkodowanie.

### *Artykuł 38.* ZWOLNIENIE OD PODATKÓW I OPŁAT POMIESZCZEŃ KONSULARNYCH, MIESZKAŃ I ŚRODKÓW TRANSPORTU

1. Pomieszczenia konsularne, a także mieszkania urzędników konsularnych, których właścicielem lub najemcą jest Państwo wysyłające, jak również wszelkie środki transportu urzędu konsularnego są zwolnione w Państwie przyjmującym

od wszelkich państwowych, terenowych lub komunalnych podatków i opłat, z wyjątkiem opłat pobieranych za specjalnie świadczone usługi.

2. Zwolnień wymienionych w ustępie 1 nie stosuje się do podatków i opłat, które muszą być uiszczone zgodnie z ustawami i innymi przepisami Państwa przyjmującego przez osobę zawierającą umowę z Państwem wysyłającym lub z osobą działającą w jego imieniu.

#### *Artykuł 39.* OPLATY I INNE NALEŻNOŚCI KONSULARNE

1. Urząd konsularny może pobierać na terytorium Państwa przyjmującego za dokonane czynności konsularne opłaty oraz inne należności zgodnie z ustawami i innymi przepisami Państwa wysyłającego.

2. Opłaty i inne należności wymienione w ustępie 1 nie podlegają jakimkolwiek podatkom i opłatom w Państwie przyjmującym.

### ROZDZIAŁ CZWARTY. PRZYWILEJE I IMMUNITETY CZŁONKÓW URZĘDU KONSULARNEGO

#### *Artykuł 40.* OCHRONA CZŁONKÓW URZĘDU KONSULARNEGO

Państwo przyjmujące będzie traktowało członków urzędu konsularnego z należnym szacunkiem i zastosuje wszelkie środki dla zapobiegania jakimkolwiek zamachom na ich osoby, wolność lub godność.

#### *Artykuł 41.* SWOBODA PORUSZANIA SIĘ

Z zastrzeżeniem swych ustaw i innych przepisów dotyczących stref, do których wstęp ze względu na bezpieczeństwo państwa jest zabroniony lub ograniczony, Państwo przyjmujące zapewni wszystkim członkom urzędu konsularnego swobodę poruszania się i podróżowania na swym terytorium.

#### *Artykuł 42.* IMMUNITET JURYSDYKCYJNY

1. Urzędnicy konsularni nie podlegają jurysdykcji karnej, cywilnej i administracyjnej Państwa przyjmującego. Korzystają oni z nietykalności osobistej i w związku z tym nie podlegają zatrzymaniu, aresztowaniu lub ograniczeniu wolności osobistej w jakiegokolwiek innej formie.

2. Pracownicy konsularni nie podlegają jurysdykcji karnej, cywilnej i administracyjnej Państwa przyjmującego w odniesieniu do czynności dokonanych w zakresie ich obowiązków urzędowych.

3. Postanowień ustępów 1 i 2 nie stosuje się do następujących spraw cywilnych:

- 1) wynikłych z zawarcia umowy przez członka urzędu konsularnego, w której nie występował on wyraźnie lub w sposób dorozumiany jako przedstawiciel Państwa wysyłającego;
- 2) wytoczonych na skutek szkody powstałej w wyniku wypadku w Państwie przyjmującym, spowodowanego przez pojazd, statek lub statek powietrzny;
- 3) dotyczących spadków, w których członek urzędu konsularnego występuje wyłącznie jako osoba prywatna w charakterze spadkobiercy, zapisobiercy, wykonawcy testamentu, zarządcy lub kuratora spadku, a nie jako przedstawiciel Państwa wysyłającego.

4. W przypadku wszczęcia postępowania karnego przeciwko pracownikowi konsularnemu lub w razie jego zatrzymania, aresztowania lub pozbawienia wolności osobistej w jakiegokolwiek innej formie, właściwe organy Państwa przyjmującego powiadomią o tym niezwłocznie kierownika urzędu konsularnego. W czasie tego postępowania Państwo przyjmujące będzie traktować pracownika konsularnego z należytyim szacunkiem i powinno unikać wszelkich przeszkód w wykonywaniu przez niego obowiązków urzędowych.

#### *Artykuł 43. OBOWIĄZEK SKŁADANIA ZEZNAŃ*

1. Członkowie urzędu konsularnego mogą być wzywani do składania zeznań w charakterze świadków przed sądami i innymi właściwymi organami Państwa przyjmującego. Jeżeli urzędnik konsularny odmawia stawienia się lub złożenia zeznań, nie można wobec niego stosować środka przymusu ani sankcji. Pracownicy konsularni nie mogą odmówić złożenia zeznań, z wyjątkiem przypadków określonych w ustępie 3.

2. Właściwy organ Państwa przyjmującego, wzywający członka urzędu konsularnego do złożenia zeznań, nie powinien utrudniać wykonywania jego obowiązków urzędowych. Może on, gdy jest to możliwe, przyjąć takie zeznanie od członka urzędu konsularnego w urzędzie konsularnym, w mieszkaniu członka urzędu konsularnego albo przyjmując od niego oświadczenie na piśmie.

3. Członkowie urzędu konsularnego nie są obowiązani do składania zeznań co do faktów związanych z wykonywaniem swych obowiązków urzędowych ani do przedkładania urzędowej korespondencji lub innych dokumentów z archiwów konsularnych.

4. Członkowie urzędu konsularnego nie mają obowiązku składania zeznań jako rzeczoznawcy w zakresie prawa Państwa wysyłającego.

#### *Artykuł 44. ZWOLNIENIE OD ŚWIADCZEŃ OSOBISTYCH I RZECZOWYCH*

Państwo przyjmujące powinno zwalniać członków urzędu konsularnego od wszelkich świadczeń osobistych, od wszelkiej służby publicznej jakiegokolwiek rodzaju oraz od obciążeń wojskowych takich, jak związane z rekwizycją, daninami i zakwaterowaniem. Będą oni również zwolnieni, zgodnie z ustawami i innymi przepisami Państwa przyjmującego, od obowiązku rejestracji cudzoziemców, zezwoleń na pobyt, zezwoleń na zatrudnienie i innych tego rodzaju formalności dotyczących cudzoziemców.

#### *Artykuł 45. ZWOLNIENIE CZŁONKÓW URZĘDU KONSULARNEGO OD OPODATKOWANIA*

1. Członkowie urzędu konsularnego są zwolnieni od wszelkich podatków i opłat państwowych, terenowych i komunalnych Państwa przyjmującego, z wyjątkiem:

- 1) podatków pośrednich, które normalnie wliczane są w cenę towarów lub usług;
- 2) podatków i opłat od nieruchomości stanowiących własność prywatną, położonych na terytorium Państwa przyjmującego;
- 3) podatków spadkowych i podatków od przeniesienia prawa własności, pobieranych przez Państwo przyjmujące, z zastrzeżeniem postanowień artykułu 47 niniejszej Konwencji;

- 4) podatków i opłat od wszelkiego rodzaju dochodów prywatnych, mających swe źródło w Państwie przyjmującym;
- 5) opłat pobieranych za specjalnie świadczone usługi;
- 6) opłat rejestracyjnych, sądowych, hipotecznych i skarbowych, z zastrzeżeniem postanowień artykułu 38 niniejszej Konwencji.

2. Członkowie urzędu konsularnego, zatrudniający osoby, których wynagrodzenia lub uposażenia nie są zwolnione od podatków od dochodów w Państwie przyjmującym, powinni wypełniać obowiązki nakładane na pracodawców przez ustawy i inne przepisy tego Państwa w zakresie pobierania podatku od dochodów.

#### *Artykuł 46. ZWOLNIENIE OD OPŁAT CELNYCH I REWIZJI CELNEJ*

1. Zgodnie ze swymi ustawami i innymi przepisami Państwo przyjmujące zezwala na wwóz i wywóz oraz przyznaje zwolnienie z wszelkich opłat celnych i innych opłat z tym związanych, z wyjątkiem opłat za składowanie, przewóz i podobne usługi:

- 1) przedmiotów i środków transportu przeznaczonych do użytku służbowego urzędu konsularnego;
- 2) przedmiotów i środków transportu przeznaczonych do osobistego użytku urzędnika konsularnego, łącznie z przedmiotami przeznaczonymi dla urzędu. Artykuły konsumpcyjne nie powinny przekraczać ilości koniecznych do bezpośrednich potrzeb urzędnika konsularnego;
- 3) przedmiotów i środków transportu, sprowadzonych w momencie pierwszego urzędowania się urzędzie konsularnym przez pracownika konsularnego.

2. Bagaż osobisty urzędnika konsularnego jest zwolniony od rewizji celnej. Może on być poddawany tej rewizji tylko wówczas, gdy istnieją poważne powody do przypuszczenia, że zawiera przedmioty inne, niż wymienione w punkcie 2 ustępu 1, albo przedmioty, których wwóz lub wywóz jest zabroniony przez ustawy i inne przepisy Państwa przyjmującego lub które podlegają jego ustawom i innym przepisom o kwarantannie. Rewizja taka powinna być dokonywana w obecności zainteresowanego urzędnika konsularnego lub jego przedstawiciela.

#### *Artykuł 47. SPADEK PO CZŁONKU URZĘDU KONSULARNEGO*

W razie śmierci członka urzędu konsularnego lub członka jego rodziny albo członka służby prywatnej, który nie posiadał obywatelstwa Państwa przyjmującego lub miejsca stałego pobytu w tym Państwie, Państwo przyjmujące jest obowiązane:

- 1) zezwolić na wywóz ruchomego mienia zmarłego, z wyjątkiem takiego mienia nabytego w Państwie przyjmującym, którego wywóz był zabroniony w chwili śmierci danej osoby;
- 2) nie pobierać podatków spadkowych ani podatków od przeniesienia prawa własności co do mienia ruchomego pozostawionego przez zmarłego w tym Państwie.

#### *Artykuł 48. PRZYWILEJE I IMMUNITETY CZŁONKÓW RODZIN CZŁONKÓW URZĘDU KONSULARNEGO I CZŁONKÓW PERSONELU PRYWATNEGO*

1. Członkowie rodzin członków urzędu konsularnego korzystają odpowiednio z przywilejów i immunitetów przyznawanych w niniejszej Konwencji

członkom urzędu konsularnego. Niniejsze postanowienia nie dotyczą osób, które są obywatelami Państwa przyjmującego lub mają miejsce stałego pobytu w tym Państwie albo które wykonują w nim działalność zarobkową.

2. Pracownicy konsularni, którzy są obywatelami Państwa przyjmującego lub mają miejsce stałego pobytu w tym Państwie, nie korzystają z przywilejów i immunitetów określonych w niniejszej Konwencji, z wyjątkiem postanowień artykułu 43 ustępu 3 niniejszej Konwencji.

3. Z wyjątkiem postanowień artykułu 47 niniejszej Konwencji, przywileje i immunitety określone w niniejszej Konwencji nie będą przyznawane członkom personelu prywatnego.

#### Artykuł 49. ZRZECZENIE SIĘ PRZYWILEJÓW I IMMUNITETÓW

1. Państwo wysyłające może zrzec się przywilejów i immunitetów określonych w artykułach 42 i 43 niniejszej Konwencji. To zrzeczenie się powinno być wyraźne i zakomunikowane Państwu przyjmującemu na piśmie.

2. Wszczęcie przez członka urzędu konsularnego lub członka jego rodziny postępowania w przypadku, w którym mógłby korzystać z immunitetu jurysdykcyjnego, pozbawia go prawa powoływania się na immunitet w stosunku do jakiegokolwiek powództwa wzajemnego, bezpośrednio związanego z powództwem głównym.

3. Zrzeczenie się immunitetu od jurysdykcji w odniesieniu do postępowania sądowego lub administracyjnego nie jest uważane za pociągające za sobą zrzeczenie się immunitetu w stosunku do środków wykonania orzeczenia. W stosunku do takich środków niezbędne jest odrębne zrzeczenie się.

#### ROZDZIAŁ PIĄTY. POSTANOWIENIA KONCOWE

##### Artykuł 50. RATYFIKACJA, WEJŚCIE W ŻYCIE I WYGAŚNIĘCIE

1. Konwencja niniejsza podlega ratyfikacji i wejdzie w życie po upływie trzydziestego dnia od dnia wymiany dokumentów ratyfikacyjnych, która nastąpi w Warszawie.

2. Konwencja niniejsza zawarta jest na czas nieokreślony. Może ona być wypowiedziana w drodze notyfikacji przez każdą z Umawiających się Stron. W takim przypadku utraci moc po upływie dwunastu miesięcy od dnia wypowiedzenia.

SPORZĄDZONO w Pekinie dnia 14 lipca 1984 roku, w dwóch egzemplarzach, każdy w językach polskim i chińskim, przy czym obydwie teksty mają jednakową moc.

NA DOWÓD CZEGO Pełnomocnicy Umawiających się Stron podpisali niniejszą Konwencję i opatrzyli ją pieczęciami.

Z upoważnienia  
Rządu Polskiej Rzeczypospolitej  
Ludowej:

[Signed — Signé]<sup>1</sup>

Z upoważnienia  
Rządu Chińskiej Republiki  
Ludowej:

[Signed — Signé]<sup>2</sup>

<sup>1</sup> Signed by Ernest Kucza — Signé par Ernest Kucza.

<sup>2</sup> Signed by Qian Qichen — Signé par Qian Qichen.



[TRANSLATION — TRADUCTION]

CONSULAR CONVENTION<sup>1</sup> BETWEEN THE GOVERNMENT OF  
THE PEOPLE'S REPUBLIC OF CHINA AND THE POLISH  
PEOPLE'S REPUBLIC

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The Government of the People's Republic of China and the Government of the Polish People's Republic,

Desiring to regulate and strengthen consular relations with a view to developing friendly and co-operative relations between the two States, on the basis of the principles of mutual respect for sovereignty, non-intervention in the internal affairs of the other State, equality and mutual benefit,

Have decided to conclude this Consular Convention and have for that purpose appointed as their plenipotentiaries:

The Government of the People's Republic of China:

Qian Qichen, Deputy Minister for Foreign Affairs,

The Government of the Polish People's Republic:

Ernest Kucza, Under-Secretary of State in the Ministry of Foreign Affairs; who, having exchanged their full powers, found in good and due form, have agreed on the following provisions:

*Article 1. DEFINITIONS*

For the purposes of this Convention, the following expressions have the meanings hereunder assigned to them:

(1) "Consular post" means any consulate-general, consulate, vice-consulate or consular agency;

(2) "Consular district" means the area assigned to the consular post for the exercise of consular functions;

(3) "Head of the consular post" means the person entrusted by the sending State with acting in that capacity;

(4) "Consular officer" means any person, including the head of the consular post, entrusted in that capacity with the exercise of consular functions;

(5) "Consular employee" means any person performing administrative, technical or service functions at the consular post;

(6) "Members of the consular post" means consular officers and consular employees;

(7) "Member of the private staff" means a person employed exclusively in the private service of a member of the consular post;

(8) "Family member" means the spouse of a member of the consular post and those children of the member of the consular post who reside with him;

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<sup>1</sup> Came into force on 21 February 1985, i.e., the thirtieth day after the exchange of the instruments of ratification, which took place at Warsaw on 22 January 1985, in accordance with article 50 (1).

(9) “Consular premises” means the buildings or parts of buildings and the land ancillary thereto, irrespective of ownership, used exclusively for the purposes of the consular post;

(10) “Consular archives” means all the papers, documents, correspondence, books, films, photographs, recording tapes, registers and seals of the consular post, together with ciphers and codes, card-indexes and any article of furniture intended for their protection or safekeeping;

(11) “Vessel of the sending State” means any floating craft used for navigation on water and flying the flag of the sending State, with the exception of warships;

(12) “Aircraft of the sending State” means any flying craft registered in the sending State and entitled to bear the nationality markings of that State, with the exception of military aircraft;

(13) “National of the sending State” means an individual possessing the nationality of the sending State and, where appropriate, a body corporate of that State.

## CHAPTER ONE. ESTABLISHMENT OF CONSULAR POSTS AND APPOINTMENT OF THE MEMBERS OF CONSULAR POSTS

### *Article 2. ESTABLISHMENT OF CONSULAR POSTS*

1. A consular post of the sending State may be established in the territory of the receiving State only with the latter State’s consent.

2. The seat of the consular post, its classification and the consular district, as well as all subsequent changes, shall be established by agreement between the sending State and the receiving State.

### *Article 3. APPOINTMENT AND ADMISSION OF THE HEADS OF CONSULAR POSTS*

1. The heads of consular posts shall be appointed by the sending State. The sending State shall, through the diplomatic channel, transmit to the Ministry of Foreign Affairs of the receiving State the consular commission relating to the appointment of the head of the consular post. The consular commission shall include the full name and rank of the head of the consular post, the seat and classification of the consular post and the designation of the consular district.

2. Upon receipt of the consular commission relating to the appointment of the head of the consular post, the receiving State must without delay issue an exequatur. If the receiving State refuses to grant the exequatur, it shall not be required to give the sending State an explanation of the reasons for the refusal.

3. The head of the consular post shall be admitted to the exercise of his functions after the issuance of the exequatur.

4. Pending delivery of the exequatur, the head of the consular post may be admitted to the exercise of his functions on a provisional basis with the consent of the receiving State. In such case, the provisions of this Convention shall apply.

### *Article 4. TEMPORARY EXERCISE OF THE FUNCTIONS OF HEAD OF THE CONSULAR POST*

1. If the head of the consular post is unable for any reason to exercise his functions or if his position is temporarily vacant, the sending State may appoint a

consular officer of one of its consular posts in the receiving State or a member of the diplomatic staff of its diplomatic mission in that State to exercise the functions of temporary head of the consular post in the receiving State. The sending State shall notify to the Ministry of Foreign Affairs of the receiving State in advance the full name and most recent rank of the person temporarily exercising the functions of head of the consular post.

2. The temporary head of the consular post shall be entitled to the same facilities, privileges and immunities which are enjoyed by the head of the consular post under this Convention.

3. A member of the diplomatic staff who is appointed to exercise the functions of head of the consular post in accordance with paragraph 1 shall continue to enjoy the diplomatic privileges and immunities to which he is entitled.

*Article 5. NOTIFICATION OF THE AUTHORITIES OF THE CONSULAR DISTRICT*

After the exequatur has been delivered by the receiving State, or as soon as the head of the consular post is admitted, even temporarily, to the exercise of his functions, the receiving State must so notify the competent authorities of the consular district. It must also ensure that the necessary measures are taken to enable the head of the consular post to perform his official functions and enjoy the facilities, privileges and immunities provided for in this Convention.

*Article 6. NOTIFICATION OF ARRIVALS AND DEPARTURES*

The sending State shall notify the Ministry of Foreign Affairs of the receiving State, or the competent authority of the consular district, in good time of the following:

- (1) The appointment of members of the consular post, their full name, nationality, rank, date of arrival, date of final departure or of the termination of the exercise of their functions, and other changes affecting their status during their service at the consular post;
- (2) The arrival and final departure of a family member, his full name and nationality and the fact that a person becomes or ceases to be a family member;
- (3) The arrival and final departure of members of the private staff, their full name and nationality, the functions performed by them and the termination of their service;
- (4) The engagement and discharge of consular employees who are nationals or permanent residents of the receiving State.

*Article 7. NATIONALITY OF MEMBERS OF THE CONSULAR POST AND MEMBERS OF THE PRIVATE STAFF*

1. Consular officers must be nationals of the sending State and must not be permanent residents of the receiving State.

2. Consular employees and members of the private staff must be nationals of the sending State or of the receiving State.

*Article 8. IDENTITY DOCUMENTS*

1. The competent authorities of the receiving State shall issue identity documents free of charge to each member of the consular post and to each family member.

2. The provisions of paragraph 1 shall not apply to nationals or permanent residents of the receiving State.

**Article 9. TERMINATION OF THE EXERCISE OF THE FUNCTIONS  
OF MEMBERS OF THE CONSULAR POST**

1. The receiving State may at any time, without being required to explain the reasons for its decision, notify the sending State through the diplomatic channel that the exequatur issued to the head of the consular post has been revoked or that a consular officer is considered *persona non grata* or that a consular employee is unacceptable. In such case, the sending State shall recall the person concerned or terminate his functions at the consular post.

2. The exercise of the functions of a member of the consular post shall be subject to termination, *inter alia*, through:

- (1) Revocation of the exequatur by the receiving State;
- (2) Notification of the sending State by the receiving State that a particular consular officer has been declared *persona non grata* or that a particular consular employee has been declared unacceptable;
- (3) Notification of the receiving State by the sending State that the functions of a particular person have been terminated.

**CHAPTER TWO. CONSULAR FUNCTIONS**

**Article 10. FUNCTIONS OF CONSULAR OFFICERS**

The functions of consular officers shall be:

- (1) To protect the rights and interests of the sending State and its nationals in the receiving State and to provide assistance to nationals of the sending State;
- (2) To foster the development of friendly relations between the sending State and the receiving State in the field of economics, trade, culture, science and tourism;
- (3) To obtain by every legal means information concerning the receiving State in the sphere of politics, economics, trade, culture, science and tourism and report thereon to the Government of the sending State;
- (4) To exercise other functions entrusted to them by the sending State which do not violate the laws and regulations of the receiving State or to which the latter State does not object.

**Article 11. COMMUNICATION WITH NATIONALS OF THE SENDING STATE**

1. The consular officer shall have the right to communicate and meet with any national of the sending State within his consular district, provide him with assistance and secure legal counsel for him.

2. The receiving State shall not in any way restrict the ability of a national of the sending State to communicate with the consular post or his access to that post.

**Article 12. REPRESENTATION OF NATIONALS OF THE SENDING STATE**

Where a national of the sending State is unable to undertake the defence of his rights and interests at the proper time because he is not present in the receiving State or for any other reason, the consular officer shall have the right, subject to

the laws and regulations of the receiving State, to represent the said national before the courts or other authorities of the receiving State or to provide appropriate representation for him until such time as the said national appoints his own agent or himself undertakes the defence of his rights and interests.

*Article 13.* KEEPING OF A REGISTER OF NATIONALS  
AND ISSUANCE OF DOCUMENTS

1. The consular officer shall be entitled:

- (1) To keep a register of nationals of the sending State;
- (2) To keep a register of births and deaths of nationals of the sending State and to issue the appropriate documents. This provision shall not, however, exempt nationals of the sending State from the obligation to comply with the relevant laws and regulations of the receiving State;
- (3) To take any actions relating to the contracting of marriage between nationals of the sending State and to issue documents attesting to the contracting of marriage in accordance with the law of the sending State;
- (4) To issue passports and other travel documents to nationals of the sending State and to extend, alter or revoke them;
- (5) To issue or extend visas.

2. The competent authorities of the receiving State shall, at the request of the consular officer, transmit for official purposes, without delay and free of charge, relevant documents relating to nationals of the sending State.

*Article 14.* NOTARIAL FUNCTIONS AND LEGALIZATION

1. The consular officer shall be entitled:

- (1) To authenticate all documents of nationals of the sending State, to certify the accuracy of all copies, extracts, photocopies or translations of such documents and to authenticate the signatures of nationals of the sending State on documents of all kinds;
- (2) To authenticate signatures and seals on documents issued by the authorities of the sending State or the receiving State;
- (3) To translate documents of all kinds into the official language of the sending or of the receiving State and to certify the accuracy of the translations;
- (4) To accept and authenticate declarations made by nationals of the sending State;
- (5) To accept, draw up and authenticate wills and other documents relating to unilateral legal acts of nationals of the sending State carried out in accordance with the law of that State;
- (6) To issue and authenticate certificates of origin of goods;
- (7) To exercise other notarial and legalization functions entrusted to him by the sending State.

2. Documents drawn up, certified or legalized by consular officers of the sending State shall have the same value and effect in the receiving State as documents drawn up, certified or legalized by the latter State's own authorities, provided that their substance is not contrary to its laws and regulations.

*Article 15.* ACCEPTANCE OF DOCUMENTS AND ARTICLES FOR SAFEKEEPING

1. The consular officer shall be entitled, subject to the laws and regulations of the receiving State, to accept for safekeeping documents, money or articles of value from a national of the sending State.

2. The consular officer shall also be entitled to accept for safekeeping articles lost in the receiving State by a national of the sending State, for the purpose of returning them to their owner.

3. Where a national of the sending State who is not a permanent resident of the receiving State dies in the latter State, the competent authorities of the receiving State shall take charge of the deceased's property left in that State and transmit it, without any legal formalities, to the consular officer. The consular officer shall pay all debts left unpaid by the deceased in the receiving State, up to the total value of the said property.

*Article 16.* ESTABLISHMENT OF GUARDIANSHIP OR CURATORSHIP

1. The competent authorities of the receiving State shall notify the consular officer of the need to establish guardianship or curatorship in respect of a national of the sending State who is a permanent resident of the receiving State.

2. In the cases referred to in paragraph 1, the consular officer shall cooperate with the competent authorities of the receiving State and shall, where necessary, recommend a person to serve as guardian or curator.

*Article 17.* ARREST NOTIFICATIONS AND VISITS

1. Where a national of the sending State is detained, arrested or deprived of freedom in any other manner, the competent authorities of the receiving State shall so notify the consular officer not later than seven days from the date on which the measures referred to were taken.

2. The consular officer shall be entitled to visit a national of the sending State who has been detained, arrested or deprived of his freedom in any other manner, with a view to conversing with him and providing him with assistance, including legal counsel, and also entitled to correspond with him. The visit shall take place as soon as possible, but the competent authorities of the receiving State may not refuse the visit after the expiry of three days from the date of notification. Subsequent visits may take place at reasonable intervals of time.

3. The consular officer shall be entitled to visit a national of the sending State who is serving a term of deprivation of freedom in the receiving State.

4. The competent authorities of the receiving State shall inform the persons affected by the provisions of this article of all their rights under these provisions.

5. The rights specified in this article shall be exercised in accordance with the laws and regulations of the receiving State, subject to the condition that such laws and regulations shall not annul the said rights.

*Article 18.* NOTIFICATION OF ACCIDENTS AND DEATHS

1. The competent authorities of the receiving State shall without delay notify the consular officer concerning accidents which cause death or serious bodily injury to nationals of the sending State.

2. Upon receiving information concerning the death of a national of the sending State in the receiving State, the competent authorities of the receiving State shall without delay notify the consular officer of the death of the national of the sending State and shall, at the consular officer's request, transmit to him free of charge the death certificate or a copy or transcript of any other document attesting to the death.

*Article 19. FUNCTIONS IN MATTERS OF SUCCESSION*

1. Where a national of the sending State mentioned as an heir or legatee in connection with a succession is entitled to inherit all or part of an estate or to receive a legacy left by a person of any nationality who has died in the receiving State, the competent authorities of the receiving State shall without delay inform the consular officer of the opening of the succession.

2. In the event of the death in the receiving State of a national of the sending State who has left an estate in the receiving State, the competent authorities of the receiving State shall without delay inform the consular officer of the composition and whereabouts of the estate and also of the whereabouts of the persons entitled to the estate. If the deceased left a will, the competent authorities of the receiving State shall transmit a copy thereof to the consular officer at his request.

3. The consular officer may, without requiring a power of attorney, represent before the courts and other authorities of the receiving State, directly or through his agent, a national of the sending State who is entitled or has a claim to an estate in the receiving State, if the said national is absent or unable to participate in the succession proceedings. The representation shall cease when the national or his agent himself undertakes the defence of his rights and interests. While representing a national of the sending State, the consular officer must comply with the laws and regulations in force in the receiving State.

4. The competent authorities of the receiving State shall, in accordance with their laws and regulations, take all appropriate steps to safeguard the estate referred to in paragraph 2 and shall without delay inform the consular officer of the steps taken. The consular officer shall have the right to be present during the inventorying, sealing, unsealing and sale of the estate property and also during the taking of any steps for the safeguarding of the estate.

5. As soon as the succession proceedings or other official procedures have been concluded, the competent authorities of the receiving State shall so notify the consular officer without delay, and after the settlement of any debts, taxes and charges, they shall without delay deliver to him the estate or the shares of the estate belonging to the persons whom he represents.

6. The consular officer shall have the right to receive money or other property due by reason of succession, compensation, pensions or insurance policies or any other money due, for delivery to entitled persons who are not permanent residents of the receiving State.

7. The delivery of property and money from the receiving State in pursuance of paragraphs 5 and 6 may be carried out by the consular officer only in accordance with the laws and regulations of that State.

*Article 20. DELIVERY OF DOCUMENTS*

The consular officer shall have the right, at the request of the competent authorities of the sending State, to receive voluntary declarations from nationals

of the sending State in accordance with the laws and regulations of the receiving State or to deliver judicial and non-judicial documents to such nationals.

*Article 21. PROVISION OF AID TO VESSELS OF THE SENDING STATE*

1. The consular officer shall be entitled to provide aid of every kind to vessels of the sending State which are in the territorial sea, inland waters, ports or other anchoring places of the receiving State.

2. While carrying out the functions referred to in paragraph 1, the consular officer shall be entitled:

- (1) To go on board the vessel and take statements concerning the vessel, its cargo and its voyage;
- (2) To receive visits from the master or any member of the crew and, where necessary, to arrange for their hospitalization or repatriation;
- (3) To receive, inspect, authenticate, draw up or extend certificates or other documents relating to the vessel;
- (4) To settle disputes between the master and members of the crew or between members of the crew, including disputes relating to contracts of service or conditions of work, in accordance with the law of the sending State;
- (5) In accordance with the laws and regulations of the sending State, to supervise and inspect the vessel, to conduct investigations concerning events that have taken place during the voyage, and to take steps designed to ensure discipline and order on board the vessel;
- (6) To provide the master or members of the crew with protection and assistance in their relations with the courts and other authorities of the receiving State and, to that end, to provide them with legal counsel and with the services of an interpreter or of any other person;
- (7) To perform any other activities provided for by the law of the sending State in maritime matters, provided that they are not contrary to the laws and regulations of the receiving State.

3. While carrying out the functions referred to in this article, the consular officer shall be required to comply with the laws and regulations of the receiving State.

4. The competent authorities of the receiving State shall recognize all steps taken by the consular officer, in accordance with the laws and regulations of the sending State, with respect to the latter State's vessels and their crews. In carrying out such functions, the consular officer may apply to the competent authorities of the receiving State for assistance.

*Article 22. DAMAGED VESSELS OF THE SENDING STATE*

1. Where a vessel of the sending State is sunk or stranded or suffers other substantial damage in the inland waters or territorial sea of the receiving State, the competent authorities of the receiving State shall so notify the consular officer without delay.

2. In the cases referred to in paragraph 1, the consular officer shall be entitled to provide assistance to the vessel and its crew and also to request assistance from the receiving State.



3. In the cases referred to in paragraph 1, the competent authorities of the receiving State shall take all necessary steps to arrange for the rescue of the passengers and crew members. Irrespective of the foregoing, at the request of the master of the vessel or of the consular officer, the said authorities shall provide the necessary assistance for the rescue and protection of the vessel, its equipment or its cargo and also of articles belonging to the vessel or its cargo which have become separated from the vessel.

4. Where the equipment, cargo, supplies or other articles which have become separated from a wrecked vessel of the sending State are found on or near the coast or brought to a port of the receiving State, in the event of the absence of the master, his agent or an agent of the insurance carrier, or in the event of their inability to take appropriate action, the competent authorities of the receiving State shall without delay notify the consular officer, who shall be empowered to take such action as the owner might have taken if he had been present.

5. The consular officer shall be entitled to be present at any proceeding undertaken for the purpose of enabling the competent authorities of the receiving State to establish the causes of the damaging, grounding or sinking of the vessel.

6. The damaged vessel, its equipment, its cargo or other articles belonging to it shall not be subject to customs duty or other similar duty in the territory of the receiving State, provided that they are not sold or used in that State.

*Article 23.* ASSISTANCE PROVIDED TO VESSELS OF THE SENDING STATE  
BY THE AUTHORITIES OF THE RECEIVING STATE

1. The competent authorities of the receiving State shall provide the necessary assistance to vessels of the sending State.

2. Where a crew member who is not a national of the receiving State leaves a vessel of the sending State in the territory of the receiving State without the consent of the master, the competent authorities of the latter State shall provide assistance in finding such a person at the request of the master or the consular officer.

*Article 24.* EXERCISE OF JURISDICTION ON BOARD A VESSEL  
OF THE SENDING STATE

1. The competent authorities of the receiving State may exercise their jurisdiction in respect of offences committed on board a vessel of the sending State which is in the territorial sea, inland waters or a port of the receiving State, where:

- (1) The offence was committed by or against a national of the receiving State;
- (2) The offence is one which disturbs the peace and security of a port or peace and security in the territorial sea or inland waters of the receiving State;
- (3) The offence violates the laws or regulations of the receiving State which relate to protection of health, safety of life at sea, customs or immigration matters, marine pollution or the illegal transport or sale of narcotics.

2. Irrespective of the provisions of paragraph 1, the competent authorities of the receiving State shall, in accordance with their laws and regulations, also have the right to exercise their jurisdiction in respect of offences which disturb public order or the security of the receiving State or are damaging to its interests.

They may not, however, without the consent of the consular officer or the master of the vessel, interfere in the vessel's internal affairs.

3. The competent authorities of the receiving State may, at the request of the master of the vessel or the consular officer, exercise their jurisdiction on board a vessel of the sending State.

4. Where the competent authorities of the receiving State intend to take coercive measures on board a vessel of the sending State against the master, a crew member or a passenger of the vessel or to seize any property on board the vessel, they must so notify the consular officer in advance. If, owing to the urgency of the case, it is impossible to notify the consular officer in advance, the competent authorities of the receiving State must without delay provide information concerning the facts of the case and the steps taken.

5. The provisions of paragraph 4 shall not apply to actions taken by the competent authorities of the receiving State in connection with ordinary passports, customs or health inspections, nor to actions taken for the purpose of saving human lives at sea or preventing water pollution, and likewise shall not apply to investigations undertaken at the request or with the consent of the master of the vessel.

#### *Article 25. VISITS ON BOARD FOREIGN VESSELS*

Subject to the prior consent of the master of the vessel, the consular officer shall have the right to visit a vessel flying the flag of any State other than the sending State and travelling towards a port or other anchoring place in the sending State. The consular officer must comply with the regulations in force in the port of the receiving State.

#### *Article 26. AIRCRAFT OF THE SENDING STATE*

The provisions of articles 21 to 25 of this Convention shall also apply to aircraft of the sending State and to aircraft chartered by enterprises of the sending State, unless otherwise provided in multilateral aviation agreements to which the sending State and the receiving State are parties or in bilateral agreements.

#### *Article 27. EXERCISE OF CONSULAR FUNCTIONS WITHIN AND OUTSIDE THE CONSULAR DISTRICT*

The consular officer shall exercise consular functions within his consular district. He may also, with the consent of the receiving State, exercise consular functions outside that district.

#### *Article 28. COMMUNICATION WITH THE AUTHORITIES OF THE RECEIVING STATE*

In exercising his functions, the consular officer may apply to:

- (1) The competent local authorities of his consular district;
- (2) The competent central authorities of the receiving State, if the laws and regulations or customs of that State or international treaties so permit.

#### *Article 29. COMPLIANCE WITH THE LAWS AND REGULATIONS OF THE RECEIVING STATE*

1. Members of the consular post and family members shall be required, without prejudice to their privileges and immunities, to comply with the laws and regulations of the receiving State.

2. Members of the consular post shall not, in addition to their official functions, engage in any professional or commercial activity for personal gain in the receiving State.

3. The consular premises must not be used in any manner inconsistent with the exercise of consular functions.

4. Means of transport owned by the sending State which are used by the consular post and means of transport owned by members of the consular post and family members shall be subject to the receiving State's regulations relating to compulsory insurance.

*Article 30.* EXERCISE OF CONSULAR FUNCTIONS BY THE DIPLOMATIC MISSION

1. The diplomatic mission of the sending State may exercise consular functions. In such case, the provisions of this Convention shall apply.

2. The diplomatic mission of the sending State shall notify to the Ministry of Foreign Affairs of the receiving State the full names and ranks of the members of the diplomatic mission who are assigned to the exercise of consular functions.

3. Members of the diplomatic mission who are assigned to the exercise of consular functions shall enjoy the privileges and immunities to which they are entitled by reason of their diplomatic status.

CHAPTER THREE. FACILITIES, PRIVILEGES AND IMMUNITIES  
RELATING TO CONSULAR POSTS

*Article 31.* FACILITIES IN THE ACTIVITIES OF THE CONSULAR POST

The receiving State shall afford the consular post all facilities in the exercise of its functions and shall take appropriate steps to enable members of the consular post to exercise their functions without hindrance.

*Article 32.* ACQUISITION OF CONSULAR PREMISES AND LIVING QUARTERS

1. The sending State or its representatives shall have the right to acquire ownership of, to lease or to acquire in any other manner land, buildings and living quarters for the use of the consular post, with the exception of the living quarters of members of the consular post who are nationals or permanent residents of the receiving State, and to undertake building construction or remodelling projects necessary for such use.

2. In exercising the rights referred to in paragraph 1, the sending State shall comply with the laws and regulations of the receiving State in the sphere of law relating to the acquisition and use of land, building law, town planning and space planning.

3. The receiving State shall, in accordance with its laws and regulations, facilitate for the consular post of the sending State the acquisition of appropriate premises intended for the use of the consular post. Where necessary, the receiving State shall provide the sending State with assistance in the acquisition of living quarters for the members of the consular post.

*Article 33.* USE OF THE STATE FLAG AND COAT OF ARMS

1. The sending State shall have the right to place its coat of arms on the building occupied by the consular post and on its entrances, as well as on the resi-

dence of the head of the consular post, and to place on the building of the consular post an appropriate inscription designating the consular post in the languages of the sending State and the receiving State.

2. The sending State shall have the right to fly its flag at the building of the consular post and at the residence of the head of the consular post, as well as on his means of transport when used for official purposes.

*Article 34. INVIOIABILITY OF THE CONSULAR POST AND THE LIVING QUARTERS OF CONSULAR OFFICERS*

1. The consular premises and the living quarters of consular officers shall be inviolable. The authorities of the receiving State may not enter them without the consent of the head of the consular post or of the head of the sending State's diplomatic mission in the receiving State or without the consent of a person authorized by either of them.

2. The receiving State shall take all appropriate measures to protect the consular premises against intrusion or damage and to prevent any disturbance of the peace of the consular post or any offence against its dignity.

*Article 35. INVIOIABILITY OF ARCHIVES*

The consular archives shall be inviolable at all times and wherever they may be.

*Article 36. FREEDOM OF COMMUNICATION*

1. The receiving State shall permit and protect the consular post's freedom of communication for all official purposes. In communicating with the Government, the diplomatic missions and other consular posts, wherever situated, of the sending State, the consular post may employ all appropriate means of communication, including diplomatic or consular couriers, diplomatic or consular bags and correspondence in code or cipher. The consular post may install and use a wireless transmitter only with the consent of the receiving State.

2. The official correspondence of the consular post shall be inviolable.

3. The consular bag must be sealed and bear visible external marks of its character and may contain only official correspondence and documents or articles intended exclusively for the official use of the consular post.

4. The consular bag shall not be opened or detained.

5. The consular courier must be provided with an official document indicating his status and the number of packages constituting the consular bag. The consular courier must be a national of the sending State who is not a permanent resident of the receiving State. In the performance of his official functions, the consular courier shall be under the protection of the receiving State, shall enjoy personal inviolability and shall not be subject to detention, arrest or restriction of his personal freedom in any other manner.

6. The consular bag may be entrusted to the master of a vessel or the captain of an aircraft of the sending State. The master or captain shall be provided with an official document indicating the number of packages constituting the consular bag. He shall not, however, be considered to be a consular courier. By agreement with the competent authorities of the receiving State, the consular

officer may directly take possession of the consular bag or deliver it to the master or captain.

*Article 37.* IMMUNITY FROM REQUISITION

The consular premises, their equipment, the property of the consular post, and its means of transport shall not be subject to any form of requisition for purposes of national defence or public utility. If expropriation is required for such purposes, all appropriate steps must be taken to avoid impeding the exercise of consular functions, and full and effective compensation must be made without delay to the sending State.

*Article 38.* EXEMPTION OF THE CONSULAR PREMISES, LIVING QUARTERS AND MEANS OF TRANSPORT FROM TAXES AND CHARGES

1. The consular premises and the living quarters of consular officers which are owned or leased by the sending State, as well as all means of transport of the consular post, shall be exempt in the receiving State from all State, local or communal taxes or charges, with the exception of payments levied for specific services rendered.

2. The exemptions referred to in paragraph 1 shall not apply to taxes and charges that must be paid under the laws and regulations of the receiving State by a person contracting with the sending State or by a person acting on his behalf.

*Article 39.* CONSULAR SERVICE CHARGES AND PROCEDURAL FEES

1. The consular post may levy service charges and procedural fees in the territory of the receiving State, in accordance with the laws and regulations of the sending State, for consular activities performed.

2. The service charges and procedural fees referred to in paragraph 1 shall not be subject to any taxes and charges in the receiving State.

CHAPTER FOUR. PRIVILEGES AND IMMUNITIES OF MEMBERS OF THE CONSULAR POST

*Article 40.* PROTECTION OF MEMBERS OF THE CONSULAR POST

The receiving State shall treat the members of the consular post with due respect and shall take all steps to prevent any offence against their persons, freedom or dignity.

*Article 41.* FREEDOM OF MOVEMENT

Subject to its laws and regulations concerning areas entry into which is prohibited or restricted for reasons of State security, the receiving State shall ensure to all members of the consular post freedom of movement and travel in its territory.

*Article 42.* IMMUNITY FROM JURISDICTION

1. Consular officers shall not be subject to the criminal, civil and administrative jurisdiction of the receiving State. They shall enjoy personal inviolability and therefore shall not be subject to detention, arrest or restriction of their personal freedom in any other manner.

2. Consular employees shall not be subject to the criminal, civil and administrative jurisdiction of the receiving State in respect of acts committed in the context of their official duties.

3. The provisions of paragraphs 1 and 2 shall not apply to the following civil matters:

- (1) Those arising out of the conclusion of a contract by a member of the consular post in which he did not act expressly or implicitly as a representative of the sending State;
- (2) Those arising out of damage resulting from an accident in the receiving State caused by a vehicle, vessel or aircraft;
- (3) Those relating to successions in which a member of the consular post is involved solely as a private person in the capacity of an heir, legatee, executor of a will, or administrator or trustee of an estate and not as a representative of the sending State.

4. In the event of the initiation of a criminal proceeding against a consular employee or in the event of his detention, arrest or deprivation of personal freedom in any other manner, the competent authorities of the receiving State shall so notify the head of the consular post without delay. When taking such action, the receiving State shall treat the consular employee with due respect and must avoid impeding him in any way in the exercise of his official functions.

#### *Article 43. OBLIGATION TO GIVE EVIDENCE*

1. Members of the consular post may be summoned to give evidence as witnesses before the courts and other competent authorities of the receiving State. If a consular officer refuses to appear or to give evidence, no coercive measure or penalty may be applied to him. Consular employees may not refuse to give evidence except in the cases referred to in paragraph 3.

2. The competent authority of the receiving State which summons a member of the consular post to give evidence may not interfere with the exercise of his official functions. It may, where possible, take such evidence from the member of the consular post at the consular post or at his living quarters or accept a statement from him in writing.

3. Members of the consular post shall be under no obligation to give evidence concerning matters connected with the exercise of their official functions or to produce official correspondence or other documents from the consular archives.

4. Members of the consular post shall be under no obligation to give evidence as expert witnesses with regard to the law of the sending State.

#### *Article 44. EXEMPTION FROM PERSONAL AND MATERIAL SERVICES*

The receiving State must exempt the members of the consular post from all personal services, from all public service of any kind and from military obligations such as those connected with requisitioning, contributions and billeting. They shall also be exempt, subject to the laws and regulations of the receiving State, from the obligation relating to the registration of aliens, residence permits, work permits and other formalities of that nature relating to aliens.

*Article 45.* EXEMPTION OF MEMBERS OF THE CONSULAR POST  
FROM TAXATION

1. Members of the consular post shall be exempt from all national, local and communal taxes and charges of the receiving State, except:

- (1) Indirect taxes of the kind normally incorporated in the price of goods or services;
- (2) Taxes and charges on private immovable property situated in the territory of the receiving State;
- (3) Inheritance taxes and taxes on the transfer of ownership levied by the receiving State, subject to the provisions of article 47 of this Convention;
- (4) Taxes and charges on private income of any kind having its source in the receiving State;
- (5) Charges levied for specific services rendered;
- (6) Registration fees, court fees, mortgage dues and stamp duties, subject to the provisions of article 38 of this Convention.

2. Members of the consular post who employ persons whose wages or salaries are not exempt from income tax in the receiving State must fulfil the obligations imposed on employers by the laws and regulations of that State with regard to the levying of income tax.

*Article 46.* EXEMPTION FROM CUSTOMS DUTIES AND CUSTOMS INSPECTION

1. Subject to its laws and regulations, the receiving State shall permit import and export of the following and shall exempt them from all customs duties and other charges appertaining thereto, with the exception of charges for storage, transport and similar services:

- (1) Articles and means of transport intended for the official use of the consular post;
- (2) Articles and means of transport intended for the personal use of a consular officer, together with the articles intended for their operation. Consumable articles must not exceed the quantities necessary for the immediate needs of the consular officer;
- (3) Articles and means of transport imported at the time of first installation at the consular post by a consular employee.

2. The personal baggage of a consular officer shall be exempt from customs inspection. It may be subjected to such inspection only when there exist substantial reasons for assuming that it contains articles other than those referred to in paragraph 1, item (2), or articles whose import or export is prohibited by the laws and regulations of the receiving State or which are subject to its laws and regulations relating to quarantine. Such inspection must be carried out in the presence of the consular officer concerned or of his agent.

*Article 47.* ESTATE OF A MEMBER OF THE CONSULAR POST

In the event of the death of a member of the consular post or of a family member or of a member of the private staff who is not a national or a permanent resident of the receiving State, the receiving State shall be required:

- (1) To permit the export of the movable property of the deceased, with the exception of property which was acquired in the receiving State and whose export was prohibited at the time of the death of the person concerned;

- (2) Not to levy any inheritance taxes or taxes on the transfer of ownership in respect of movable property left by a person who has died in that State.

*Article 48. PRIVILEGES AND IMMUNITIES OF FAMILY MEMBERS  
AND MEMBERS OF THE PRIVATE STAFF*

1. Family members shall enjoy, as appropriate, the privileges and immunities accorded under this Convention to members of the consular post. This provision shall not apply to persons who are nationals or permanent residents of the receiving State or who engage in gainful employment in that State.

2. Consular employees who are nationals or permanent residents of the receiving State shall not enjoy the privileges and immunities provided for in this Convention, with the exception of the provisions of article 43, paragraph 3, of this Convention.

3. With the exception of the provisions of article 47 of this Convention, the privileges and immunities provided for in this Convention shall not be accorded to members of the private staff.

*Article 49. WAIVER OF PRIVILEGES AND IMMUNITIES*

1. The sending State may waive the privileges and immunities referred to in articles 42 and 43 of this Convention. Such waiver must be express and must be communicated to the receiving State in writing.

2. Where a member of the consular post or a family member initiates proceedings in a case in which he could enjoy immunity from jurisdiction, he may not invoke immunity in relation to any counter-claim directly related to the principal claim.

3. Waiver of immunity from jurisdiction in respect of judicial or administrative proceedings shall not be deemed to imply waiver of immunity in respect of measures of execution of a judgement. A separate waiver shall be required in respect of such measures.

CHAPTER FIVE. FINAL PROVISIONS

*Article 50. RATIFICATION, ENTRY INTO FORCE AND TERMINATION*

1. This Convention is subject to ratification and shall enter into force upon the expiry of 30 days after the date of the exchange of the instruments of ratification, which shall take place at Warsaw.

2. This Convention is concluded for an indefinite period. It may be denounced through notification by either Contracting Party. In such case, it shall cease to have effect upon the expiry of 12 months after the date of denunciation.

DONE at Beijing on 14 July 1984, in duplicate in the Chinese and Polish languages, both texts being equally authentic.

IN WITNESS WHEREOF the plenipotentiaries of the Contracting Parties have signed this Convention and have thereto affixed their seals.

For the Government  
of the People's Republic of China:  
[QIAN QICHEN]

For the Government  
of the Polish People's Republic:  
[ERNEST KUCZA]



[TRADUCTION — TRANSLATION]

CONVENTION<sup>1</sup> CONSULAIRE ENTRE LE GOUVERNEMENT DE  
LA RÉPUBLIQUE POPULAIRE DE CHINE ET LE GOUVERNEMENT  
DE LA RÉPUBLIQUE POPULAIRE DE POLOGNE

Le Gouvernement de la République populaire de Chine et le Gouvernement de la République populaire de Pologne,

Désireux de réglementer et de renforcer leurs relations consulaires en vue de développer les relations de coopération entre les deux Etats, sur la base des principes du respect mutuel de la souveraineté, de la non-intervention dans les affaires intérieures de l'autre Etat, de l'égalité et de l'intérêt mutuel,

Ont décidé de conclure la présente Convention et à cette fin ont désigné comme plénipotentiaires :

Le Gouvernement de la République populaire de Chine :

Qian Qichen, Vice-Ministre des affaires étrangères;

Le Gouvernement de la République populaire de Pologne :

Ernest Kucza, Sous-Secrétaire d'Etat au Ministère des affaires étrangères;

Lesquels, après avoir échangé leurs pleins pouvoirs respectifs, reconnus en bonne et due forme, sont convenus de ce qui suit :

*Article premier.* DÉFINITIONS

Aux fins de la présente Convention, les expressions suivantes s'entendent comme il est précisé ci-dessous :

1) Par « poste consulaire », on entend tout consulat général, consulat, vice-consulat ou agence consulaire;

2) Par « circonscription consulaire », on entend le territoire attribué au poste consulaire pour l'exercice des fonctions consulaires;

3) Par « chef de poste consulaire », on entend toute personne chargée d'agir en cette qualité par l'Etat d'envoi;

4) Par « fonctionnaire consulaire », on entend toute personne, y compris le chef de poste consulaire, chargée en cette qualité de l'exercice des fonctions consulaires;

5) Par « employé consulaire », on entend toute personne chargée d'exercer des fonctions administratives, techniques ou se rapportant au service du consulat;

6) Par « membres du poste consulaire », on entend les fonctionnaires et employés consulaires;

7) Par « membres du personnel privé », on entend toute personne employée exclusivement au service privé d'un membre du poste consulaire;

8) Par « membre de la famille », on entend le conjoint d'un membre du poste consulaire et ses enfants vivant à son foyer;

<sup>1</sup> Entrée en vigueur le 21 février 1985, soit le trentième jour ayant suivi l'échange des instruments de ratification, qui a eu lieu à Varsovie le 22 janvier 1985, conformément au paragraphe 1 de l'article 50.

9) Par « locaux consulaires », on entend les bâtiments ou parties de bâtiments et le terrain attenant qui, quel qu'en soit le propriétaire, sont utilisés exclusivement aux fins du poste consulaire;

10) Par « archives consulaires », on entend tous les papiers, documents, correspondance, livres, films, photographies, rubans magnétiques, registres et sceaux du poste consulaire, le matériel du chiffre et les codes, ainsi que les fichiers et les meubles destinés à les protéger et à les conserver;

11) Par « navire de l'Etat d'envoi », on entend toute unité flottante utilisée pour la navigation et battant le pavillon de l'Etat d'envoi, à l'exception des navires de guerre;

12) Par « aéronef de l'Etat d'envoi », on entend toute unité aérienne immatriculée dans l'Etat d'envoi et autorisée à porter les marques de la nationalité de cet Etat, à l'exception des aéronefs militaires;

13) Par « ressortissant de l'Etat d'envoi », on entend toute personne ayant la nationalité de l'Etat d'envoi et, le cas échéant, une personne morale ayant ladite nationalité.

## TITRE PREMIER. ÉTABLISSEMENT DES POSTES CONSULAIRES ET NOMINATION DES MEMBRES DES POSTES CONSULAIRES

### Article 2. ÉTABLISSEMENT DES POSTES CONSULAIRES

1. Un poste consulaire ne peut être établi sur le territoire de l'Etat de résidence qu'avec l'assentiment de cet Etat.

2. Le siège du poste consulaire, sa classe et sa circonscription consulaire, ainsi que toute modification ultérieure y relative, sont déterminés d'un commun accord par l'Etat d'envoi et l'Etat de résidence.

### Article 3. NOMINATION ET ADMISSION DES CHEFS DE POSTE CONSULAIRE

1. Le chef de poste consulaire est nommé par l'Etat d'envoi. L'Etat d'envoi transmet la lettre de commission relative à la nomination du chef de poste consulaire au Ministère des affaires étrangères de l'Etat de résidence par la voie diplomatique. La lettre de commission indique les nom et prénoms et le rang du chef de poste consulaire, le siège et la classe du poste consulaire, ainsi que sa circonscription consulaire.

2. Après avoir reçu la lettre de commission relative à la nomination du chef de poste, l'Etat de résidence doit, sans retard, délivrer un *exequatur*. Si l'Etat de résidence refuse d'accorder l'*exequatur*, il n'est pas tenu de motiver son refus.

3. Après avoir reçu l'*exequatur*, le chef de poste consulaire est admis à l'exercice de ses fonctions.

4. En attendant la délivrance de l'*exequatur*, le chef de poste consulaire peut être admis, à titre provisoire, à l'exercice de ses fonctions, avec le consentement de l'Etat de résidence. Dans ce cas, les dispositions de la présente Convention lui sont applicables.

### Article 4. EXERCICE À TITRE PROVISOIRE DES FONCTIONS DE CHEF DE POSTE CONSULAIRE

1. Si, pour quelque raison que ce soit, le chef de poste consulaire est empêché d'exercer ses fonctions, ou si son poste est temporairement vacant,

l'Etat d'envoi peut désigner un fonctionnaire consulaire appartenant à l'un de ses postes consulaires dans l'Etat de résidence, ou un membre du personnel diplomatique de sa mission diplomatique dans ledit Etat, pour exercer à titre provisoire les fonctions de chef de poste. L'Etat d'envoi notifiera à l'avance au Ministère des affaires étrangères de l'Etat de résidence, les nom et prénoms et le rang le plus récent de la personne exerçant provisoirement les fonctions de chef de poste consulaire.

2. Le chef de poste consulaire par intérim jouit des mêmes facilités, privilèges et immunités que le chef de poste consulaire aux termes de la présente Convention.

3. Le membre du personnel diplomatique désigné pour exercer les fonctions de chef de poste consulaire conformément au paragraphe 1 continue de jouir des privilèges et immunités auxquels il a droit.

#### *Article 5.* NOTIFICATION AUX AUTORITÉS DE LA CIRCONSCRIPTION CONSULAIRE

Après la délivrance de l'*exequatur* par l'Etat de résidence, ou dès que le chef de poste consulaire est admis, même à titre provisoire, à l'exercice de ses fonctions, l'Etat de résidence doit le notifier aux autorités compétentes de la circonscription consulaire. Il doit également assurer que les mesures nécessaires soient prises afin de permettre au chef de poste consulaire d'exercer ses fonctions officielles et de jouir des facilités, privilèges et immunités prévus par la présente Convention.

#### *Article 6.* NOTIFICATION DES ARRIVÉES ET DÉPARTS

L'Etat d'envoi notifie en temps opportun au Ministère des affaires étrangères de l'Etat de résidence, ou à l'autorité compétente de la circonscription consulaire :

- 1) La nomination des membres du poste consulaire, leurs nom et prénoms, leur nationalité, leur rang, la date de leur arrivée et de leur départ définitif ou celle de la cessation de l'exercice de leurs fonctions, et autres changements affectant leur statut pendant leur service au poste consulaire;
- 2) L'arrivée et le départ définitif d'un membre de la famille, ses nom et prénoms, sa nationalité et les cas où des personnes deviennent ou cessent d'être membres de la famille;
- 3) L'arrivée et le départ définitif des membres du personnel privé, leurs nom et prénoms, leur nationalité, les fonctions qu'ils exercent et la cessation de leurs services;
- 4) L'engagement et le licenciement des employés consulaires qui sont ressortissants ou résidents permanents de l'Etat de résidence.

#### *Article 7.* NATIONALITÉ DES MEMBRES DU POSTE CONSULAIRE ET DES MEMBRES DU PERSONNEL PRIVÉ

1. Les fonctionnaires consulaires doivent être ressortissants de l'Etat d'envoi et ne doivent pas être résidents permanents de l'Etat de résidence.

2. Les employés consulaires et les membres du personnel privé doivent être ressortissants de l'Etat d'envoi ou de l'Etat de résidence.

### Article 8. DOCUMENTS D'IDENTITÉ

1. Les autorités compétentes de l'Etat de résidence délivrent gratuitement à chaque membre du poste consulaire et à chaque membre de sa famille un document d'identité.

2. Les dispositions du paragraphe 1 ne sont pas applicables aux ressortissants ou aux résidents permanents de l'Etat de résidence.

### Article 9. CESSATION DES FONCTIONS DES MEMBRES DU POSTE CONSULAIRE

1. L'Etat de résidence peut, à tout moment, sans avoir à motiver les raisons de sa décision, informer l'Etat d'envoi, par la voie diplomatique, que l'*exequatur* délivré au chef du poste consulaire est retiré, ou qu'un fonctionnaire consulaire est considéré *persona non grata*, ou qu'un employé consulaire n'est pas acceptable. Dans ce cas, l'Etat d'envoi rappellera la personne en cause ou mettra fin à ses fonctions au poste consulaire.

2. L'exercice des fonctions d'un membre du poste consulaire cessera, notamment, moyennant :

- 1) Le retrait de l'*exequatur* par l'Etat de résidence;
- 2) Une notification faite à l'Etat d'envoi par l'Etat de résidence pour l'aviser qu'un fonctionnaire consulaire est déclaré *persona non grata* ou qu'un employé consulaire est déclaré inacceptable;
- 3) Une notification faite à l'Etat de résidence par l'Etat d'envoi pour l'aviser que les fonctions d'une personne particulière ont pris fin.

## TITRE II. FONCTIONS CONSULAIRES

### Article 10. FONCTIONS DES FONCTIONNAIRES CONSULAIRES

Les fonctions des fonctionnaires consulaires consistent à :

- 1) Protéger, dans l'Etat de résidence, les intérêts de l'Etat d'envoi et de ses ressortissants et prêter assistance aux ressortissants de l'Etat d'envoi;
- 2) Promouvoir le développement des relations amicales entre l'Etat d'envoi et l'Etat de résidence sur les plans économique, commercial, culturel, scientifique et touristique;
- 3) Recueillir, par tous les moyens licites, des informations sur l'Etat de résidence dans les domaines politique, économique, commercial, culturel, scientifique et touristique, et faire rapport à ce sujet au gouvernement de l'Etat d'envoi;
- 4) Exercer les autres fonctions que lui confie l'Etat d'envoi et qui ne sont pas contraires aux lois et règlements de l'Etat de résidence ou contre lesquelles l'Etat de résidence ne soulève pas d'objections.

### Article 11. COMMUNICATION AVEC LES RESSORTISSANTS DE L'ETAT D'ENVOI

1. Le fonctionnaire consulaire est habilité à communiquer avec tout ressortissant de l'Etat d'envoi dans sa circonscription consulaire, à le rencontrer, à lui prêter assistance et à lui assurer une représentation légale.

2. L'Etat de résidence ne limitera aucunement les possibilités de communication des ressortissants de l'Etat d'envoi avec le poste consulaire ni l'accès à ce poste.

*Article 12.* REPRÉSENTATION DES RESSORTISSANTS DE L'ÉTAT D'ENVOI

Si un ressortissant de l'Etat d'envoi est empêché de défendre lui-même ses droits et intérêts au moment approprié du fait de son absence ou pour toute autre raison, le fonctionnaire consulaire peut, conformément aux lois et règlements de l'Etat de résidence, représenter ledit ressortissant devant les tribunaux ou autres autorités de l'Etat de résidence ou lui assurer la représentation appropriée jusqu'à ce que ledit ressortissant désigne son mandataire ou qu'il assume lui-même la défense de ses droits et intérêts.

*Article 13.* TENUE D'UN REGISTRE DES RESSORTISSANTS  
ET DÉLIVRANCE DE DOCUMENTS

1. Le fonctionnaire consulaire est habilité à :

- 1) Tenir un registre des ressortissants de l'Etat d'envoi;
- 2) Tenir un registre des naissances et décès des ressortissants de l'Etat d'envoi et délivrer les documents appropriés. Toutefois, cette disposition n'exonère pas les ressortissants de l'Etat d'envoi de l'obligation d'observer les lois et règlements appropriés de l'Etat de résidence;
- 3) Prendre toutes les mesures relatives à la célébration des mariages conformément à la législation de l'Etat d'envoi;
- 4) Délivrer des passeports et autres documents de voyage aux ressortissants de l'Etat d'envoi et proroger, modifier ou révoquer ces passeports et documents;
- 5) Délivrer des visas ou les proroger.

2. Les autorités compétentes de l'Etat de résidence transmettent, à des fins officielles et sur la demande du fonctionnaire consulaire, les documents appropriés relatifs aux ressortissants de l'Etat d'envoi, sans délai et gratuitement.

*Article 14.* FONCTIONS NOTARIALES ET LÉGISLATION

1. Le fonctionnaire consulaire est habilité à :

- 1) Authentifier tous les documents des ressortissants de l'Etat d'envoi, ainsi que toutes les photocopies, extraits et traductions de ces documents et les signatures des ressortissants de l'Etat d'envoi apposées sur tous documents;
- 2) Légaliser les signatures et sceaux apposés sur les documents délivrés par les autorités de l'Etat d'envoi ou par celles de l'Etat de résidence;
- 3) Traduire tous documents vers la langue officielle de l'Etat d'envoi ou de l'Etat de résidence, et authentifier leur traduction;
- 4) Recevoir et authentifier les déclarations des ressortissants de l'Etat d'envoi;
- 5) Recevoir, rédiger et authentifier les testaments et autres documents relatifs aux actes juridiques unilatéraux des ressortissants de l'Etat d'envoi, dressés conformément à la loi dudit Etat;
- 6) Délivrer et authentifier les certificats d'origine des marchandises;
- 7) Exercer les autres fonctions notariales et de législation que lui confère l'Etat d'envoi.

2. Les documents rédigés, authentifiés ou légalisés par le fonctionnaire consulaire ont la même valeur et le même effet dans l'Etat de résidence que les

documents rédigés, authentifiés ou légalisés par les autorités dudit Etat, à condition que leur teneur ne soit pas contraire à ses lois et règlements.

*Article 15. RÉCEPTION DE DOCUMENTS ET D'OBJETS  
POUR EN ASSURER LA GARDE*

1. Le fonctionnaire consulaire est habilité, conformément aux lois et règlements de l'Etat de résidence, à recevoir en dépôt des mains des ressortissants de l'Etat d'envoi des documents, des sommes d'argent ou des objets de valeur.

2. Le fonctionnaire consulaire est également habilité à recevoir, en vue de les transmettre à leurs propriétaires, les objets égarés par les ressortissants de l'Etat d'envoi.

3. Si un ressortissant de l'Etat d'envoi qui n'est pas résident permanent de l'Etat de résidence décède dans cet Etat, les autorités compétentes de l'Etat de résidence prennent en charge les biens du défunt laissés dans cet Etat et les transmettent au fonctionnaire consulaire sans formalités juridiques. Le fonctionnaire consulaire règle, jusqu'à concurrence de la valeur desdits biens, les dettes laissées sans paiement par le défunt dans l'Etat de résidence.

*Article 16. CONSTITUTION DE TUTELLE OU DE CURATELLE*

1. Les autorités compétentes de l'Etat de résidence informent le fonctionnaire consulaire des cas où il est nécessaire d'instituer la tutelle ou la curatelle d'un ressortissant de l'Etat d'envoi qui est résident permanent de l'Etat de résidence.

2. Dans les cas visés au paragraphe 1, le fonctionnaire consulaire coopère avec les autorités de l'Etat de résidence pour agir en qualité de tuteur ou de curateur.

*Article 17. NOTIFICATION ET VISITES EN CAS D'ARRESTATION*

1. Lorsqu'un ressortissant de l'Etat d'envoi est détenu, arrêté ou privé de sa liberté de toute autre manière, les autorités compétentes de l'Etat de résidence en informent le fonctionnaire consulaire dans un délai de sept jours à compter de la date à laquelle les mesures susvisées ont été prises.

2. Le fonctionnaire consulaire est habilité à rendre visite à tout ressortissant de l'Etat d'envoi qui a été détenu, arrêté ou privé, de toute autre manière, de sa liberté, en vue de s'entretenir avec lui, de lui prêter assistance, notamment d'assurer sa représentation juridique, ainsi qu'à correspondre avec lui. La visite doit avoir lieu le plus tôt possible, mais les autorités de l'Etat de résidence ne peuvent pas refuser la visite après l'écoulement de trois jours à compter de la date de la notification. Les visites ultérieures peuvent avoir lieu à des intervalles raisonnables.

3. Le fonctionnaire consulaire a le droit de rendre visite à tout ressortissant de l'Etat d'envoi qui purge une peine privative de liberté dans l'Etat de résidence.

4. Les autorités compétentes de l'Etat de résidence informeront les personnes visées par les dispositions du présent article de tous leurs droits aux termes desdites dispositions.

5. Les droits visés au présent article doivent être exercés conformément aux lois et règlements de l'Etat de résidence, à condition que lesdits lois et règlements n'annulent pas ces droits.

#### *Article 18.* NOTIFICATION DES ACCIDENTS ET DÉCÈS

1. Les autorités compétentes de l'Etat de résidence informeront sans retard le fonctionnaire consulaire de tout accident ayant provoqué la mort d'un ressortissant de l'Etat d'envoi ou lui ayant infligé de graves blessures.

2. Lorsqu'elles reçoivent des informations concernant la mort d'un ressortissant de l'Etat d'envoi dans l'Etat de résidence, les autorités compétentes de cet Etat informent, sans retard, le fonctionnaire consulaire du décès dudit ressortissant et transmettent au fonctionnaire consulaire gratuitement, sur sa demande, le certificat de décès ou une copie ou transcription de tout autre document attestant le décès.

#### *Article 19.* FONCTIONS EN MATIÈRE DE SUCCESSION

1. Lorsqu'un ressortissant de l'Etat d'envoi, cité comme héritier ou légataire dans une succession, est en droit d'hériter tout ou partie d'une succession ou de recevoir un legs laissé par une personne de quelque nationalité que ce soit décédée dans l'Etat de résidence, les autorités compétentes dudit Etat informent, sans retard, le fonctionnaire consulaire de l'ouverture de la succession.

2. En cas de décès, dans l'Etat de résidence, d'un ressortissant de l'Etat d'envoi qui a laissé une succession dans l'Etat de résidence, les autorités compétentes de cet Etat informent, sans retard, le fonctionnaire consulaire de la composition de la succession et du lieu où elle se trouve, ainsi que du lieu où se trouve la personne ayant droit à la succession. Si le défunt a laissé un testament, les autorités compétentes de l'Etat de résidence transmettent au fonctionnaire consulaire de l'Etat d'envoi, sur sa demande, une copie de ce testament.

3. Le fonctionnaire consulaire peut, sans avoir besoin de procuration, représenter directement ou par l'entremise de son représentant, devant les tribunaux ou autres autorités de l'Etat de résidence, tout ressortissant de l'Etat d'envoi ayant droit ou pouvant prétendre à une succession dans l'Etat de résidence, si ledit ressortissant est absent ou empêché de participer à la procédure successorale. Cette représentation prend fin quand le ressortissant assume, lui-même, la défense de ses droits et intérêts. Lorsqu'il représente un ressortissant de l'Etat d'envoi, le fonctionnaire consulaire doit observer les lois et règlements en vigueur dans l'Etat de résidence.

4. Les autorités compétentes de l'Etat de résidence prennent toutes les mesures appropriées conformément aux lois et règlements de cet Etat, pour protéger la succession visée au paragraphe 2, et informent sans retard le fonctionnaire consulaire des mesures prises. Le fonctionnaire consulaire a le droit d'être présent pendant l'inventaire, l'apposition et le levé des scellés et la vente des biens successoraux ainsi que lors de la prise de toutes mesures visant à protéger la succession.

5. A la clôture de la procédure successorale ou de toute autre procédure officielle, les autorités compétentes de l'Etat de résidence en informent, sans retard, le fonctionnaire consulaire; après paiement de toutes les dettes, impôts et redevances, elles lui transmettent la succession ou les parts successorales des personnes qu'il représente.

6. Le fonctionnaire consulaire est habilité à recevoir, en vue de les délivrer aux personnes intéressées qui ne sont pas résidents permanents de l'Etat de résidence, les sommes d'argent ou autres biens dus à titre de succession, compensations, pensions, ou polices d'assurance, ou toutes autres sommes d'argent dues.

7. Le transfert des biens et sommes d'argent de l'Etat de résidence en application des paragraphes 5 et 6 ne peut être effectué par le fonctionnaire consulaire que conformément aux lois et règlements dudit Etat.

#### *Article 20. DÉLIVRANCE DES DOCUMENTS*

Le fonctionnaire consulaire a le droit, sur la demande des autorités compétentes de l'Etat d'envoi, de recevoir des déclarations volontaires de ressortissants de l'Etat d'envoi, conformément aux lois et règlements de l'Etat de résidence, et de délivrer auxdits ressortissants des documents judiciaires et non judiciaires.

#### *Article 21. ASSISTANCE AUX NAVIRES DE L'ÉTAT D'ENVOI*

1. Le fonctionnaire consulaire est habilité à prêter toutes formes d'assistance aux navires de l'Etat d'envoi qui se trouvent dans la mer territoriale, les eaux intérieures, les ports ou autres mouillages de l'Etat de résidence.

2. Dans l'exercice des fonctions visées au paragraphe 1, le fonctionnaire consulaire est habilité à :

- 1) Se rendre à bord du navire et recevoir des déclarations concernant le navire, sa cargaison et son voyage;
- 2) Recevoir la visite du capitaine ou de tout membre de l'équipage et, si nécessaire, assurer leur hospitalisation et leur rapatriement;
- 3) Recevoir, inspecter, authentifier, rédiger ou proroger les certificats ou autres documents concernant le navire;
- 4) Régler les litiges entre le capitaine et les membres de l'équipage, y compris les litiges relatifs aux contrats d'enrôlement ou aux conditions de travail, conformément aux lois et règlements de l'Etat d'envoi;
- 5) Surveiller et inspecter le navire, mener des enquêtes concernant des incidents ayant eu lieu pendant le voyage et prendre les mesures nécessaires pour assurer la discipline et l'ordre à bord du navire;
- 6) Fournir protection et assistance au capitaine et aux membres de l'équipage dans leurs relations avec les tribunaux et autres autorités de l'Etat de résidence et, à cet effet, leur assurer une représentation juridique et les services d'un interprète ou de toute autre personne;
- 7) Exercer toutes autres activités prévues par la législation de l'Etat d'envoi en matière de navigation maritime, à condition que ces activités ne soient pas contraires aux lois et règlements de l'Etat de résidence.

3. Dans l'exercice des fonctions visées au présent article, le fonctionnaire consulaire est tenu d'observer les lois et règlements de l'Etat de résidence.

4. Les autorités compétentes de l'Etat de résidence doivent admettre toutes les mesures prises par le fonctionnaire consulaire, conformément aux lois et règlements de l'Etat d'envoi, à l'égard des navires de cet Etat et de leurs



équipages. Dans l'exercice desdites fonctions, le fonctionnaire consulaire peut solliciter le concours des autorités compétentes de l'Etat de résidence.

*Article 22. NAVIRES SINISTRÉS DE L'ÉTAT D'ENVOI*

1. Si un navire de l'Etat d'envoi fait naufrage, échoue ou subit des avaries substantielles dans les eaux intérieures ou la mer territoriale de l'Etat de résidence, les autorités compétentes de l'Etat de résidence en avisent, sans retard, le fonctionnaire consulaire.

2. Dans les cas visés au paragraphe 1, le fonctionnaire consulaire est habilité à prêter assistance au navire et à son équipage, ainsi qu'à solliciter le concours de l'Etat de résidence.

3. Dans les cas visés au paragraphe 1, les autorités compétentes de l'Etat de résidence prennent toutes les mesures nécessaires pour assurer le sauvetage des passagers et de l'équipage. Sans préjudice de ce qui précède, lesdites autorités prêtent, sur la demande du capitaine du navire ou du fonctionnaire consulaire, l'assistance nécessaire pour le sauvetage et la protection du navire, de son équipement, ou de sa cargaison, ainsi que le sauvetage des objets appartenant au navire ou à sa cargaison, et qui en ont été séparés.

4. Lorsque l'équipement, la cargaison, l'approvisionnement ou tout autre objet séparé d'un navire naufragé de l'Etat d'envoi sont trouvés sur le rivage de l'Etat de résidence ou à proximité, ou amenés dans un port de cet Etat, et en l'absence du capitaine, de son représentant ou d'un représentant des assurances, les autorités compétentes de l'Etat de résidence en informent, sans retard, le fonctionnaire consulaire, qui sera habilité à prendre les dispositions que le propriétaire aurait pu prendre s'il avait été présent.

5. Le fonctionnaire consulaire a le droit d'être présent lors de toute procédure engagée en vue de permettre aux autorités compétentes de l'Etat de résidence de déterminer les causes de l'avarie, de l'échouement ou du naufrage du navire.

6. Le navire sinistré, son équipement, sa cargaison ou autres objets lui appartenant ne sont pas passibles, sur le territoire de l'Etat de résidence, de droits de douane ou autres droits analogues, à condition qu'ils ne soient pas vendus ou utilisés dans ledit Etat.

*Article 23. ASSISTANCE FOURNIE AUX NAVIRES DE L'ÉTAT D'ENVOI  
PAR LES AUTORITÉS DE L'ÉTAT DE RÉSIDENCE*

1. Les autorités compétentes de l'Etat de résidence prêtent l'assistance nécessaire aux navires de l'Etat d'envoi.

2. Au cas où un membre de l'équipage qui n'est pas ressortissant de l'Etat de résidence quitte, dans le territoire de cet Etat et sans le consentement du capitaine, un navire de l'Etat d'envoi, les autorités de l'Etat de résidence fournissent, sur la demande du capitaine ou du fonctionnaire consulaire, l'assistance voulue pour trouver ladite personne.

*Article 24. EXERCICE DE LA JURIDICTION À BORD D'UN NAVIRE  
DE L'ÉTAT D'ENVOI*

1. Les autorités compétentes de l'Etat de résidence peuvent exercer leur juridiction à propos des infractions commises à bord d'un navire de l'Etat d'envoi

qui se trouve dans la mer territoriale, les eaux intérieures ou un port de l'Etat de résidence, lorsque :

- 1) Les infractions sont commises par ou contre un ressortissant de l'Etat de résidence;
- 2) Les infractions sont de nature à troubler la paix et la sécurité dans un port, la mer territoriale ou les eaux intérieures de l'Etat de résidence;
- 3) Les infractions violent les lois et règlements de l'Etat de résidence concernant la protection de la santé, la sécurité de la vie humaine en mer, les questions de douane et d'immigration, la pollution de la mer ou encore le transport illicite ou la vente de stupéfiants.

2. Sans préjudice des dispositions du paragraphe 1, les autorités compétentes de l'Etat de résidence sont également habilitées, conformément à leurs lois et règlements, à exercer leur juridiction à l'égard des infractions qui troublent l'ordre ou la sécurité publics de cet Etat ou sont préjudiciables à ses intérêts. Toutefois, lesdites autorités ne peuvent pas, sans le consentement du fonctionnaire consulaire ou du capitaine du navire, s'immiscer dans les affaires intérieures du navire.

3. Les autorités compétentes de l'Etat de résidence, sur la demande du capitaine du navire ou du fonctionnaire consulaire, peuvent exercer leur juridiction à bord d'un navire de l'Etat d'envoi.

4. Lorsque les autorités compétentes de l'Etat de résidence se proposent de prendre, à bord d'un navire de l'Etat d'envoi, des mesures coercitives à l'encontre du capitaine, d'un membre de l'équipage ou d'un passager dudit navire, ou de saisir un bien se trouvant à bord, elles doivent au préalable en informer le fonctionnaire consulaire. Si, en raison de l'urgence du cas, il s'avère impossible d'informer le fonctionnaire consulaire à l'avance, les autorités compétentes de l'Etat de résidence fournissent sans retard les informations concernant les faits et les mesures prises.

5. Les dispositions du paragraphe 4 ne s'appliquent pas aux mesures prises par les autorités compétentes de l'Etat de résidence dans le cadre des inspections normales en matière de passeports, de douane et de santé, ni aux mesures prises en vue de sauver des vies humaines en mer ou de prévenir la pollution des eaux. Elles ne s'appliquent pas non plus aux enquêtes ouvertes sur la demande ou avec le consentement du capitaine du navire.

#### *Article 25. VISITES À BORD DE NAVIRES ÉTRANGERS*

Le fonctionnaire consulaire a le droit, avec le consentement préalable du capitaine du navire, de se rendre à bord d'un navire battant pavillon de tout autre Etat que l'Etat d'envoi et se rendant dans un port ou autres mouillages de l'Etat d'envoi. Le fonctionnaire consulaire doit se conformer aux règlements en vigueur dans le port de l'Etat de résidence.

#### *Article 26. AÉRONEFS DE L'ÉTAT D'ENVOI*

Les dispositions des articles 21 à 25 de la présente Convention sont également applicables aux aéronefs de l'Etat d'envoi et aux aéronefs loués par des entreprises de l'Etat d'envoi, sauf si les accords aériens multilatéraux ou bilatéraux auxquels l'Etat d'envoi et l'Etat de résidence sont parties en disposent autrement.

*Article 27.* EXERCICE DES FONCTIONS CONSULAIRES À L'INTÉRIEUR  
ET AU DEHORS DE LA CIRCONSCRIPTION CONSULAIRE

Le fonctionnaire consulaire exerce les fonctions consulaires dans sa circonscription consulaire. Il peut également, avec le consentement de l'Etat de résidence, exercer les fonctions consulaires hors de ladite circonscription.

*Article 28.* COMMUNICATION AVEC LES AUTORITÉS DE L'ÉTAT DE RÉSIDENCE

Dans l'exercice de ses fonctions, le fonctionnaire consulaire peut s'adresser :

- 1) Aux autorités locales compétentes de sa circonscription consulaire;
- 2) Aux autorités centrales compétentes de l'Etat de résidence, si les lois et règlements de cet Etat le permettent.

*Article 29.* OBSERVATION DES LOIS ET RÈGLEMENTS DE L'ÉTAT DE RÉSIDENCE

1. Les membres du poste consulaire et les membres de leur famille sont tenus, sans préjudice de leurs privilèges et immunités, d'observer les lois et règlements de l'Etat de résidence.

2. Les membres du poste consulaire ne doivent se livrer dans l'Etat de résidence, en sus de leurs fonctions officielles, à aucune activité professionnelle ou commerciale en vue de réaliser un profit personnel.

3. Les locaux consulaires ne doivent pas être utilisés d'une manière incompatible avec l'exercice des fonctions consulaires.

4. Les moyens de transport appartenant à l'Etat d'envoi et utilisés par le poste consulaire et les moyens de transport appartenant aux membres du poste consulaire et aux membres de leur famille sont soumis aux règlements de l'Etat de résidence concernant l'assurance obligatoire.

*Article 30.* EXERCICE DES FONCTIONS CONSULAIRES  
PAR LA MISSION DIPLOMATIQUE

1. La mission diplomatique de l'Etat d'envoi peut exercer des fonctions consulaires. Dans ce cas, les dispositions de la présente Convention sont applicables.

2. La mission diplomatique de l'Etat d'envoi communique au Ministère des affaires étrangères les nom et prénoms et les rangs des membres de la mission diplomatique chargés d'exercer des fonctions consulaires.

3. Les membres de la mission diplomatique chargés d'exercer des fonctions consulaires jouissent des privilèges et immunités auxquels ils ont droit en raison de leur statut diplomatique.

TITRE III. FACILITÉS, PRIVILÈGES ET IMMUNITÉS  
RELATIFS AUX POSTES CONSULAIRES

*Article 31.* FACILITÉS ACCORDÉES DANS L'EXERCICE DES ACTIVITÉS  
DU POSTE CONSULAIRE

L'Etat de résidence accorde au poste consulaire toutes les facilités dans l'exercice de ses fonctions et prend les mesures appropriées pour permettre aux membres du poste consulaire d'exercer leurs fonctions sans entrave.

*Article 32. ACQUISITION DE LOCAUX ET LOGEMENTS CONSULAIRES*

1. L'Etat d'envoi a le droit de posséder, de louer ou d'acquérir, de toute autre manière, des terrains, bâtiments et logements pour l'usage du poste consulaire, à l'exception des logements des membres du poste consulaire qui sont ressortissants ou résidents permanents de l'Etat de résidence. L'Etat d'envoi a également le droit de construire ou d'aménager les bâtiments nécessaires à cet usage.

2. Dans l'exercice des droits visés au paragraphe 1, l'Etat d'envoi observe les lois et règlements de l'Etat de résidence concernant l'acquisition et l'utilisation des terrains, la construction, l'urbanisme et la planification physique.

3. L'Etat de résidence doit, conformément à ses lois et règlements, faciliter au poste consulaire l'acquisition de locaux appropriés destinés à l'usage du poste consulaire, et si nécessaire, prêter assistance à l'Etat d'envoi pour l'acquisition de logements destinés aux membres du poste consulaire.

*Article 33. USAGE DU PAVILLON ET DE L'ÉCUSSON NATIONAUX*

1. L'Etat d'envoi a le droit de placer un écusson à ses armes sur le bâtiment et aux entrées du poste consulaire, ainsi que sur la résidence du chef du poste consulaire et de placer sur le bâtiment du poste consulaire une inscription appropriée désignant le poste consulaire dans la langue de l'Etat d'envoi et celle de l'Etat de résidence.

2. L'Etat d'envoi a le droit d'arborer son pavillon sur le bâtiment du poste consulaire et sur la résidence du chef du poste consulaire, ainsi que sur ses moyens de transport quand ils sont utilisés à des fins officielles.

*Article 34. INVOLABILITÉ DU POSTE CONSULAIRE ET DES LOGEMENTS DES FONCTIONNAIRES CONSULAIRES*

1. Les locaux consulaires et les logements des fonctionnaires consulaires sont inviolables. Les autorités de l'Etat de résidence ne peuvent y pénétrer sans le consentement du chef du poste consulaire, du chef de la mission diplomatique de l'Etat d'envoi dans l'Etat de résidence ou de la personne autorisée par l'un d'eux.

2. L'Etat de résidence prend toutes les mesures voulues pour protéger les locaux consulaires contre toute intrusion et dommage et pour empêcher que la paix du poste consulaire ne soit troublée ou qu'il soit porté atteinte à sa dignité.

*Article 35. INVOLABILITÉ DES ARCHIVES*

Les archives consulaires sont inviolables à tout moment et en quelque lieu qu'elles se trouvent.

*Article 36. LIBERTÉ DE COMMUNICATION*

1. L'Etat de résidence permet et protège la liberté de communication du poste consulaire à toutes fins officielles. En communiquant avec le gouvernement, les missions diplomatiques et les autres postes consulaires, où qu'ils se trouvent, de l'Etat d'envoi, le poste consulaire peut employer tous les moyens de communication appropriés, y compris les courriers diplomatiques ou consulaires, la valise diplomatique ou consulaire et les messages codés ou chiffrés. Le fonctionnaire consulaire ne peut installer et utiliser un poste émetteur de radio qu'avec le consentement de l'Etat de résidence.

2. La correspondance officielle du poste consulaire est inviolable.

3. La valise consulaire doit être scellée et porter des marques extérieures visibles de son caractère et ne peut contenir que la correspondance officielle et des documents et objets destinés exclusivement à l'usage officiel du poste consulaire.

4. La valise consulaire ne doit être ni ouverte ni retenue.

5. Le courrier consulaire doit être muni d'un document officiel indiquant son statut et le nombre des colis constituant la valise consulaire. Il doit être un ressortissant de l'Etat d'envoi qui n'est pas résident permanent de l'Etat de résidence. Dans l'exercice de ses fonctions, le courrier consulaire est protégé par l'Etat de résidence, jouit de l'inviolabilité personnelle et ne peut être détenu, arrêté ou soumis, de toute autre manière, à aucune mesure de limitation de sa liberté personnelle.

6. La valise consulaire peut être confiée au capitaine d'un navire ou au commandant d'un aéronef de l'Etat d'envoi. Le capitaine ou le commandant doit être muni d'un document officiel indiquant le nombre des colis constituant la valise consulaire. Toutefois, il n'est pas considéré comme un courrier consulaire. Avec le consentement des autorités compétentes de l'Etat de résidence, le fonctionnaire consulaire peut prendre directement possession de la valise consulaire des mains du capitaine ou du commandant, ou la lui remettre.

#### *Article 37. IMMUNITÉ DE RÉQUISITION*

Les locaux consulaires, leur ameublement, les biens du poste consulaire et ses moyens de transport ne peuvent faire l'objet d'aucune forme de réquisition aux fins de la défense nationale ou de l'utilité publique. Au cas où une expropriation serait nécessaire à ces fins, toutes les dispositions appropriées doivent être prises afin d'éviter toute entrave à l'exercice des fonctions consulaires, et une compensation complète et effective sera versée, sans retard, à l'Etat d'envoi.

#### *Article 38. EXEMPTION DES LOCAUX, LOGEMENTS ET MOYENS DE TRANSPORT CONSULAIRES DES IMPÔTS ET CHARGES*

1. Les locaux consulaires et les logements des fonctionnaires appartenant à l'Etat d'envoi ou loués par cet Etat sont exemptés de tous les impôts et charges nationaux, locaux ou communaux, à l'exception des paiements prélevés pour des services particuliers rendus.

2. Les exemptions visées au paragraphe 1 ne s'appliquent pas aux impôts et charges qui, conformément aux lois et règlements de l'Etat de résidence, doivent être acquittés par une personne ayant conclu un contrat avec l'Etat d'envoi ou par une personne agissant en son nom.

#### *Article 39. DROITS RELATIFS AUX SERVICES CONSULAIRES ET DROITS PROCÉDURAUX*

1. Le poste consulaire peut percevoir sur le territoire de l'Etat de résidence, conformément aux lois et règlements de cet Etat, des droits relatifs à des services et des droits procéduraux, en contrepartie des services consulaires rendus.

2. Les droits relatifs aux services et les droits procéduraux visés au paragraphe 1 sont exemptés de tous impôts et charges dans l'Etat de résidence.

#### TITRE IV. PRIVILÈGES ET IMMUNITÉS DES MEMBRES DU POSTE CONSULAIRE

##### *Article 40. PROTECTION DES MEMBRES DU POSTE CONSULAIRE*

L'Etat de résidence traite les membres du poste consulaire avec le respect qui leur est dû et prend toutes les mesures voulues pour empêcher toute atteinte à leur personne, leur liberté et leur dignité.

##### *Article 41. LIBERTÉ DE DÉPLACEMENT*

Sous réserve de ses lois et règlements applicables aux zones dont l'accès est interdit ou réglementé pour des raisons de sécurité, l'Etat de résidence assurera à tous les membres du poste consulaire la liberté de se déplacer et de voyager sur son territoire.

##### *Article 42. IMMUNITÉ DE JURIDICTION*

1. Les fonctionnaires consulaires ne sont pas soumis à la juridiction pénale, civile et administrative de l'Etat de résidence. Ils jouissent de l'inviolabilité personnelle et, de ce fait, ne peuvent être détenus, arrêtés ou soumis, de toute autre manière, à aucune mesure limitative de leur liberté personnelle.

2. Les employés consulaires ne sont pas soumis à la juridiction pénale, civile et administrative de l'Etat de résidence en ce qui concerne les actes commis dans l'exercice de leurs fonctions officielles.

3. Les dispositions des paragraphes 1 et 2 ne s'appliquent pas aux actions suivantes :

- 1) Action résultant de la conclusion, par un membre du poste consulaire, d'un contrat dans lequel il n'a pas agi, expressément ou implicitement, en tant que représentant de l'Etat d'envoi;
- 2) Action résultant d'un dommage lié à un accident causé dans l'Etat de résidence par un véhicule, un navire ou un aéronef;
- 3) Action relative à une succession dans laquelle le membre du poste consulaire figure uniquement comme héritier, légataire, exécuteur testamentaire, administrateur ou tuteur, à titre privé et non en tant que mandataire de l'Etat d'envoi.

4. En cas de poursuites pénales, de détention, d'arrestation ou de privation de liberté, sous toute autre forme que ce soit, d'un employé consulaire, les autorités compétentes de l'Etat de résidence en informent sans retard le chef de poste consulaire. En prenant de telles mesures, les autorités compétentes de l'Etat de résidence doivent traiter l'employé consulaire avec le respect qui lui est dû et éviter d'entraver, sous toute forme que ce soit, l'exercice de ses fonctions officielles.

##### *Article 43. OBLIGATION DE RÉPONDRE COMME TÉMOIN*

1. Les membres du poste consulaire peuvent être appelés à répondre comme témoins devant les tribunaux des autres autorités compétentes de l'Etat de résidence. Si un fonctionnaire consulaire refuse de comparaître ou de témoigner, aucune mesure coercitive ou sanction ne peut lui être appliquée. Les employés consulaires ne peuvent refuser de témoigner que dans les cas visés au paragraphe 3.

2. Les autorités compétentes de l'Etat de résidence qui appellent un membre du poste consulaire à témoigner ne peuvent pas entraver l'exercice de ses fonctions officielles. Elles peuvent recueillir ce témoignage du membre du poste consulaire au poste consulaire ou à son logement, ou accepter une déclaration écrite de sa part.

3. Les membres du poste consulaire ne sont pas tenus de témoigner sur des faits ayant trait à l'exercice de leurs fonctions officielles ou de produire la correspondance officielle ou autres documents des archives consulaires.

4. Les membres du poste consulaire ne sont pas tenus de témoigner en tant qu'experts sur la législation de l'Etat d'envoi.

#### *Article 44.* EXEMPTION DES SERVICES PERSONNELS ET MATÉRIELS

L'Etat de résidence doit exempter les membres du poste consulaire de tout service public et des obligations militaires telles que celles ayant trait aux réquisitions, contributions et logements militaires. Ils sont exemptés également, sous réserve des lois et règlements de l'Etat de résidence, des obligations en matière d'immatriculation des étrangers, aux permis de séjour et de travail, ainsi qu'aux autres formalités de cette nature concernant les étrangers.

#### *Article 45.* EXEMPTIONS FISCALES DES MEMBRES DU POSTE CONSULAIRE

1. Les membres du poste consulaire sont exemptés de tous impôts et charges nationaux, locaux et communaux, à l'exception :

- 1) Des impôts normalement incorporés dans le prix des marchandises ou des services;
- 2) Des impôts et charges sur les biens immobiliers situés sur le territoire de l'Etat de résidence;
- 3) Des droits de succession et de mutation perçus par l'Etat de résidence, sous réserve des dispositions de l'article 47 de la présente Convention;
- 4) Des impôts et charges sur les revenus privés, de quelque nature que ce soit, qui ont leur source dans l'Etat de résidence;
- 5) Des droits perçus pour des services particuliers rendus;
- 6) Des droits d'enregistrement, de greffe, d'hypothèque et de timbre, sous réserve des dispositions de l'article 38 de la présente Convention.

2. Les membres du poste consulaire qui emploient des personnes dont les salaires ou les traitements ne sont pas exemptés de l'impôt sur le revenu dans l'Etat de résidence doivent s'acquitter des obligations que les lois et règlements dudit Etat imposent aux employeurs en matière de perception de l'impôt sur le revenu.

#### *Article 46.* EXEMPTION DES DROITS DE DOUANE ET DE LA VISITE DOUANIÈRE

1. Sous réserve de ses lois et règlements, l'Etat de résidence autorise l'importation et l'exportation des objets suivants, et accorde les exemptions de tous droits de douane et autres charges connexes, à l'exception des frais d'entrepôt, de transport, et des services analogues :

- 1) Les objets et moyens de transport destinés à l'usage officiel du poste consulaire;

- 2) Les objets et moyens de transport destinés à l'usage personnel des fonctionnaires consulaires, ainsi que les articles destinés à leur fonctionnement. Les articles de consommation ne doivent pas excéder les quantités nécessaires pour les besoins immédiats des fonctionnaires consulaires;
- 3) Les objets et moyens de transport importés par un employé consulaire lors de sa première installation au poste consulaire.

2. Les bagages personnels des fonctionnaires consulaires sont exemptés de la visite douanière. Ils ne peuvent y être soumis que s'il y a des sérieuses raisons de supposer qu'ils contiennent des objets autres que ceux qui sont visés à l'alinéa 2 du paragraphe 1, ou des objets dont l'importation ou l'exportation est interdite par les lois et règlements de quarantaine. Cette visite doit avoir lieu en présence du fonctionnaire consulaire intéressé ou de son représentant.

#### *Article 47. SUCCESSION D'UN MEMBRE DU POSTE CONSULAIRE*

En cas de décès d'un membre du poste consulaire, d'un membre de sa famille, ou d'un membre du personnel privé qui n'est pas résident permanent de l'Etat de résidence, cet Etat est tenu :

- 1) D'autoriser l'exportation des biens meubles du défunt, à l'exception de ceux qui ont été acquis dans l'Etat de résidence et qui font l'objet d'une prohibition d'exportation au moment du décès de la personne en question;
- 2) De ne prélever aucun droit de succession ou de mutation sur les biens meubles laissés par une personne qui est décédée dans l'Etat de résidence.

#### *Article 48. PRIVILÈGES ET IMMUNITÉS DES MEMBRES DE LA FAMILLE ET DES MEMBRES DU PERSONNEL PRIVÉ*

1. Les membres de la famille jouissent, selon qu'il convient, des privilèges et immunités accordés aux membres du poste consulaire en vertu de la présente Convention. Cette disposition ne s'applique pas aux personnes qui sont ressortissants ou résidents permanents de l'Etat de résidence ou qui se livrent à une activité lucrative dans cet Etat.

2. Les employés consulaires qui sont ressortissants ou résidents permanents de l'Etat de résidence ne bénéficient pas des privilèges et immunités prévus par la présente Convention à l'exception des dispositions du paragraphe 3 de l'article 43 de la présente Convention.

3. A l'exception des dispositions de l'article 47 de la présente Convention, les privilèges et immunités prévus par la présente Convention ne sont pas accordés aux membres du personnel privé.

#### *Article 49. RENONCIATION AUX PRIVILÈGES ET IMMUNITÉS*

1. L'Etat d'envoi peut renoncer aux privilèges et immunités visés aux articles 42 et 43 de la présente Convention. Cette renonciation doit être expresse et communiquée par écrit à l'Etat de résidence.

2. Si un membre du poste consulaire ou un membre de sa famille engage une procédure dans une affaire où il bénéficie de l'immunité de juridiction, il n'est pas recevable à invoquer l'immunité de juridiction à l'égard de toute demande reconventionnelle directement liée à la demande principale.

3. La renonciation à l'immunité de juridiction pour une action judiciaire ou administrative n'est pas censée impliquer la renonciation à l'immunité quant aux



mesures d'exécution du jugement, pour lesquelles une renonciation distincte est requise.

#### TITRE V. DISPOSITIONS FINALES

##### *Article 50.* RATIFICATION, ENTRÉE EN VIGUEUR ET DÉNONCIATION

1. La présente Convention est sujette à ratification et entrera en vigueur 30 jours après la date de l'échange des instruments de ratification, qui aura lieu à Varsovie.

2. La présente Convention est conclue pour une période indéterminée. Elle pourra être dénoncée moyennant notification de l'une des deux Parties contractantes. Dans ce cas, elle cessera d'être en vigueur à l'expiration d'un délai de 12 mois à compter de la date de la dénonciation.

FAIT à Beijing le 14 juillet 1984, en deux exemplaires en langues chinoise et polonaise, les deux textes faisant également foi.

EN FOI DE QUOI les plénipotentiaires des Parties contractantes ont signé la présente Convention et y ont apposé leur sceau.

Pour le Gouvernement  
de la République populaire  
de Chine :

[QIAN QICHEN]

Pour le Gouvernement  
de République populaire  
de Pologne :

[ERNEST KUCZA]



**No. 23361**

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**CHINA  
and  
AUSTRALIA**

**Agreement relating to civil air transport (with schedule).  
Signed at Beijing on 7 September 1984**

*Authentic texts: Chinese and English.*

*Registered by China on 17 May 1985.*

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**CHINE  
et  
AUSTRALIE**

**Accord relatif aux transports civils aériens (avec annexe).  
Signé à Beijing le 7 septembre 1984**

*Textes authentiques : chinois et anglais.*

*Enregistré par la Chine le 17 mai 1985.*

[CHINESE TEXT — TEXTE CHINOIS]

## 中华人民共和国政府和澳大利亚 政府民用航空运输协定

中华人民共和国政府和澳大利亚政府（以下称为“缔约方”），承认遵循一九四四年十二月七日在芝加哥开放签字的国际民用航空公约及对它们已生效的修改和对缔约双方均有效的附件或修改；

希望便利中国人民和澳大利亚人民之间的友好往来，发展两国民用航空方面的相互关系；

就建立和经营两国领土间的定期航班，达成如下协议：

### 第一条 定 义

除非文中另有需要，本协定中：

（一）“航空当局”，中华人民共和国方面指中国民用航空局，澳大利亚方面指航空部秘书长，或双方均指授权执行上述当局目前履行的职能的任何个人或机构；

（二）“空运企业”，指提供或经营国际航班的任何航空运输企业；

(三) “指定空运企业”，指根据本协定第三条经指定和获准的缔约一方的空运企业；

(四) “航班”，指以飞机从事旅客、行李、货物或邮件的公共运输的任何定期航班；

(五) “国际航班”，指经过一个以上国家领土上空的航班；

(六) “非运输业务性经停”，指任何目的不在于上下旅客、行李、货物或邮件的降停；

(七) “运力”：

(1) 就飞机而言，指该飞机在航线或航段上可提供的商务载量；和

(2) 就规定航班而言，指飞行这一航班的飞机的运力乘以该飞机在一定的时期内在航线或航段上所飞行的班次；

(八) “运价”，指为运输旅客、行李和货物所支付的价格以及采用这些价格的条件，但不包括运输邮件的报酬和条件；

(九) “航线表”，指本协定所附的航线表或根据本协定第十四条的规定所修改过的航线表。该表构成本协定的组成部分。除另有规定外，对本协定的一切援引应包括对该航线表的援引。

## 第二条 授 权

一、缔约一方给予缔约另一方以本协定规定的权利，以使其指定空运企业能在航线表规定的航线上建立和经营国际航班（以下分别称为“规定航线”和“协议航班”）。

二、在不违反本协定规定的情况下，缔约一方指定空运企业在规定航线上经营协议航班时，应享有下列权利：

（一）经缔约另一方航空当局同意其季节飞行时刻表有关部分后，即可沿该当局规定的航路不降停飞越缔约另一方领土；

（二）经缔约另一方航空当局同意，在缔约另一方领土内规定航线上的地点作非运输业务性经停；和

（三）在缔约另一方领土内规定航线上的地点经停，以便上下国际旅客、行李、货物和邮件。

三、缔约一方指定空运企业如欲在缔约双方领土之间作加班或包机飞行，应取得缔约另一方指定空运企业同意和缔约另一方航空当局的事先许可。

## 第三条 指定和许可

一、缔约一方有权书面向缔约另一方指定一家空运企业，在航线表规定的航线上经营协议航班。

二、缔约各方指定空运企业的主要所有权和有效管理权应属于该缔约方或其国民。

三、缔约另一方航空当局可要求缔约一方指定空运企业向它证明，该空运企业有资格履行根据法律和规章所制定的条件，这些法律和规章是它们在经营国际航班方面所通常和合理地予以实施的。

四、在不违反本条第二款和第三款规定的情况下，缔约另一方在收到上述指定后，应不延误地给予该空运企业以合适的经营许可。

五、空运企业按照上述一经指定和获准，即可在任何时候开始经营协议航班。

#### 第四条 许可的撤销

一、在下列情况下，缔约一方有权撤销和暂停业已给予缔约另一方指定空运企业的经营许可，或对该指定空运企业行使本协定第二条规定的权利，规定它认为必要的条件：

(一) 如它对该空运企业的主要所有权或有效管理权是否属于指定该空运企业的缔约方或其国民的情况有疑义；或

(二) 如不遵守本协定第三条第三款给予其权利的缔约方的法律和规章；或

(三) 如该空运企业在其他方面没有按照本协定规定的条件经营。

二、除非本条第一款所述的撤销、暂停或规定条件必须立即执行，以防止进一步违反法律和规章，这种权利只能在与缔约另一方协商后方可行使。

## 第五条 提供技术服务和费率

一、缔约一方应在其领土内指定供缔约另一方指定空运企业经营规定航线所使用的主用机场和备降机场，并向该空运企业提供飞行协议航班所需的通信、导航、气象和其他附属服务。具体办法由缔约双方航空当局做出安排。

二、缔约一方指定空运企业使用缔约另一方的机场、导航设备和其他技术服务按公平合理的费率付费。这些费率不应高于使用类似飞机从事国际航班飞行的其他国家空运企业所付的费率。本款提及的费率限于根据缔约方法律收取的费用，不包括空运企业收取的费用。



## 第六条 关税和税收

一、缔约一方指定空运企业飞行国际航班的飞机，以及留置在飞机上的正常设备、零备件、燃料、油料（包括液压油）、润滑油、机上供应品（包括在飞行中售予旅客或供其使用的少量食品、饮料、酒类、烟草和其他物品）和专供飞机运行或检修使用的其他物品，在进入缔约另一方领土时，豁免一切关税、检验费和其他税捐，但这些设备和物品应留置机上直至再次运出。

二、缔约一方指定空运企业运入或代表该企业运入缔约另一方领土的专供飞行国际航班使用的燃料、油料（包括液压油）、润滑油、包括发动机等零备件、正常设备以及第一款所指的机上供应品，或装上该指定空运企业的飞机的上述物品，即使在装机的缔约方领土内的航段上使用，也应豁免所有税收和费用，包括缔约另一方领土内所征收的关税和检验费。但上述物品应交海关监管。

三、留置在缔约任何一方飞机上的正常设备、零备件、机上供应品、燃料、油料（包括液压油）和第一款所指的其他物品，只能在缔约另一方海关当局同意后，方可在缔约另一方领土内卸下。该当局可要求这些物品置于他们监管之下，直至再次运出，或按海关规定另作处理。

## 第七条 代表机构和人员

一、为了经营规定航线上的协议航班，缔约一方指定空运企业有权在缔约另一方领土内规定航线上的地点设立代表机构。本款所述的代表机构的人员应受驻在国的现行法律和规章的管辖。

二、除非双方另有安排，缔约一方指定空运企业驻在缔约另一方领土内的代表机构的工作人员，应为缔约任何一方的国民，其人数由缔约双方航空当局协议。

三、缔约一方应采取一切必要的步骤，对按本条第一款代表机构的建立和工作给予方便和协助。

四、进入缔约任一方领土的人员应经有关当局许可。

五、缔约一方应尽最大努力在其领土内保护缔约另一方空运企业活动和人员的安全。

## 第八条 空运企业收入的结汇

缔约任何一方允许缔约另一方指定空运企业按其外汇规定和要求，自由结汇该指定空运企业因运输旅客、行李、货物和邮件在缔约一方领土内所得的收支余额。

## 第九条 入境和放行规章

一、缔约一方关于从事国际航班飞行的飞机进出其领土和在其领土内停留、航行的法律和规章以及关于旅客、空勤组、行李、货物和邮件进出其领土和在其领土内停留的法律和规章，均适用于缔约另一方指定空运企业在缔约一方领土内的飞机、空勤组和该机所载运的旅客、行李、货物和邮件。在缔约另一方提出要求时，缔约一方应立即向其提供上述法律和规章的文本。

二、对直接过境缔约任一方领土的旅客，至多只采取非常简化的控制措施。直接过境的行李和货物应豁免关税、检验费和其他税收和费用。

## 第十条 运力规定

一、缔约双方指定空运企业在其两国领土间规定航线上经营协议航班方面，应有公平均等的机会。

二、缔约一方指定空运企业在规定航线上经营协议航班时，应考虑缔约另一方指定空运企业的利益，以免不适当地影响后者在整条航线或其航段上经营的航班。

三、缔约双方指定空运企业提供的协议航班应与公众对规定航线上运输的需要有密切的关系。指定空运企业提供的

协议航班,其主要目的应是提供足够的运力,以满足来自或前往指定该空运企业的缔约方领土的运输需要。对来自和前往指定空运企业以外的其他国家领土内的协议航班上提供的运输业务,应按运力须与下列各点相联系的总原则予以载运:

(一) 来自或前往指定该空运企业的缔约方领土的业务需要;

(二) 在考虑当地和区域的航班后,该空运企业经过该地区的业务需要;

(三) 联程航班的需要。

四、根据这些原则,在一方领土内始发、在另一方领土内过境或经停的业务并至第三国领土的往返业务,如此种业务在另一方领土内航路上过境或经停为期二十四小时以上,应被视为是前往或来自另一方领土的业务。这并不是欲在协议航班上提供由缔约一方领土始发和前往第三国领土的运力,是在另一方领土过境而不分程。

五、缔约各方指定空运企业可按照本条在协议航班上提供的运力,在有关指定空运企业开航之前和开航之后,应随时由缔约双方航空当局共同确定。

六、考虑到本条前述各款的规定,指定空运企业应随时讨论有关规定航线上的班次、飞行的机型所必需的事项,并

可将有关事项向各自航空当局提出联合建议。指定空运企业的建议应经双方航空当局批准。

## 第十一条 资料 and 统计资料

缔约任何一方航空当局应根据缔约另一方航空当局的要求，向其提供审议缔约一方指定空运企业在规定航线上提供的运力时可能合理地需要的统计资料。这些资料应包括为确定已载运的业务量所需的全部情况。

## 第十二条 运价的制定

一、适用于缔约双方领土间规定航线上运输的运价，应在合理的水平上制定，适当考虑到一切有关因素，包括经营成本、合理的利润、航班特点（如速度和舒适水平），以及其他空运企业在规定航线任何航段上所收取的运价。这些运价应根据本条下列规定制定。

二、本条第一款所述运价，应由缔约双方指定空运企业共同确定，在有必要和可能时，应与在该航线或其航段上经营的其他空运企业进行磋商。确定的运价应经缔约双方航空当局批准，并至少应在其拟议采用之日四十五天前提交各自

航空当局。在某些情况下，经上述当局决定，这一期限可予缩短。

三、如指定空运企业不能共同确定这些运价中的任何一项，缔约双方航空当局之间应设法确定运价。

四、如双方航空当局未能就批准根据本条第二款向其提交的任何运价达成协议，或未能根据第三款就运价的确定达成协议，这一问题应根据本协定第十三条规定提交缔约双方解决。

五、在根据本条规定决定新运价前，已生效的运价应继续有效。但是，运价不应由于本款规定在其应失效之日十二个月后仍然有效。

### 第十三条 协 商

一、缔约双方应本着密切合作和相互支持的精神，保证本协定的各项规定的正确实施和满意的遵守。为此，缔约双方航空当局应经常相互协商。

二、缔约任何一方可要求与缔约另一方进行协商，这一协商可以口头或书面进行，并应在收到要求之日起六十天内进行，除非缔约双方同意延长这一期限。

三、如对本协定的解释或实施发生分歧，缔约双方指定空运企业应在适当的情况下本着友好合作和相互谅解的精

神，设法直接通过协商予以解决。如上述空运业未能求得解决，或所争执的问题不在他们的主管范围以内，缔约双方航空当局应设法协商解决。如仍不能求得解决，缔约双方应设法通过外交途径予以解决。

#### 第十四条 修 改

一、为保证本协定的实施中的密切合作，缔约各方航空当局应根据该任何一方当局的要求进行协商。

二、如缔约任何一方认为修改本协定包括航线表的任何条款是可取的，可要求与缔约另一方进行协商。此项协商可在航空当局之间通过讨论或通过信函进行，应在收到要求之日起六十天内开始。达成协议的修改在通过外交途径换文载入达成的协定之后方能生效。

#### 第十五条 终 止

缔约任何一方可随时将其终止本协定的决定通知缔约另一方。通知发出后，本协定在缔约另一方收到终止通知之日起十二个月后即告终止，除非在期满前撤回该通知。在通知之日起十四天后，或将通知递交缔约另一方在发出通知的缔约一方领土内的外交机构之日，该项通知应认为已被收到。

## 第十六条 标 题

本协定每条均冠以标题，只是为了查阅方便，而决非对本协定的范围或意图予以解释、限制和说明。

## 第十七条 生 效

本协定自签字之日起生效。

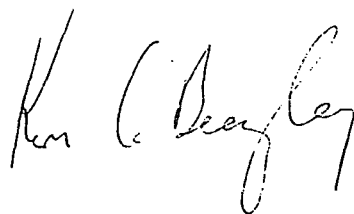
下列签字人，经其各自政府正式授权，已在本协定上签字，以昭信守。

本协定于一九八四年九月七日在 <sup>北京</sup> 签字，正本共两份，每份都用中文和英文写成，两种文字具有同等效力。

中华人民共和国政府  
代 表



澳大利亚政府  
代 表





## 航 线 表

一、指定空运企业经营的航线应为航空当局双方随时确定的中国境内地点和澳大利亚境内地点之间的航线，直至另行确定：

(一) 中华人民共和国指定空运企业经营的往返航线为：

北京—广州—悉尼—墨尔本；和

(二) 澳大利亚指定空运企业经营的往返航线为：

墨尔本—悉尼—广州—北京

二、有关指定空运企业在任何或所有飞行中，可以自行决定不经停上述航线上的任何地点，但该协议航班须在指定该空运企业的缔约方领土内的地点始发和终止。

## AGREEMENT<sup>1</sup> BETWEEN THE GOVERNMENT OF AUSTRALIA AND THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA RELATING TO CIVIL AIR TRANSPORT

The Government of the People's Republic of China and the Government of Australia (hereinafter referred to as "the Contracting Parties"),

Recognising that they should act in accordance with the Convention on International Civil Aviation opened for signature at Chicago on 7 December 1944<sup>2</sup> with amendments in force between them and Annexes or any amendments thereto effective for both Contracting Parties;

Desiring to facilitate friendly contacts between the peoples of China and Australia, and develop mutual relations between the two countries in the field of civil aviation,

Have agreed on the establishment and operation of scheduled air services between their respective territories as follows:

### *Article 1. DEFINITIONS*

For the purpose of this Agreement, unless the context otherwise requires:

(a) The term "aeronautical authorities" means in the case of the People's Republic of China, the Civil Aviation Administration of China, and in the case of Australia, the Secretary of the Department of Aviation, or in both cases any other person or agency authorised to perform the functions exercised by the said authorities;

(b) The term "airline" means any air transport enterprise offering or operating international air services;

(c) The term "designated airline" means an airline or airlines of each Contracting Party which has or have been designated and authorised in accordance with Article 3 of this Agreement;

(d) The term "air service" means any scheduled air service performed by aircraft for the public transport of passengers, baggage, cargo or mail;

(e) The term "international air service" means a service which passes through the air space over the territory of more than one State;

(f) The term "stop for non-traffic purposes" means a landing for any purpose other than taking on or discharging passengers, baggage, cargo or mail;

(g) The term "capacity" means:

- (1) In relation to an aircraft, the payload of that aircraft available on a route or section of a route; and
- (2) In relation to a specified air service, the capacity of the aircraft used on such service multiplied by the frequency operated by such aircraft over a given period on a route or section of a route;

<sup>1</sup> Came into force on 7 September 1984 by signature, in accordance with article 17.

<sup>2</sup> United Nations, *Treaty Series*, vol. 15, p. 295. For the texts of the Protocols amending this Convention, see vol. 320, pp. 209 and 217; vol. 418, p. 161; vol. 514, p. 209; vol. 740, p. 21; vol. 893, p. 117; vol. 958, p. 217; vol. 1008, p. 213, and vol. 1175, p. 297.

(h) The term “tariff” means the prices to be paid for the carriage of passengers, baggage and freight and the conditions under which these prices apply but excluding remuneration or conditions for the carriage of mail;

(i) The term “Schedule” means the Route Schedule annexed to this Agreement or as amended in accordance with the provisions of Article 14 of this Agreement. The Schedule forms an integral part of this Agreement and all references to the Agreement shall include references to the Schedule except where otherwise provided.

#### *Article 2. GRANT OF RIGHTS*

(1) Each Contracting Party grants to the other Contracting Party the rights specified in this Agreement to enable its designated airline to establish and operate international air services on the routes specified in the Schedule (hereinafter called “the agreed services” and “the specified routes” respectively).

(2) Subject to the provisions of this Agreement, the designated airline of each Contracting Party, while operating the agreed services on the specified routes, shall enjoy the following rights:

- (a) To overfly, without landing, the territory of the other Contracting Party along the air routes prescribed by the aeronautical authorities of the other Contracting Party after approval of the relevant part of the designated airline’s seasonal schedule has been obtained from the said authorities;
- (b) Subject to the approval of the aeronautical authorities of the other Contracting Party, to make stops for non-traffic purposes at points on the specified routes in the territory of the other Contracting Party; and
- (c) To make stops at points on the specified routes in the territory of the other Contracting Party for the purpose of taking on board and discharging international traffic in passengers, baggage, cargo and mail.

(3) Where the designated airline of one Contracting Party desires to operate an additional flight or a charter flight between the territories of the Contracting Parties, it shall obtain the agreement of the other designated airline prior to obtaining approval from the aeronautical authorities of the other Contracting Party.

#### *Article 3. DESIGNATION AND AUTHORISATION*

(1) Each Contracting Party shall have the right to designate in writing to the other Contracting Party an airline to operate the agreed services on the specified routes in the Schedule.

(2) The substantial ownership and effective control of the designated airlines of each Contracting Party shall remain vested in such Contracting Party or its nationals.

(3) The aeronautical authorities of the other Contracting Party may require the designated airline of the first Contracting Party to satisfy them that it is qualified to fulfil the conditions prescribed under the laws and regulations normally and reasonably applied by them to the operation of international air services.

(4) On receipt of such designation, the other Contracting Party shall, subject to the provisions of paragraphs (2) and (3) of this Article, grant without delay to the airline so designated the appropriate operating authorisation.

(5) When an airline has been so designated and authorised it may commence at any time operation of the agreed services.

*Article 4. REVOCATION OF OPERATING AUTHORISATION*

(1) Each Contracting Party shall have the right to revoke or suspend the operating authorisation already granted to the designated airline of the other Contracting Party, or to impose such conditions as it may deem necessary on the exercise by the said designated airline of the rights specified in Article 2 of this Agreement, in any of the following cases:

- (a) Where it is not satisfied that the substantial ownership or effective control of that airline is vested in the Contracting Party designating the airline or its nationals; or
- (b) Where there is a failure to comply with the laws and regulations, referred to in Article 3 (3) of this Agreement, of the Contracting Party granting these rights; or
- (c) Where that airline otherwise fails to operate in accordance with the conditions prescribed under this Agreement.

(2) Unless immediate revocation, suspension or imposition of the conditions mentioned in paragraph (1) of this Article is essential to prevent further infringements of laws and regulations, such right shall be exercised only after consultation with the other Contracting Party.

*Article 5. PROVISION OF TECHNICAL SERVICES AND RATE OF CHARGES*

(1) Each Contracting Party shall designate in its territory regular airports and alternate airports to be used by the designated airline of the other Contracting Party for the operation of the specified routes, and shall provide that airline with such communications, navigational, meteorological and other auxiliary services in its territory as are required for the operation of the agreed services. Detailed arrangements relating to the above shall be concluded between the aeronautical authorities of both Contracting Parties.

(2) The designated airline of each Contracting Party shall be charged for the use of airports, air navigation facilities and technical services of the other Contracting Party at fair and reasonable rates. Such rates shall not be higher than those paid by airlines of other States engaged in international air services using similar aircraft. The charges referred to in this paragraph are limited to those levied by and under the jurisdiction of the Contracting Parties and do not include charges levied by airlines.

*Article 6. CUSTOMS AND DUTIES*

(1) Aircraft operated on international air services by the designated airline of one Contracting Party, as well as their regular equipment, spare parts, supplies of fuels, oils (including hydraulic fluids), lubricants, aircraft stores (including food, beverages, liquor, tobacco and other products for sale to or use by passengers in limited quantities during the flight) and other items intended for or used solely in connection with the aircraft's operation or servicing which are on board such aircraft shall be exempt from all customs duties, inspection fees and other duties or taxes on arriving in the territory of the other Contracting Party, provided such equipment and supplies remain on board the aircraft up to such time as they are re-exported.

(2) Supplies of fuels, oils (including hydraulic fluids), lubricants, spare parts including engines, regular equipment and aircraft stores as referred to in paragraph (1) introduced into or supplied in the territory of each Contracting Party by or on behalf of the designated airline of the other Contracting Party or taken on board the aircraft operated by such designated airline and intended solely for use in the operation of international air services shall be exempt from all duties and charges, including customs duties and inspection fees imposed in the territory of the first Contracting Party even when those supplies are to be used on the parts of the journey performed over the territory of the Contracting Party in which they are taken on board. The materials referred to above may be required to be kept under customs supervision or control.

(3) The regular airborne equipment, spare parts, aircraft stores, supplies of fuels, oils (including hydraulic fluids), lubricants and other items referred to in paragraph (1) retained on board the aircraft of either Contracting Party may be unloaded in the territory of the other Contracting Party only with the approval of the customs authorities of that Contracting Party, who may require that those materials be placed under their supervision and control up to such time as they are re-exported or otherwise disposed of in accordance with customs regulations.

#### *Article 7. REPRESENTATIVE OFFICES AND PERSONNEL*

(1) For the operation of the agreed services on the specified routes, the designated airline of each Contracting Party shall have the right to set up representative offices at each point on the specified routes within the territory of the other Contracting Party. The staff of the representative offices referred to in this paragraph shall be subject to the laws and regulations in force in the country where such offices are located.

(2) The staff members of the representative offices of the designated airline of each Contracting Party in the territory of the other Contracting Party shall be nationals of either Contracting Party, unless mutually arranged otherwise. The number of such staff shall be subject to the consent of the aeronautical authorities of both Contracting Parties.

(3) Each Contracting Party shall take all necessary steps to facilitate and to assist the setting up and operation of the representative offices referred to in paragraph (1) of this Article.

(4) The entry of personnel into the territory of either Contracting Party shall be subject to the approval of the relevant authorities.

(5) Each Contracting Party shall use its best endeavours to safeguard, within its territory, the airline operations and personnel of the other Contracting Party.

#### *Article 8. TRANSFER OF AIRLINE EARNINGS*

Each Contracting Party undertakes to grant the designated airline of the other Contracting Party the right to free transfer in accordance with its foreign exchange regulations and requirements, of the excess of receipts over expenditure achieved in its territory in connection with the carriage of passengers, baggage, cargo and mail by the said designated airline.

*Article 9.* ENTRY AND CLEARANCE REGULATIONS

(1) The laws and regulations of either Contracting Party relating to the admission into, stay in, departure from and flight over its territory of aircraft engaged in the operation of international air services, as well as laws and regulations relating to the admission to, stay in and departure from its territory of passengers, crew, baggage, cargo and mail shall be applicable to the aircraft of the designated airline of the other Contracting Party, its crew as well as the passengers, baggage, cargo and mail carried by such aircraft, while in the territory of the first Contracting Party. Each Contracting Party shall promptly supply to the other Contracting Party at the latter's request the texts of the above-mentioned laws and regulations.

(2) Passengers in direct transit across the territory of either Contracting Party shall be subject to no more than very simplified control. Baggage and freight, if in direct transit, shall be exempt from customs duties, inspection fees and other duties and charges.

*Article 10.* CAPACITY PROVISIONS

(1) There shall be fair and equal opportunity for the designated airlines of the Contracting Parties in operating the agreed services on the specified routes between their respective territories.

(2) In the operation of the agreed services on the specified routes, the designated airline of each Contracting Party shall take into account the interests of the designated airline of the other Contracting Party so as not to affect unduly the air services which the latter airline operates over the whole route or parts thereof.

(3) The agreed services provided by the designated airlines of the Contracting Parties shall bear a close relationship to the requirements of the public for transportation on the specified routes. The agreed services provided by the designated airlines shall have as their primary objective the provision of capacity adequate for the requirements of traffic originating in or destined for the territory of the Contracting Party which has designated that airline. Provision for the carriage on the agreed services of traffic both originating in and destined for the territories of States other than that designating the airline shall be made in accordance with the general principles that capacity shall be related to:

- (a) The requirement of traffic originating in or destined for the territory of the Contracting Party which has designated the airline; and
- (b) The traffic requirements of the area through which the airline passes, after taking account of local and regional services; and
- (c) The requirements of through airline operations.

(4) Under these principles traffic which originates in the territory of one Contracting Party, transits or stops over in the territory of the second Contracting Party, and is destined for the territory of a third State and vice versa shall be regarded as traffic destined for or originating in the territory of the second Contracting Party provided such traffic transits or stops over en route in the territory of the second Contracting Party for a period of 24 hours or more. It is not intended to provide capacity on the agreed services for traffic originating in the territory of one Contracting Party and destined for the territory of a third State, which transits the territory of the other Contracting Party without making such a stopover.

(5) The capacity which may be provided in accordance with this Article by the designated airline of each of the Contracting Parties on the agreed services shall be such as is mutually determined between the aeronautical authorities of the Contracting Parties before the commencement by the designated airline concerned of an agreed service and from time to time thereafter.

(6) The designated airlines shall discuss from time to time as necessary matters relating to frequency of services on the specified routes and type of aircraft to be operated and may make joint recommendations to their respective aeronautical authorities in relation to such matters, taking into account the provisions of preceding paragraphs of this Article. The recommendations of the designated airlines shall be effective upon the approval of both aeronautical authorities.

#### *Article 11.* INFORMATION AND STATISTICS

The aeronautical authorities of either Contracting Party shall furnish to the aeronautical authorities of the other Contracting Party, at their request, statistical data as may be reasonably required for the purpose of reviewing the capacity provided by the designated airline of the first Contracting Party on the specified routes. Such data shall include all information required to determine the amount of traffic carried.

#### *Article 12.* ESTABLISHMENT OF TARIFFS

(1) The tariffs to be applied for transportation between the territories of each Contracting Party on the specified routes shall be established at reasonable levels, due regard being paid to all relevant factors including cost of operation, reasonable profit, characteristics of service (such as standards of speed and accommodation) and the tariffs of other airlines for any part of the specified route. These tariffs shall be fixed in accordance with the following provisions of this Article.

(2) The tariffs referred to in paragraph (1) of this Article shall be jointly determined between the designated airlines of both Contracting Parties, in consultation, when necessary and possible, with other airlines operating over the whole or part of that route. The tariffs so determined shall be subject to the approval of the aeronautical authorities of both Contracting Parties and shall be submitted to their respective aeronautical authorities at least 45 days prior to the proposed date of introduction of these tariffs. This period can be reduced in certain cases if both aeronautical authorities mutually decide to do so.

(3) If the designated airlines cannot jointly determine any of these tariffs, the aeronautical authorities of the Contracting Parties shall try to determine the tariffs between themselves.

(4) If the aeronautical authorities cannot both approve any tariff submitted to them under paragraph (2) of this Article or on the determination of any tariff under paragraph (3), the matter shall be referred to the Contracting Parties for settlement in accordance with the provisions of Article 13 of this Agreement.

(5) Pending determination of a new tariff in accordance with the provisions of this Article, the tariffs already in force shall prevail. Nevertheless, a tariff shall not be prolonged by virtue of this paragraph for more than 12 months after the date on which it otherwise would have expired.

### *Article 13. CONSULTATIONS*

(1) The Contracting Parties shall ensure the correct implementation of, and satisfactory compliance with, the provisions of the present Agreement in a spirit of close co-operation and mutual support. To this end, the aeronautical authorities of the Contracting Parties shall consult each other from time to time.

(2) Either Contracting Party may request consultation with the other Contracting Party, which may be either oral or in writing, and which shall begin within a period of 60 days from the date of receipt of the request, unless both Contracting Parties jointly determine an extension of this period.

(3) If any difference of opinion arises in respect of the interpretation or implementation of this Agreement, the designated airlines of both Contracting Parties shall, where appropriate, endeavour to settle it directly through consultation in a spirit of friendly co-operation and mutual understanding. If the airlines fail to reach a settlement, or if the matter at issue does not lie within their competence, the aeronautical authorities of the Contracting Parties shall endeavour to settle it through consultation. If a settlement still cannot be reached, the Contracting Parties shall endeavour to settle it through the diplomatic channel.

### *Article 14. AMENDMENT*

(1) In order to ensure close collaboration in the performance of this Agreement the aeronautical authorities of the Contracting Parties shall consult on request of either of those authorities.

(2) If either of the Contracting Parties considers it desirable to amend any provision of this Agreement including the Schedule, it may request consultation with the other Contracting Party. This consultation, which may be between aeronautical authorities and which may be through discussion or by correspondence, shall begin within a period of 60 days from the date of receipt of the request. Any amendments so negotiated shall not come into force until they have been incorporated into an agreement concluded by way of an exchange of notes through the diplomatic channel.

### *Article 15. TERMINATION*

Either Contracting Party may at any time notify the other Contracting Party of its decision to terminate this Agreement. If such notice is given, this Agreement shall terminate 12 months after the date of receipt by the other Contracting Party of the notice to terminate, unless the notice under reference is withdrawn before the expiry of that period. Notice shall be deemed to have been received 14 days after the date of the notice, or at the date of handing the notice to the diplomatic mission of the other Contracting Party in the territory of the first Contracting Party giving notice.

### *Article 16. TITLES*

Titles are inserted in this Agreement at the head of each article for the purpose of reference and convenience and in no way to define, limit or describe the scope or intent of this Agreement.

### *Article 17. COMING INTO FORCE*

This Agreement shall enter into force on the date of signature.



IN WITNESS WHEREOF the undersigned, being duly authorised thereof by their respective Governments, have signed this Agreement.

DONE at Beijing this seventh day of September in the year one thousand nine hundred and eighty-four in two originals, each in the Chinese and English languages, each language being equally authoritative.

For the Government  
of the People's Republic  
of China:

[Signed — Signé]<sup>1</sup>

For the Government  
of Australia:

[Signed — Signé]<sup>2</sup>

#### SCHEDULE

1. The routes to be operated by the designated airlines shall be between points in China and points in Australia as mutually determined from time to time by the aeronautical authorities until determined otherwise:

A. The route to be operated in both directions by the designated airline of the People's Republic of China shall be:

Beijing–Guangzhou–Sydney–Melbourne, and

B. The route to be operated in both directions by the designated airline of Australia shall be:

Melbourne–Sydney–Guangzhou–Beijing.

2. Points on any of the above routes may, at the option of the designated airline concerned, be omitted on any or all flights, provided that an agreed service shall have its starting point or terminal in the territory of the contracting party designating the airline.

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<sup>1</sup> Signed by Shen Tu — Signé par Shen Tu.

<sup>2</sup> Signed by Kim C. Beezley — Signé par Kim C. Beezley.

[TRADUCTION — TRANSLATION]

## ACCORD<sup>1</sup> ENTRE LE GOUVERNEMENT DE LA RÉPUBLIQUE POPULAIRE DE CHINE ET LE GOUVERNEMENT DE L'AUSTRALIE RELATIF AUX TRANSPORTS CIVILS AÉRIENS

Le Gouvernement de la République populaire de Chine et le Gouvernement de l'Australie (ci-après dénommés les « Parties contractantes »),

Reconnaissant qu'ils doivent agir conformément à la Convention relative à l'aviation civile internationale ouverte à la signature à Chicago le 7 décembre 1944<sup>2</sup>, avec les amendements en vigueur entre eux et les annexes ou amendements applicables aux deux Parties contractantes;

Désireux de faciliter des contacts amicaux entre les peuples chinois et australien et de développer des relations réciproques entre les deux pays dans le domaine de l'aviation civile,

Sont convenus de conclure l'Accord suivant concernant l'établissement et le fonctionnement de services aériens réguliers entre leurs territoires respectifs :

### *Article premier.* DÉFINITIONS

Aux fins du présent Accord et à moins que le contexte ne le permette pas :

1. Le terme « autorités aéronautiques » s'entend, en ce qui concerne la République populaire de Chine, de l'Administration de l'aviation civile de la Chine et, en ce qui concerne l'Australie, du Secrétaire du Département de l'aviation, ou, dans les deux cas, de toute personne ou organe habilité à remplir les fonctions exercées par lesdites autorités;

2. Le terme « entreprise de transport » désigne toute entreprise de transport aérien offrant ou exploitant des services aériens internationaux;

3. Le terme « entreprise désignée » s'entend d'une ou de plusieurs entreprises de transports aériens de chacune des Parties contractantes, désignées et autorisées conformément à l'article 3 du présent Accord;

4. Le terme « service aérien » désigne tout service aérien régulier, assuré par des aéronefs affectés au transport public de voyageurs, de bagages, de marchandises ou de courrier;

5. Le terme « service aérien international » désigne un service qui traverse l'espace aérien situé au-dessus des territoires de deux ou de plusieurs Etats;

6. Le terme « escale non commerciale » désigne une escale ayant un objet autre que l'embarquement ou le débarquement de voyageurs, de bagages, de marchandises ou de courrier;

7. Le terme « capacité »

l) S'appliquant à un aéronef, s'entend de la charge de l'appareil disponible sur une route ou une portion de route, et

<sup>1</sup> Entré en vigueur le 7 septembre 1984 par la signature, conformément à l'article 17.

<sup>2</sup> Nations Unies, *Recueil des Traités*, vol. 15, p. 295. Pour les textes des Protocoles amendant cette Convention, voir vol. 320, p. 209 et 217; vol. 418, p. 161; vol. 514, p. 209; vol. 740, p. 21; vol. 893, p. 117; vol. 958, p. 217; vol. 1008, p. 213, et vol. 1175, p. 297.

2) S'appliquant à un service aérien spécifié, s'entend de la capacité de l'aéronef utilisé sur ce service multipliée par la fréquence de vols de cet aéronef pour une période donnée sur une route ou une portion de route;

8. Le terme « tarifs » s'entend des prix à acquitter pour le transport des voyageurs, des bagages et du fret et des conditions d'application de ces prix, à l'exclusion du coût du transport du courrier et de ses conditions d'application;

9. Le terme « annexe » désigne le tableau des routes joint en annexe au présent Accord ou modifié conformément aux dispositions de l'article 14 dudit Accord. L'annexe fait partie intégrante du présent Accord et, sauf indication contraire, toute référence audit Accord vise également l'annexe.

#### *Article 2. OCTROI DES DROITS*

1. Chacune des Parties contractantes accorde à l'autre Partie les droits définis au présent Accord pour permettre à son entreprise désignée d'établir et d'exploiter des services aériens internationaux sur les routes indiquées dans l'annexe (ci-après dénommés respectivement les « services convenus » et les « routes indiquées »).

2. Sous réserve des dispositions du présent Accord, l'entreprise désignée par chaque Partie contractante aura le droit, au cours de l'exploitation des services convenus sur les routes indiquées :

- 1) De survoler, sans y faire escale, le territoire de l'autre Partie contractante le long des routes aériennes déterminées par les autorités aéronautiques de l'autre Partie contractante après approbation par lesdites autorités de la partie appropriée du tableau de route de l'entreprise désignée;
- 2) Sous réserve de l'approbation des autorités aéronautiques de l'autre Partie contractante, de faire des escales non commerciales sur le territoire de ladite Partie, aux points spécifiés des routes indiquées; et
- 3) De faire des escales sur le territoire de l'autre Partie, aux points spécifiés des routes indiquées, pour embarquer ou débarquer, en trafic international, des passagers, des bagages, des marchandises et du courrier.

3. L'entreprise désignée d'une des Parties contractantes qui désire exploiter un vol supplémentaire ou un vol affrété entre les territoires des Parties contractantes devra obtenir l'accord de l'autre entreprise désignée avant d'obtenir l'approbation des autorités aéronautiques de l'autre Partie contractante.

#### *Article 3. DÉSIGNATION ET AUTORISATION*

1. Chacune des Parties contractantes aura le droit de désigner par écrit à l'autre Partie l'entreprise qui exploitera les services convenus sur les routes indiquées dans l'annexe.

2. La propriété et le contrôle effectifs des entreprises désignées de chaque Partie contractante devront continuer d'appartenir à ladite Partie ou à ses ressortissants.

3. Les autorités aéronautiques de chacune des Parties contractantes pourront exiger de l'entreprise désignée par l'autre Partie qu'elle fasse la preuve qu'elle est en mesure de remplir les obligations prescrites par les lois et règlements que lesdites autorités appliquent normalement et raisonnablement à l'exploitation des services aériens internationaux.

4. Dès réception de la désignation de l'entreprise, chaque Partie contractante, sous réserve des dispositions des paragraphes 2 et 3 du présent article, devra accorder sans délai à l'entreprise désignée l'autorisation d'exploitation nécessaire.

5. Toute entreprise désignée et autorisée pourra commencer à tout moment l'exploitation des services convenus.

#### *Article 4. RÉVOCATION DES AUTORISATIONS D'EXPLOITATION*

1. Chacune des Parties contractantes a le droit de révoquer ou de suspendre l'autorisation d'exploitation accordée à l'entreprise désignée de l'autre Partie ou de soumettre l'exercice, par ladite entreprise désignée, des droits spécifiés à l'article 2 du présent Accord aux conditions qu'elle jugera nécessaires dans tous les cas où :

- 1) Elle n'aura pas la certitude que la propriété et le contrôle effectifs de l'entreprise sont entre les mains de la Partie contractante qui l'a désignée ou de ses ressortissants; ou
- 2) Les lois et règlements visés au paragraphe 3 de l'article 3 du présent Accord édictés par la Partie contractante ayant accordé ces droits n'auront pas été respectés; ou
- 3) L'entreprise désignée ne se conformerait pas aux conditions définies par le présent Accord.

2. Sauf s'il est indispensable de prononcer immédiatement la révocation ou la suspension, ou d'imposer les conditions définies au paragraphe 1 du présent article, pour empêcher de nouvelles infractions aux lois et règlements, le droit de révoquer ou de suspendre l'exploitation ne pourra être exercé par une Partie contractante qu'après consultation de l'autre Partie.

#### *Article 5. FOURNITURE DES SERVICES TECHNIQUES ET TAUX DES REDEVANCES*

1. Chacune des Parties contractantes désignera, sur son territoire, les aéroports réguliers et les aéroports de dégagement que devra utiliser l'entreprise désignée de l'autre Partie contractante pour l'exploitation des routes indiquées et fournira à cette entreprise, sur son territoire, les services de communication, de navigation et de météorologie et les autres services auxiliaires nécessaires à l'exploitation des services convenus. Des arrangements détaillés à cette fin seront conclus entre les autorités aéronautiques des deux Parties contractantes.

2. L'entreprise désignée par l'une des Parties contractantes devra payer, pour l'utilisation des aéroports, des services de navigation aérienne et des services techniques aériens de l'autre Partie contractante, des redevances équitables et raisonnables dont le taux n'excédera pas celui payé par des entreprises d'autres Etats assurant des services aériens utilisant des aéronefs similaires. Les redevances visées au présent paragraphe ne concernent que celles prélevées par les Parties contractantes et sous leur juridiction; elles n'incluent pas les droits exigés par les entreprises.

#### *Article 6. DROITS DE DOUANE ET TAXES*

1. Les aéronefs exploités en service international par l'entreprise désignée d'une Partie contractante, ainsi que leur équipement normal, les pièces détachées, les lubrifiants (y compris les fluides hydrauliques), les provisions de bord (y

compris les denrées alimentaires, les boissons, les alcools, le tabac et autres produits destinés à la vente ou à la consommation des passagers en quantités limitées pendant le vol) et les autres produits destinés à être utilisés ou effectivement utilisés exclusivement pour le fonctionnement et l'entretien des aéronefs se trouvant à bord sont exemptés de tous droits de douane, frais d'inspection et autres droits et taxes à l'arrivée sur le territoire de l'autre Partie contractante, à condition que ledit équipement et lesdites fournitures demeurent à bord jusqu'à ce qu'ils soient réexportés.

2. Les carburants, les huiles (y compris les fluides hydrauliques), les lubrifiants, les pièces détachées y compris les moteurs, l'équipement normal et les approvisionnements visés au paragraphe 1, introduits ou fournis sur le territoire de chacune des Parties contractantes par l'entreprise désignée de l'autre Partie ou pour son compte, ou embarqués à bord de l'aéronef exploité par l'entreprise désignée et devant être utilisés exclusivement aux fins de l'exploitation des services aériens internationaux, sont exonérés de tous droits et charges, y compris des droits de douane et frais d'inspection, imposés sur le territoire de la première Partie contractante, même lorsque lesdits articles doivent être utilisés sur les parties du voyage exécutées au-dessus du territoire de la Partie contractante sur lequel ils ont été embarqués. Les fournitures susvisées peuvent être conservées sous contrôle ou surveillance de la douane.

3. L'équipement normal des aéronefs, les pièces détachées, les approvisionnements de bord et les carburants, les huiles (y compris les fluides hydrauliques), les lubrifiants et les autres articles visés au paragraphe 1 se trouvant à bord des aéronefs de l'une ou l'autre des Parties contractantes ne peuvent être déchargés sur le territoire de l'autre Partie qu'avec l'approbation des autorités douanières de cette dernière, lesquelles peuvent exiger que ces matériaux soient placés sous leur supervision et leur contrôle jusqu'au moment où ils sont réexportés ou écoulés de toute autre manière conformément aux règlements douaniers.

#### *Article 7. BUREAUX DE REPRÉSENTATION ET PERSONNEL*

1. Aux fins de l'exploitation des services convenus sur les routes indiquées, l'entreprise désignée de chacune des Parties contractantes aura le droit d'établir des bureaux de représentation sur tous les points des routes indiquées situés sur le territoire de l'autre Partie contractante. Le personnel des bureaux de représentation visés au présent paragraphe sera assujéti aux lois et règlements en vigueur dans le pays où lesdits bureaux sont situés.

2. A moins que les Parties n'en conviennent autrement, les membres du personnel des bureaux de représentation de l'entreprise désignée de chacune des Parties contractantes situées sur le territoire de l'autre Partie devront être ressortissants de l'une ou l'autre Partie. Leur nombre sera soumis à l'approbation des autorités aéronautiques de chacune des Parties contractantes.

3. Chacune des Parties contractantes prendra toutes les mesures nécessaires pour faciliter et aider la mise en place et le fonctionnement des bureaux de représentation visés au paragraphe 1 du présent article.

4. L'entrée des membres du personnel susmentionné sur le territoire de chacune des Parties contractantes sera soumise à l'approbation des autorités compétentes.

5. Chacune des Parties contractantes, sur son territoire, veillera à assurer la sécurité des opérations et du personnel de l'entreprise de transport de l'autre Partie.

*Article 8. TRANSFERT DES BÉNÉFICES DE L'ENTREPRISE DE TRANSPORT*

Chacune des Parties contractantes s'engage à accorder à l'entreprise désignée de l'autre Partie le droit de transférer librement, conformément à ses règles et règlements en matière de change, l'excédent de ses recettes réalisées sur ses dépenses engagées sur son territoire à l'occasion du transport des passagers, des bagages, des marchandises et du courrier.

*Article 9. RÈGLEMENTS APPLICABLES À L'ENTRÉE ET À LA SORTIE*

1. Les lois et règlements de chacune des Parties contractantes applicables à l'entrée et au séjour sur son territoire ainsi qu'à la sortie et au survol dudit territoire par un aéronef assurant les services aériens internationaux et ceux qui régissent l'entrée et le séjour sur son territoire et la sortie dudit territoire des passagers, des équipages, des marchandises et du courrier seront applicables aux aéronefs de l'entreprise désignée de l'autre Partie, ainsi qu'aux passagers, aux bagages, aux marchandises et au courrier transportés par lesdits aéronefs pendant le temps où ils se trouveront sur le territoire de la première Partie contractante. Chacune des Parties contractantes communiquera promptement à l'autre, si elle en fait la demande, les textes des lois et règlements susmentionnés.

2. Les passagers en transit direct par le territoire de l'une ou l'autre Partie contractante ne seront soumis qu'à un contrôle très simplifié. Les bagages et le fret en transit direct seront exonérés de droits de douanes, taxes d'inspection et autres droits et taxes.

*Article 10. DISPOSITIONS RELATIVES À LA CAPACITÉ*

1. Les entreprises désignées par chacune des Parties contractantes auront la faculté d'exploiter, dans des conditions équitables et égales, les services convenus sur les routes spécifiées entre leurs territoires respectifs.

2. Pour l'exploitation des services convenus sur les routes spécifiées, les entreprises désignées par chacune des Parties contractantes devront prendre en considération les intérêts des entreprises désignées par l'autre Partie afin de ne pas affecter indûment les services aériens que ces dernières exploitent sur tout ou partie des routes.

3. Les services convenus assurés par les entreprises désignées par les Parties contractantes devront être adaptés de près aux besoins du public en matière de transport sur les routes spécifiées et auront pour objectif premier de fournir une capacité suffisante pour répondre à la demande de transport au départ et à destination du territoire de la Partie contractante qui a désigné cette entreprise. Pour les services convenus exploités à destination ou en provenance du territoire d'Etats autres que celui ayant désigné l'entreprise, il conviendra de respecter les principes généraux suivant lesquels la capacité doit être proportionnée :

- 1) Aux exigences du trafic en provenance ou à destination du territoire de la Partie contractante qui a désigné l'entreprise;
- 2) Aux exigences du trafic dans la région desservie par l'entreprise, compte dûment tenu des services locaux et régionaux; et

3) Aux exigences de l'exploitation des services longs courriers.

4. En vertu de ces principes, le trafic qui commence sur le territoire d'une Partie contractante, transite ou fait escale sur le territoire de la seconde Partie contractante, et est destiné au territoire d'un Etat tiers et *vice versa* est considéré comme un trafic à destination ou en provenance du territoire de la seconde Partie contractante, à condition que ce trafic transite ou fasse escale en route sur le territoire de la seconde Partie contractante pendant 24 heures ou plus. Aucune restriction de capacité n'affectera les services convenus pour le trafic en provenance du territoire d'une Partie contractante et à destination du territoire d'un Etat tiers avec transit sur le territoire de l'autre Partie contractante sans escale d'au moins 24 heures.

5. La capacité qui peut être fournie, conformément au présent article, par l'entreprise désignée de chacune des Parties contractantes aux fins des services convenus sera celle qui sera déterminée d'un commun accord par les autorités aéronautiques des Parties contractantes avant que l'entreprise désignée commence à exploiter un service convenu et périodiquement par la suite.

6. Les entreprises désignées se consulteront périodiquement au sujet de toutes les questions relatives à la fréquence des services sur les routes indiquées et au type d'aéronefs qui sera exploité; elles pourront faire des recommandations communes à leurs autorités aéronautiques respectives concernant ces questions, compte tenu des dispositions des paragraphes précédents du présent article. Les recommandations des entreprises désignées entreront en vigueur lorsqu'elles auront été approuvées par les autorités aéronautiques des deux Parties.

#### Article 11. INFORMATION ET STATISTIQUES

Les autorités aéronautiques de chacune des Parties contractantes fourniront à celles de l'autre Partie, sur leur demande, les données statistiques que ces dernières peuvent raisonnablement exiger pour pouvoir contrôler la capacité offerte par l'entreprise désignée de la première Partie contractante sur les routes indiquées. Ces données contiendront tout renseignement nécessaire pour déterminer le volume du trafic acheminé.

#### Article 12. TARIFS

1. Les tarifs applicables aux transports entre les territoires de chacune des Parties contractantes sur les routes indiquées seront fixés à des taux raisonnables, compte dûment tenu de tous les éléments d'appréciation pertinents, notamment des frais d'exploitation, de la réalisation d'un bénéfice normal, des caractéristiques du service (telles que normes de vitesse et d'aménagements) et des tarifs appliqués par les autres entreprises sur tout ou partie des routes spécifiées. Ces tarifs seront arrêtés conformément aux dispositions suivantes du présent article.

2. Les tarifs visés au paragraphe 1 du présent article seront déterminés conjointement par les entreprises désignées des deux Parties contractantes, en consultation, si possible et lorsque cela s'avérera nécessaire, avec les autres entreprises exploitant tout ou partie de cette route. Les tarifs ainsi arrêtés seront soumis à l'approbation des autorités aéronautiques des deux Parties contractantes 45 jours au moins avant la date proposée pour leur mise en vigueur. Cette période pourra être réduite dans certains cas si les deux autorités aéronautiques le décident d'un commun accord.

3. Si les entreprises désignées ne peuvent parvenir à un accord sur ces tarifs, les autorités aéronautiques des Parties contractantes s'efforceront de fixer le tarif entre elles.

4. Si les autorités aéronautiques ne parviennent pas à approuver les tarifs qui leur sont soumis conformément au paragraphe 2 du présent article ou à fixer un tarif conformément au paragraphe 3, la question sera soumise pour règlement aux Parties contractantes conformément aux dispositions de l'article 13 du présent Accord.

5. Jusqu'à la fixation d'un nouveau tarif conformément aux dispositions du présent article, les tarifs en vigueur continueront de s'appliquer. Néanmoins, les tarifs ne pourront être prorogés, en vertu du présent paragraphe, au-delà d'un délai de 12 mois après la date à laquelle ils seraient autrement venus à expiration.

#### *Article 13. CONSULTATIONS*

1. Les Parties contractantes veilleront à ce que les dispositions du présent Accord soient dûment appliquées et respectées dans un esprit d'étroite collaboration et de soutien mutuel. A cette fin, les autorités aéronautiques des Parties contractantes se consulteront périodiquement.

2. Chacune des Parties contractantes pourra demander à l'autre Partie que des consultations aient lieu, oralement ou par écrit; ces consultations devront commencer dans un délai de 60 jours à compter de la date de réception de la demande, à moins que les deux Parties contractantes ne conviennent de proroger ce délai.

3. En cas de divergence de vues au sujet de l'interprétation ou de la mise en œuvre du présent Accord, les entreprises désignées des deux Parties contractantes s'efforceront, lorsqu'il y a lieu, de le régler directement dans un esprit de coopération amicale et de compréhension mutuelle. Si les entreprises ne parviennent pas à un règlement ou si la question à résoudre excède leur compétence, les autorités aéronautiques des Parties contractantes s'efforceront de le régler par voie de consultation. Si un tel règlement demeure impossible, les Parties contractantes s'efforceront de le régler par la voie diplomatique.

#### *Article 14. AMENDEMENTS*

1. Afin d'assurer une étroite collaboration dans la mise en œuvre du présent Accord, les autorités aéronautiques des Parties contractantes se consulteront à la demande de l'une ou l'autre d'entre elles.

2. Si l'une ou l'autre des Parties contractantes juge souhaitable de modifier les dispositions du présent Accord, y compris l'annexe, elle pourra demander que des consultations aient lieu avec l'autre Partie. Ces consultations, qui pourront se dérouler à l'échelon des autorités aéronautiques et pourront s'effectuer soit de vive voix, soit par correspondance, commenceront dans les 60 jours de la date de réception de la demande. Tout amendement ainsi négocié ne prendra effet qu'après conclusion d'un accord effectué par un échange de notes diplomatiques.

#### *Article 15. DÉNONCIATION*

Chacune des Parties contractantes pourra à tout moment notifier à l'autre Partie sa décision de dénoncer le présent Accord. En pareil cas, l'Accord prendra fin 12 mois après la date à laquelle l'autre Partie contractante aura reçu ladite



notification, à moins qu'elle ne soit retirée avant l'expiration de ce délai. La notification sera réputée être parvenue à l'autre Partie 14 jours après sa date ou à la date à laquelle elle aura été remise à la mission diplomatique de l'autre Partie contractante sur le territoire de la Partie auteur de la notification.

*Article 16. TITRES*

Les titres insérés dans le présent Accord en tête de chaque article l'ont été à seule fin de commodité et ne définissent, ne limitent ni ne décrivent aucunement la portée ou l'objet du présent Accord.

*Article 17. ENTRÉE EN VIGUEUR*

Le présent Accord entrera en vigueur à la date de sa signature.

EN FOI DE QUOI les représentants soussignés, à ce dûment habilités par leurs gouvernements respectifs, ont signé le présent Accord.

FAIT à Beijing le 7 septembre 1984, en deux originaux en langues chinoise et anglaise, chaque original faisant également foi.

Pour le Gouvernement  
de la République populaire  
de Chine :

[SHEN TU]

Pour le Gouvernement  
de l'Australie :

[KIM C. BEEZLEY]

ANNEXE

1. Jusqu'à ce qu'elles soient déterminées autrement, les routes qui seront exploitées par les entreprises désignées relieront les points en territoires chinois et australien, qui seront déterminés périodiquement par les autorités aéronautiques :

A. La route qui sera exploitée dans les deux directions par l'entreprise désignée de la République populaire de Chine reliera les points suivants :

Beijing – Guangzhou – Sydney – Melbourne, et

B. La route qui sera exploitée dans les deux directions par l'entreprise désignée de l'Australie reliera les points suivants :

Melbourne – Sydney – Guangzhou – Beijing.

2. Chaque entreprise désignée concernée pourra, à son gré, omettre de desservir des points situés sur l'une ou l'autre des routes susmentionnées sous réserve qu'un service convenu ait son point de départ ou son point d'arrivée sur le territoire de la Partie contractante qui l'a désignée.



**No. 23362**

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**CHINA  
and  
BANGLADESH**

**Long-term Trade Agreement (with schedules). Signed at  
Dhaka on 21 December 1984**

*Authentic texts: Chinese and English.*

*Registered by China on 17 May 1985.*

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**CHINE  
et  
BANGLADESH**

**Accord commercial à long terme (avec listes). Signé à Dacca  
le 21 décembre 1984**

*Textes authentiques : chinois et anglais.*

*Enregistré par la Chine le 17 mai 1985.*

[CHINESE TEXT — TEXTE CHINOIS]

## 中华人民共和国政府和孟加拉人民共和国政府 长期贸易协定

中华人民共和国政府和孟加拉人民共和国政府（以下简称缔约双方），为了进一步发展两国之间的友好关系和贸易关系，经过友好商谈，达成协议如下：

### 第 一 条

缔约双方应采取措施发展两国之间的贸易，并对两国间的货物交换相互提供便利。

### 第 二 条

两国之间的贸易和货物交换应遵照各自国家当时有效的进出口法令、规定、程序和外汇条例进行。

### 第 三 条

缔约双方在有关航运、进出口商品征收关税和其他捐税方面，以及海关管理的规章、手续和收费方面，相互给予最惠国待遇。

但上述规定不适用于：

（一）缔约任何一方为便利边境贸易已给予或将给予毗邻国家的优惠和利益；

(二) 缔约任何一方由于成为或将成为关税联盟、自由贸易区的成员而产生的优惠和利益。

#### 第 四 条

在本协定有效期内，缔约双方各方出口的商品金额大约为二亿至二亿五十万<sup>二</sup>美元。

#### 第 五 条

两国之间的货物交换应参照本协定附表“甲”（孟加拉国对中国出口的商品）和附表“乙”（中国对孟加拉国出口的商品），并根据双方的需要与可能进行。但本协定对上述附表“甲”和附表“乙”内未列入的商品的交换并无限制之意。

#### 第 六 条

本协定项下的商品的进口和出口由中国对外贸易机构同孟加拉国的国营贸易公司和其他进出口商签订合同进行。

#### 第 七 条

缔约双方同意每一协定年度签订一项贸易议定书，确定该年度贸易额和双方交换的主要商品。

#### 第 八 条

缔约双方同意，为了就执行本协定进行磋商，每年轮流在北京和达卡举行会晤。

## 第九 条

本协定项下的贸易贷款以及有关的从属费用，如运费、保险费、银行手续费、商业佣金等，通过两国银行开立的帐户办理支付。为此，中国银行和孟加拉国黄金银行相互以对方名义开立帐户。上述帐户以美元为记帐货币。

双方相互提供免予计息的摆动额度一百四十万美元。上述帐户余额超过摆动额时，其超过部分将根据本条款所述两银行商定的利率计算利息。

但是，中国和孟加拉国的进出口者也可以缔结以可兑换货币支付的供货合同。

## 第十 条

每一协定年度终了时，如帐面差额超过摆动额，应将超过摆动额的金额另记入新户，逆差一方在三个月内通过出口附表中所列的商品予以清偿。三个月后如新帐户仍有余额，则逆差一方应以美元或其他可兑换的货币予以清偿。

本协定期满时，帐上的余额应在三个月内以双方同意的货物偿还，三个月后如仍有余额，则逆差一方应以美元或其他可兑换的货币偿还。

## 第十一 条

本协定的记帐货币美元以特别提款权进行保值。关于保值的技术细节由两国银行在制订银行细则时确定。

## 第十二条

为执行本协定和根据本协定签订的贸易议定书，本协定第九条所述两银行应缔结一项银行细则。

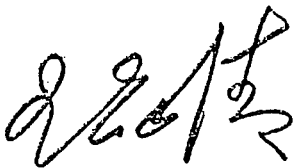
## 第十三条

本协定为期五年，从一九八五年一月一日起生效，有效期至一九八九年十二月三十一日止。

本协定于一九八四年十二月二十一日在达卡签订，正本两份，每份都用中文和英文写成，两种文本具有同等效力。

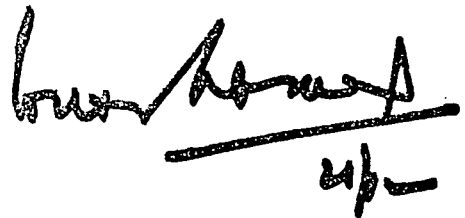
中华人民共和国政府

代 表



孟加拉人民共和国政府

代 表



## 附表“甲”

一九八五—一九八九年

孟加拉國对中国出口商品参考  
貨 單

編 号	品 名
1	黄 麻
2	麻 制 品
3	皮 張
4	皮革和皮革制品
5	食 糖
6	木 材
7	烟 叶
8	新闻紙、紙張和紙漿
9	人造絲
10	玻璃紙
11	化 肥
12	電 纜、電 線
13	電 話 線
14	聚乙稀产品
15	麻 地 毯
16	麻 紗
17	其 他



## 附件“乙”

## 一九八五年至一九八九年中国对孟加拉国出口商品参考货单

编 号	品 名
1	煤 炭
2	钢 坯
3	生 铁
4	棉 花
5	大 米
6	高速柴油
7	润滑基础油
8	染料和化工原料
9	轻工业品
10	纺织品
11	机械设备
12	水电设备
13	工具和小五金
14	其 他

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## LONG TERM TRADE AGREEMENT<sup>1</sup> BETWEEN THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA AND THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

The Government of the People's Republic of China and the Government of the People's Republic of Bangladesh (hereinafter referred to as the Contracting Parties), with a view to further enhancing the friendship and developing trade relations between the two countries, have, through friendly consultation, reached agreement as follows:

*Article 1.* The Contracting Parties shall take appropriate measures to develop trade between their two countries and facilitate the exchange of goods between the two countries.

*Article 2.* The trade and exchange of goods between the two countries shall be conducted in accordance with the import and export laws, rules and procedures, and the foreign exchange laws and regulations in force from time to time in each respective country.

*Article 3.* The Contracting Parties shall grant to each other the most-favoured-nation treatment in all matters relating to shipping, customs duties and other taxes to be levied on the importation and exportation of commodities, and to rules, formalities and charges of customs management.

The provisions of the preceding paragraph, however, shall not apply to:

- (a) Preferences and advantages which either Contracting Party has accorded or may accord to bordering countries in order to facilitate their frontier trade; and
- (b) Preferences and advantages which result from any customs unions or free trade areas to which either Contracting Party is or may become a member.

*Article 4.* During the period of validity of this Agreement, the value of exports by each of the Contracting Parties will be approximately 200 million to 250 million U.S. Dollars.

*Article 5.* In accordance with the requirements and possibilities of the Contracting Parties, the exchange of commodities between the two countries shall be made on the basis of Schedule "A" (Exports from Bangladesh to China) and Schedule "B" (Exports from China to Bangladesh) attached to this Agreement.

However, this Agreement does not preclude the exchange of commodities not listed in the above-mentioned schedules.

*Article 6.* The import and export of goods under this Agreement shall be carried out on the basis of contracts to be concluded between foreign trade corporations of China, on the one hand, and the state trading corporations and other importers and exporters of Bangladesh, on the other.

*Article 7.* The Contracting Parties agree to conclude a trade Protocol for each Agreement year to fix the value of trade and the major commodities to be exchanged in the same Agreement year.

*Article 8.* The Contracting Parties agree that in order to hold consultation on and for carrying out this Agreement, they would meet every year in Beijing and Dhaka alternately.

<sup>1</sup> Came into force on 1 January 1985, in accordance with article 13.

*Article 9.* Payments for the goods exchanged under this Agreement and the incidental expenses thereof such as freight, insurance premiums, banking and commercial commissions, shall be effected through the accounts to be opened by the banks of the two countries. Accordingly, the Bank of China and Sonali Bank of Bangladesh shall open an account in their books in each other's name. U.S. Dollar will be used as the accounting currency for these accounts.

The Contracting Parties shall mutually provide each other with an interest-free swing limit to the extent of U.S. Dollar 1.4 million. Should the balance of the said account exceed this swing limit, interest will be charged for the amount in excess of such limit at a rate to be mutually agreed upon by the two banks mentioned in this Article.

However, the importers and exporters of Bangladesh and China may also conclude contracts for supply of goods to be paid in convertible currencies.

*Article 10.* At the end of each Agreement year, if the net balance of the accounts exceeds the swing limit, the amount in excess shall be transferred into a new account and the Party having the adverse balance shall settle the excess amount within three months by the deliveries of goods listed in the attached Schedules. If there still remains a balance in the new accounts after three months, the same shall be liquidated by the payment of U.S. Dollar or other convertible currencies.

At the expiration of this Agreement, the outstanding balance of accounts shall be settled within three months by the deliveries of goods to be mutually agreed upon by the Contracting Parties. If there still remains a balance after three months, the party having the adverse balance shall settle it by the payment of U.S. Dollar or other convertible currencies.

*Article 11.* The value of the U.S. Dollar, the accounting currency under this Agreement, shall be determined in terms of the Special Drawing Rights. The technical details shall be finalized in the banking arrangement to be worked out by the two banks.

*Article 12.* For implementation of the provisions of this Agreement and the Trade Protocols signed under this Agreement, a banking arrangement shall be concluded between the two banks mentioned in Article 9 of this Agreement.

*Article 13.* This Agreement shall cover a period of five years and come into effect from the 1st day of January, 1985, and remain in force until December 31, 1989.

DONE in Dhaka on the 21st day of December, 1984, in two original copies, each written in the Chinese and English languages, both texts being equally authentic.

For and on behalf  
of the Government  
of the People's Republic  
of China:

[Signed]

WANG PINQING  
Minister's Representative for Foreign  
Economic Relations and Trade and  
Leader of the Chinese Trade De-  
legation

For and on behalf  
of the Government  
of the People's Republic  
of Bangladesh:

[Signed]

S. HASAN AHMAD  
Secretary, Ministry of Commerce and  
Leader of the Bangladesh Trade De-  
legation

## SCHEDULE "A"

INDICATIVE LIST OF EXPORTS FROM BANGLADESH TO CHINA  
FOR THE PERIOD 1985-1989

<i>Sl. No.</i>	<i>Items</i>	<i>Sl. No.</i>	<i>Items</i>
1.	Raw jute	9.	Rayon
2.	Jute goods	10.	Cellophane
3.	Hides and skins (tanned and semi-tanned)	11.	Fertilizer
4.	Leather (finished) and leather products	12.	Electric wires and cables
5.	Sugar	13.	Telephone cables
6.	Processed timber	14.	Jute carpets
7.	Tobacco	15.	Jute yarn
8.	Newsprint, paper and paper pulp	16.	PVC products
		17.	Others

## SCHEDULE "B"

INDICATIVE LIST OF EXPORTS FROM CHINA  
TO BANGLADESH FOR THE PERIOD 1985-1989

<i>Sl. No.</i>	<i>Items</i>	<i>Sl. No.</i>	<i>Items</i>
1.	Coal	8.	Dyes and chemicals
2.	M. S. billets	9.	Light industrial products
3.	Pig iron	10.	Textiles
4.	Cotton	11.	Machinery and equipment
5.	Rice	12.	Hydroelectric power equipment
6.	High-speed diesel oil	13.	Tools and hardwares
7.	Lubricating base oil	14.	Others

[TRADUCTION — TRANSLATION]

ACCORD<sup>1</sup> COMMERCIAL À LONG TERME ENTRE LE GOUVERNEMENT DE LA RÉPUBLIQUE POPULAIRE DE CHINE ET LE GOUVERNEMENT DE LA RÉPUBLIQUE POPULAIRE DU BANGLADESH

Le Gouvernement de la République populaire de Chine et le Gouvernement de la République populaire du Bangladesh (ci-après dénommés les « Parties contractantes »), en vue de favoriser l'amitié réciproque entre les deux pays et de développer les relations commerciales, sont, à la suite de consultations amicales, convenus de ce qui suit :

*Article premier.* Les Parties contractantes s'engagent à prendre les mesures nécessaires pour développer le commerce et faciliter les échanges de marchandises entre les deux pays.

*Article 2.* Le commerce et les échanges de marchandises entre les deux pays se feront conformément à la législation et à la réglementation en matière de commerce extérieur et de change en vigueur dans chacun de ces pays.

*Article 3.* Les Parties contractantes s'accordent réciproquement le traitement de la nation la plus favorisée en tout ce qui concerne l'expédition de marchandises, les droits de douane et autres impositions applicables aux marchandises importées ou exportées, et les règlements, commissions et formalités douaniers.

Les dispositions du paragraphe précédent ne s'appliquent pas :

- 1) Aux préférences et avantages que l'une ou l'autre Partie contractante a accordés ou pourra accorder à un pays voisin en matière de commerce frontalier;
- 2) Aux préférences et avantages résultant de l'appartenance, actuelle ou future, de l'une ou l'autre des Parties contractantes à une union douanière ou zone de libre-échange.

*Article 4.* Le montant des exportations effectuées par chacune des Parties contractantes pendant la durée du présent Accord se situera environ entre 200 millions et 250 millions de dollars des Etats-Unis.

*Article 5.* Sous réserve des besoins des Parties contractantes, et dans la mesure de leurs possibilités, l'échange de marchandises entre les deux pays concernera les produits énumérés dans les listes A (Exportations du Bangladesh vers la Chine) et B (Exportations de la Chine vers le Bangladesh) jointes au présent Accord.

Le présent article ne sera pas interprété comme limitant l'échange de marchandises aux marchandises énumérées dans les listes A et B jointes au présent Accord.

*Article 6.* L'importation et l'exportation de marchandises effectuées en vertu du présent Accord se feront selon les modalités prescrites dans les contrats qui seront conclus entre les organismes de commerce extérieur de la République

<sup>1</sup> Entré en vigueur le 1<sup>er</sup> janvier 1985, conformément à l'article 13.

populaire de Chine, d'une part, et les sociétés étatiques de commerce et autres personnes physiques ou morales s'occupant d'importation et d'exportation en République populaire du Bangladesh, d'autre part.

*Article 7.* Les Parties contractantes sont convenues de conclure chaque année, pendant la durée du présent Accord, un protocole commercial précisant le montant des échanges commerciaux et les principales marchandises devant faire l'objet de ces échanges au cours de l'année en question.

*Article 8.* Les Parties contractantes sont convenues de se réunir chaque année, alternativement à Beijing et à Dacca, pour tenir des consultations concernant le présent Accord et son exécution.

*Article 9.* Les paiements relatifs aux échanges de marchandises en vertu du présent Accord et aux dépenses y afférentes, telles celles concernant le transport, les polices d'assurance et les commissions bancaires et commerciales, seront effectués par l'intermédiaire de comptes à ouvrir auprès de banques des deux pays. En conséquence, la Banque de Chine et la Sonali Bank du Bangladesh ouvriront réciproquement un compte sur leurs propres livres au nom de l'autre. La monnaie de compte utilisée pour ces transactions sera le dollar des Etats-Unis.

Les Parties contractantes s'accorderont réciproquement un plafond de crédit non soumis à intérêt d'un montant de 1,4 million de dollars. Si le solde créditeur de l'une ou l'autre des deux Parties dépasse ce plafond, le montant excédentaire sera soumis à des intérêts dont le taux sera fixé d'un commun accord entre les deux banques mentionnées dans le présent article.

Les importateurs et exportateurs du Bangladesh et de la Chine pourront également conclure des contrats de livraison de marchandises dont les paiements seront effectués en d'autres monnaies convertibles.

*Article 10.* Pendant la durée du présent Accord, si, au terme de chaque année, le solde net des comptes réciproquement ouverts dépasse le plafond du solde créditeur, le montant excédentaire sera transféré dans un nouveau compte et la Partie dont le solde est excédentaire devra régler le montant de l'excédent dans les trois mois qui suivent par des livraisons de marchandises énumérées dans les listes jointes au présent Accord. Si, après trois mois, le solde du nouveau compte n'est toujours pas réglé, ce compte sera liquidé par des paiements en dollars des Etats-Unis ou en toute autre monnaie convertible.

A l'expiration du présent Accord, le solde des comptes sera réglé dans les trois mois par des livraisons de marchandises à déterminer par accord réciproque entre les Parties contractantes. Si, après trois mois, l'une ou l'autre des Parties n'a pas liquidé son compte, le solde en sera réglé par un paiement en dollars des Etats-Unis ou en toute autre monnaie convertible.

*Article 11.* La valeur du dollar des Etats-Unis, monnaie de compte utilisée pour régler les transactions effectuées en vertu du présent Accord, sera fixée en fonction du cours des droits de tirage spéciaux. Les aspects techniques de cette opération seront définis par les accords bancaires devant être négociés entre les deux banques susmentionnées.

*Article 12.* Aux fins de l'application des dispositions du présent Accord et des protocoles commerciaux signés en vertu du présent Accord, un arrangement bancaire sera conclu entre les deux banques mentionnées à l'article 9 du présent Accord.

*Article 13.* Le présent Accord prendra effet le 1<sup>er</sup> janvier 1985 pour une durée de cinq ans et viendra à expiration le 31 décembre 1989.

FAIT à Dacca le 21 décembre 1984, en deux exemplaires, en langues chinoise et anglaise, les deux textes faisant également foi.

Pour le Gouvernement  
de la République populaire  
de Chine :

[Signé]

WANG PINQING

Représentant le Ministre des relations  
économiques et du commerce exté-  
rieurs et chef de la délégation com-  
merciale chinoise

Pour le Gouvernement  
de la République  
du Bangladesh :

[Signé]

S. HASAN AHMAD

Secrétaire général du Ministère du  
commerce et chef de la délégation  
commerciale du Bangladesh

#### LISTE A

##### LISTE INDICATIVE DE PRODUITS POUVANT FAIRE L'OBJET D'EXPORTATIONS DU BANGLADESH VERS LA CHINE POUR LA PÉRIODE 1985-1989

<i>Numéros</i>	<i>Produits</i>	<i>Numéros</i>	<i>Produits</i>
1.	Jute non manufacturé	10.	Cellophane
2.	Produits en jute	11.	Engrais
3.	Cuirs et peaux (tannés et semi-tannés)	12.	Fils et câbles électriques
4.	Cuirs (finis) et produits en cuir	13.	Câbles téléphoniques
5.	Sucre	14.	Tapis en jute
6.	Bois manufacturé	15.	Fil de jute
7.	Tabac	16.	Produits en chlorure de polyvinyle
8.	Papier journal, papier et pâte à papier	17.	Divers
9.	Rayonne		

#### LISTE B

##### LISTE INDICATIVE DE PRODUITS POUVANT FAIRE L'OBJET D'EXPORTATIONS DE LA CHINE VERS LE BANGLADESH POUR LA PÉRIODE 1985-1989

<i>Numéros</i>	<i>Produits</i>	<i>Numéros</i>	<i>Produits</i>
1.	Charbon	8.	Teintures et produits chimiques
2.	Billettes d'acier	9.	Produits de l'industrie légère
3.	Fonte brute	10.	Textiles
4.	Coton	11.	Machines et équipements
5.	Riz	12.	Équipements pour centrales hydro- électriques
6.	Gazole pour moteur diesel à régime élevé	13.	Outils et produits de quincaillerie
7.	Huile de base lubrifiante	14.	Divers





No. 23363

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**UNITED NATIONS  
and  
UNION OF SOVIET SOCIALIST REPUBLICS**

**Agreement on the United Nations international seminar on  
satellite communications to be held in Moscow from  
20 to 31 May 1985. Signed at New York on 17 May 1985**

*Authentic text: English.*

*Registered ex officio on 17 May 1985.*

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**ORGANISATION DES NATIONS UNIES  
et  
UNION DES RÉPUBLIQUES  
SOCIALISTES SOVIÉTIQUES**

**Accord relatif au séminaire international des Nations Unies  
sur les communications par satellites devant avoir lieu  
à Moscou du 20 au 31 mai 1985. Signé à New York le  
17 mai 1985**

*Texte authentique : anglais.*

*Enregistré d'office le 17 mai 1985.*

[TRADUCTION — TRANSLATION]

AGREEMENT<sup>1</sup> BETWEEN THE UNITED NATIONS AND THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE UNITED NATIONS INTERNATIONAL SEMINAR ON SATELLITE COMMUNICATIONS TO BE HELD IN MOSCOW FROM 20 TO 31 MAY 1985

ACCORD<sup>1</sup> ENTRE L'ORGANISATION DES NATIONS UNIES ET LE GOUVERNEMENT DE L'UNION DES RÉPUBLIQUES SOCIALISTES SOVIÉTIQUES RELATIF AU SÉMINAIRE INTERNATIONAL DES NATIONS UNIES SUR LES COMMUNICATIONS PAR SATELLITES DEVANT AVOIR LIEU À MOSCOU DU 20 AU 31 MAI 1985

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*Publication effected in accordance with article 12 (2) of the General Assembly regulations to give effect to Article 102 of the Charter of the United Nations as amended in the last instance by General Assembly resolution 33/141 A of 19 December 1978.*

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*Publication effectuée conformément au paragraphe 2 de l'article 12 du règlement de l'Assemblée générale destiné à mettre en application l'Article 102 de la Charte des Nations Unies tel qu'amendé en dernier lieu par la résolution 33/141 A de l'Assemblée générale en date du 19 décembre 1978.*

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<sup>1</sup> Came into force on 17 May 1985 by signature, in accordance with article VI (1).

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<sup>1</sup> Entré en vigueur le 17 mai 1985 par la signature, conformément au paragraphe 1 de l'article VI.

No. 23364

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**MULTILATERAL**

**Agreement establishing the Latin American Housing and Human Settlements Development Organization (OLAVI). Concluded at Quito on 14 January 1982**

*Authentic texts: Spanish and French.*

*Registered by Ecuador on 21 May 1985.*

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**MULTILATÉRAL**

**Accord constitutif de l'Organisation latino-américaine du logement et du développement des établissements humains (OLAVI). Conclu à Quito le 14 janvier 1982**

*Textes authentiques : espagnol et français.*

*Enregistré par l'Équateur le 21 mai 1985.*

[SPANISH TEXT — TEXTE ESPAGNOL]

## CONVENIO CONSTITUTIVO DE LA ORGANIZACIÓN LATINO-AMERICANA DE VIVIENDA Y DESARROLLO DE LOS ASENTAMIENTOS HUMANOS (OLAVI)

Los Estados de América Latina debidamente representados en la Reunión convocada para constituir la Organización Latinoamericana de Vivienda y Desarrollo de los Asentamientos Humanos,

### CONSIDERANDO:

- Que las condiciones estructurales que comprenden entre otras las realidades económicas, sociales y culturales de nuestros pueblos, la escasez de recursos, el crecimiento demográfico, los procesos de urbanización y la inequitativa asignación de la oferta formal de vivienda son las causas del déficit habitacional, lo que impone a la Región la realización de un gigantesco esfuerzo para alcanzar el desarrollo económico y social, y contribuir así al mejoramiento de las condiciones habitacionales.
- Que en los asentamientos humanos de la Región se presentan con características comunes, deficiencias cualitativas y cuantitativas de vivienda, que por su naturaleza pueden y deben ser abordadas conjuntamente.
- Que los esfuerzos para solucionar tales problemas deben dirigirse prioritariamente a los sectores mayoritarios de la población tanto rural como urbana de menores recursos.
- Que se requiere un enfoque integral para enfrentar los problemas de vivienda y desarrollo de los asentamientos humanos, que comprenda fundamentalmente la estructuración territorial, el desarrollo de los centros de población, la atención de los componentes que los constituyen, tales como tierra, infraestructura, equipamiento y vivienda y los factores ambientales que los afectan, así como los instrumentos y medios para su atención.
- Que el Convenio de Panamá destaca la necesidad de “promover la cooperación regional, con el fin de lograr un desarrollo integral, autosostenido e independiente”, de los países de la Región.
- Que sobre estas bases se creó en 1977 el Comité de Acción sobre Vivienda y Edificaciones de Interés Social (CAVEIS), con el propósito de identificar y promover los mecanismos de cooperación más adecuados a la satisfacción de las necesidades y al mejor aprovechamiento de los recursos de la Región, en materia de vivienda.
- Que la gestión cumplida por el CAVEIS ha demostrado positivamente el potencial y la viabilidad de la cooperación regional en esta materia.
- Que los Estados Miembros del CAVEIS manifestaron su interés en crear un mecanismo permanente de cooperación en el campo de la vivienda y el desarrollo de los asentamientos humanos en el marco del SELA, mediante los acuerdos XII, XIV y XVIII del Comité.
- Que durante la IV Reunión Ordinaria del CAVEIS se firmó una Carta de Intención para expresar el interés de los países presentes en esa oportunidad,

- en crear un mecanismo latinoamericano permanente de cooperación en este campo.
- Que en el VII período de Sesiones del Consejo Latinoamericano del SELA, se adoptó la Decisión 93, mediante la cual se recomienda la creación e institucionalización de un mecanismo de esta naturaleza, en el marco del SELA.
  - Que los Estados Miembros del Comité de Acción sobre Vivienda y Edificaciones de Interés Social propusieron en la IV Reunión Extraordinaria del mismo, mediante el Acuerdo XX, la creación de la Organización Latinoamericana de Vivienda y Desarrollo Urbano.
  - Que es indispensable crear un organismo de carácter permanente que promueva la cooperación regional en esta materia, en consecuencia, Acuerdan celebrar el siguiente Convenio Constitutivo:

#### CAPÍTULO I. NATURALEZA Y PROPÓSITOS

*Artículo 1º.* Se constituye, mediante este Instrumento, la Organización Latinoamericana de Vivienda y [Desarrollo de los]<sup>1</sup> Asentamientos Humanos, denominada OLAVI, persona jurídica de Derecho Internacional Público, que se regirá por las normas que se establecen en el mismo.

*Artículo 2º.* Son propósitos fundamentales de OLAVI:

- a) Fomentar la cooperación regional en la planificación y ejecución de acciones concretas en materia de vivienda y desarrollo de los asentamientos humanos.
- b) Coordinar acciones y estrategias, ante organismos y foros internacionales, terceros países y agrupaciones de países, en materia de vivienda y desarrollo de los asentamientos humanos.

*Artículo 3º.* OLAVI se constituye en el marco del Sistema Económico Latinoamericano (SELA) y se fundamenta en los principios y objetivos contenidos en el Convenio de Panamá.

*Artículo 4º.* OLAVI así mismo, contará como base de su funcionamiento con los siguientes criterios:

- a) Lograr su autofinanciamiento mediante las empresas, programas y proyectos que constituya y realice.
- b) Mantener un mecanismo operativo sencillo y eficiente, atendiendo al espíritu de organización fundamentalmente promotora de la cooperación regional en materia de vivienda y desarrollo de los asentamientos humanos.

#### CAPÍTULO II. OBJETIVOS

*Artículo 5º.* Son objetivos de OLAVI:

1. Promover la cooperación multinacional en el campo de la vivienda y el desarrollo de los asentamientos humanos y contribuir al mejoramiento de las

<sup>1</sup> The words between brackets reflect the modifications which were effected, in the absence of any objections from the Parties to which they were communicated, by a procès-verbal of rectification of the Minister of Foreign Affairs of the Republic of Ecuador dated at Quito on 9 August 1982 — Les mots entre crochets reflètent les modifications qui ont été effectuées, en l'absence d'objection des Parties auxquelles elles avaient été communiquées, par un procès-verbal de rectification du Ministre des relations extérieures de la République de l'Equateur en date à Quito du 9 août 1982.

condiciones habitacionales de los pobladores de los Estados Miembros, fundamentalmente las de aquellos de más bajos ingresos, establecidos en áreas rurales e urbanas, mediante acciones orientadas a:

- a) La creación, desarrollo, adaptación e intercambio de tecnología en coordinación con las entidades regionales especializadas para la producción de materiales y componentes constructivos, sistemas de edificación y maquinaria, equipos y herramientas utilizados en la ejecución de proyectos habitacionales.
- b) El desarrollo de la tecnología y la utilización de fuentes alternativas de energía en la vivienda y los asentamientos humanos, particularmente en las áreas rurales.
- c) El intercambio de experiencias y criterios en el desarrollo de las normas técnicas de planificación territorial, urbanización y vivienda, así como en la normalización de materiales y componentes constructivos con miras a su compatibilización.
- d) El intercambio comercial de materiales y componentes constructivos, maquinaria, equipo y herramientas de construcción, servicios de consultoría, asesoría y capacitación en la planificación, programación y ejecución de proyectos de vivienda y desarrollo de los asentamientos humanos.
- e) El intercambio de experiencias producto de la utilización de estrategias basadas en la cooperación comunitaria para la solución de problemas de vivienda y desarrollo de los asentamientos humanos.
- f) La protección, conservación y mejoramiento del medio ambiente, en su relación con la vivienda y el desarrollo de los asentamientos humanos.
- g) El desarrollo y aprovechamiento de los recursos humanos, científicos y tecnológicos de los Estados Miembros, en el campo de la vivienda y el desarrollo de los asentamientos humanos.
- h) El intercambio de experiencias metodológicas y técnicas para la elaboración de planes, programas y proyectos de vivienda y desarrollo de los asentamientos humanos y los sistemas de gestión para instrumentarlos.
- i) La sistematización, la evaluación y el intercambio de experiencias orientadas a ampliar la accesibilidad de los sectores de bajos ingresos a: la tierra, los materiales, la tecnología y el financiamiento de la vivienda, infraestructura y equipamiento necesarios.
- j) El conocimiento continuo y sistemático de la realidad habitacional de los países de la Región.

2. Promover la creación de instrumentos de cooperación e intercambio permanente de carácter empresarial entre los Estados Miembros y entre éstos y los demás Estados y órganos que integran el SELA, en campos tales como la información, el financiamiento, la prevención y atención de emergencias que afecten la vivienda y el hábitat y la comercialización de los elementos señalados en el literal *d*) del numeral 1) de este artículo, así como en otros campos que resulten de interés para el desarrollo de la propia Organización.

3. Promover programas de cooperación en la prevención, evaluación de daños y rehabilitación en casos de emergencia que afecten la vivienda y el hábitat.

4. Promover acciones y estrategias compartidas por los Estados Miembros que permitan:

- a) Mejorar y fortalecer su capacidad de negociación ante los organismos internacionales que financian acciones en el campo de la vivienda y el desarrollo de los asentamientos humanos.
- b) Proponer medidas para que las empresas transnacionales, que operan en campos relacionados con la vivienda y el desarrollo urbano, se sujeten a los objetivos del desarrollo de la Región y a los intereses nacionales de los Estados Miembros, así como a intercambiar información sobre las actividades que dichas empresas desarrollen.
- c) Gestionar el financiamiento de estudios, planes, programas y proyectos ante organismos financieros nacionales, subregionales, regionales e internacionales en materia de vivienda y desarrollo de los asentamientos humanos.

### CAPÍTULO III. MIEMBROS Y SEDE

*Artículo 6º* Son miembros de OLAVI los Estados Latinoamericanos que forman parte del Sistema Económico Latinoamericano (SELA) y que suscriban y ratifiquen el presente Convenio Constitutivo.

*Artículo 7º* Tendrán igual calidad los Estados Latinoamericanos que no hubieren suscrito el Convenio Constitutivo y que decidan adherirse a OLAVI.

*Artículo 8º* La Sede de OLAVI es la ciudad de Quito, Capital de la República del Ecuador.

### CAPÍTULO IV. ESTRUCTURA ORGÁNICA

*Artículo 9º* Son órganos de OLAVI:

- a) La Asamblea General.
- b) La Secretaría Ejecutiva.

#### *Título I. DE LA ASAMBLEA GENERAL*

*Artículo 10º* La Asamblea General es el órgano supremo de OLAVI y estará integrada por los Representantes de los Estados Miembros y podrá constituirse en Reunión Ministerial.

*Artículo 11º* Son atribuciones de la Asamblea General:

- a) Determinar las políticas y las directrices que deberán seguirse para dar cumplimiento a los propósitos y objetivos de la Organización.
- b) Aprobar los programas, proyectos, presupuestos y distributivos de cuotas de la Organización.
- c) Constituir los órganos auxiliares temporales o permanentes y las comisiones o grupos de trabajo que considera necesarios.
- d) Determinar para cada caso, la conveniencia de establecer convenios de cooperación científica, técnica y financiera, con otros organismos que coadyuven al cumplimiento de los propósitos de la Organización.
- e) Analizar y aprobar en su caso, los informes de actividades, los estados financieros y los balances anuales formulados por la Secretaría Ejecutiva.
- f) Conocer y aprobar en su caso, los informes del Presidente de la Organización al término de su gestión.

- g) Elegir de entre sus miembros al Presidente y Vicepresidente de la Organización por un período de un año.
- h) Designar y remover al Secretario Ejecutivo de la Organización.
- i) Establecer la estructura organizativa y aprobar los reglamentos internos de la Organización.

*Artículo 12°:* La Asamblea General se reunirá en períodos ordinarios de sesiones una vez al año y en períodos extraordinarios en los casos siguientes:

- a) Por acuerdo de la propia Asamblea General.
- b) A solicitud de uno de los Estados Miembros, siempre y cuando dicha propuesta cuente con la aceptación de, por lo menos, un tercio de los mismos.
- c) A petición de un Estado Miembro en situación de emergencia nacional que afecte la vivienda y los asentamientos humanos.
- d) A pedido del Presidente.

*Artículo 13°:* Son atribuciones específicas del Presidente:

- a) Ejercer la representación legal y oficial de OLAVI en los casos en que la Asamblea General así lo determine.
- b) Convocar a las reuniones conjuntamente con el Secretario Ejecutivo.
- c) Presidir las sesiones y someter a consideración de la Asamblea General las cuestiones que figuren en el orden del día.
- d) Coadyuvar en la promoción de las actividades de OLAVI.
- e) Hacer cumplir las disposiciones expuestas en este Convenio Constitutivo y proponer las medidas que estime oportunas para el mejor desarrollo de los trabajos.
- f) Presentar a la Asamblea General un informe anual de su gestión.
- g) Solicitar la celebración de sesiones extraordinarias de la Asamblea General.

*Artículo 14°:* La Asamblea General podrá sesionar con la asistencia de por lo menos las dos terceras partes de los Estados Miembros.

*Artículo 15°:* Los Acuerdos que adopte la Asamblea sobre modificaciones al presente Convenio o en aspectos referentes a sus políticas, reglamentos, presupuestos y distributivos de cuotas, deberán realizarse por consenso, siempre que las reuniones correspondientes se convoquen expresamente para estos propósitos. Los demás Acuerdos requerirán del voto de una mayoría de los Estados Miembros. Todos los Estados Miembros se sujetarán a las obligaciones derivadas de las decisiones que adopte la Asamblea.

*Artículo 16°:* El Secretario Permanente del SELA será invitado a participar en las Reuniones de la Asamblea con carácter de observador y con pleno derecho a voz.

*Artículo 17°:* Durante los períodos de sesiones de la Asamblea General, podrán participar en calidad de observadores, delegados debidamente acreditados de Estados no miembros de OLAVI así como invitados especiales. Los participantes en la Asamblea contemplados en este artículo tienen derecho a voz y no derecho a voto.



## Título II. DE LA SECRETARÍA EJECUTIVA

*Artículo 18º* La Secretaría Ejecutiva es el órgano técnico y administrativo de OLAVI, encargada de ejecutar los Acuerdos adoptados por la Asamblea General.

*Artículo 19º* La Secretaría Ejecutiva estará ubicada en la sede de OLAVI.

*Artículo 20º* Estará dirigida por un Secretario Ejecutivo y contará con las unidades técnicas y administrativas que acuerde la Asamblea General.

*Artículo 21º* Son obligaciones de la Secretaría Ejecutiva:

- a) Informar a la Asamblea General sobre el cumplimiento de sus actividades y de la ejecución del presupuesto.
- b) Elaborar un plan general de acción de mediano plazo, el programa de actividades y el proyecto anual para someterlos, previa consideración de los Estados Miembros, a la aprobación de la Asamblea General.
- c) Elaborar, en consulta con los Estados Miembros propuestas de recomendaciones de carácter estratégico, programático y operativo, a ser considerado por la Asamblea General.
- d) Actuar como enlace entre OLAVI y la Secretaría Permanente del SELA.
- e) Formular su propio Reglamento Interno para someterlo a la aprobación de la Asamblea General.
- f) Someter a consideración de la Asamblea General el resultado de los estados financieros, balances anuales y de auditoría externa.

*Artículo 22º* Son atribuciones específicas del Secretario Ejecutivo:

- a) Ejercer la representación legal de la Secretaría Ejecutiva y en los casos específicos que determine la Asamblea, ejercerá la representación legal y oficial de OLAVI.
- b) Convocar a los Estados Miembros a los períodos ordinarios y extraordinarios de sesiones de la Asamblea General.
- c) Actuar como Secretario-Relator de la Asamblea General.
- d) Elaborar y someter a consideración de los Estados Miembros el proyecto de temario para las reuniones de la Asamblea y preparar y distribuir los documentos relacionados con dicho temario.
- e) Promover y concertar, sujeto a la aprobación de la Asamblea, arreglos para la realización de estudios, programas y proyectos con organismos e instituciones internacionales, especialmente las de carácter nacional, subregional y regional.
- f) Recaudar las contribuciones de los Estados Miembros, administrar el patrimonio y ejecutar el presupuesto de OLAVI.
- g) Seleccionar y contratar el personal técnico y administrativo de la Secretaría.
- h) Todas aquellas que le asigne la Asamblea General y se establezcan en los reglamentos.

*Artículo 23º* El Secretario Ejecutivo que deberá ser ciudadano de uno de los Estados Miembros, será designado por un período de 4 años y podrá ser redesignado por una sola vez, pero no por períodos consecutivos, ni sustituido por una persona de la misma nacionalidad.

*Artículo 24º.* Para el cumplimiento de sus actividades el Secretario Ejecutivo podrá asignar programas y tareas a grupos de trabajo específicos, integrados por funcionarios designados y financiados por sus respectivos gobiernos.

#### CAPÍTULO V. PATRIMONIO Y RECURSOS FINANCIEROS

*Artículo 25º.* Constituyen el Patrimonio de OLAVI todos los bienes y obligaciones que ésta adquiera a título gratuito u oneroso.

*Artículo 26º.* Los recursos financieros de OLAVI se integran por:

- a) Las cuotas anuales que en función de los requerimientos presupuestarios se fijen, en tanto se logre su autofinanciamiento.
- b) Contribuciones de las empresas creadas en el marco de OLAVI.
- c) Aportes especiales de los Estados Miembros.
- d) Aportes, reembolsables o no, provenientes de organismos financieros, de cooperación técnica o de otra naturaleza.
- e) Donaciones y legados.
- f) Otros recursos obtenibles a través de modalidades pertinentes que en su oportunidad identifique y establezca la Asamblea.

*Artículo 27º.* Las cuotas se fijarán en similar proporción a su participación en el Sistema Económico Latinoamericano, ponderadas según el número de Estados Miembros.

#### CAPÍTULO VI. CAPACIDAD JURÍDICA, INMUNIDADES Y PRIVILEGIOS

*Artículo 28º.* OLAVI en uso de su personalidad jurídica, podrá celebrar toda clase de actos y contratos, y en general, realizar todas las actividades necesarias para el cumplimiento de sus objetivos.

*Artículo 29º.* OLAVI, sus órganos, los funcionarios de la Secretaría Ejecutiva y los representantes gubernamentales, gozarán en el territorio del País Sede de la capacidad jurídica, privilegios e inmunidades que sean indispensables para el ejercicio de sus funciones. Con este fin se celebrarán los Acuerdos correspondientes con el Gobierno del Ecuador.

*Artículo 30º.* Los Estados Miembros concederán las facilidades necesarias, a los representantes gubernamentales y a los funcionarios de la Secretaría Ejecutiva, para el cumplimiento de sus actividades, cuando éstos se encuentren en misión oficial, dentro de sus respectivos territorios. La Asamblea General podrá hacer recomendaciones para determinar los pormenores de la aplicación de este artículo o proponer convenciones sobre la materia.

*Artículo 31º.* En caso de que la Organización estableciera oficinas o agencias en algún otro Estado Miembro, se concertarán los correspondientes acuerdos sobre inmunidades y privilegios.

#### CAPÍTULO VII. RATIFICACIÓN, VIGENCIA Y ADHESIÓN

*Artículo 32º.* Cada Estado signatario ratificará el Convenio Constitutivo conforme a sus respectivos ordenamientos legales.

Los instrumentos de ratificación y adhesión serán depositados ante el Gobierno del Ecuador, el cual comunicará la fecha de depósito a los Gobiernos de

los Estados que hayan firmado el Convenio Constitutivo y, en su caso, a los que se hayan adherido.

*Artículo 33°:* El presente Convenio entrará en vigor para los países que lo ratifiquen, cuando la mayoría absoluta de los Estados signatarios hayan efectuado el depósito del instrumento de ratificación; para los demás Estados signatarios y los adherentes, a partir de la fecha de depósito del respectivo instrumento de ratificación o adhesión, en el orden en que fueron depositados dichos instrumentos.

*Artículo 34°:* Las reformas del presente Convenio, que sean propuestas por cualquier Estado Miembro, estarán sujetas a la aprobación de la Asamblea General.

Las reformas entrarán en vigor, cuando las dos terceras partes de Estados Miembros hayan efectuado el depósito del instrumento correspondiente.

*Artículo 35°:* El presente Convenio regirá indefinidamente pero todo Estado Contratante podrá denunciarlo, en cualquier momento, mediante notificación por escrito al Gobierno del Ecuador.

La denuncia surtirá efecto ciento ochenta días a partir de la fecha en que la notificación haya sido recibida por el Depositario.

El Gobierno del Ecuador comunicará a los Estados que hayan firmado el presente Convenio o sean partes en él, acerca de la notificación de denuncia y de la fecha a partir de la cual ésta surtirá efecto.

El Estado Miembro cumplirá cualesquiera obligaciones a las que se hubiere comprometido antes de notificar su retiro, no obstante el hecho de que las mismas se extiendan durante un plazo posterior a la fecha en que se haga efectivo dicho retiro.

*Artículo 36°:* No se podrán hacer reservas al presente Convenio al momento de su suscripción, ratificación o adhesión.

#### CAPÍTULO VIII. DISPOSICIONES GENERALES

*Artículo 37°:* Son idiomas oficiales de la Organización los reconocidos como tales por el Sistema Económico Latinoamericano.

*Artículo 38°:* El presente Convenio será registrado en la Secretaría General de las Naciones Unidas por el Gobierno del Ecuador.

*Artículo 39°:* Cada Estado Miembro establecerá las modalidades más adecuadas para coordinar, apoyar y administrar las acciones, programas y proyectos relacionados con la OLAVI, siguiendo las recomendaciones de la Asamblea General.

#### DISPOSICIÓN TRANSITORIA

El presente Convenio estará abierto para su firma ante el Gobierno del Ecuador por un período de sesenta (60) días, a partir del catorce de enero de mil novecientos ochenta y dos y después de esta fecha quedará abierto a la adhesión.

EN FE DE LO CUAL, los Plenipotenciarios que suscriben, habiendo depositado sus plenos poderes, hallados en buena y debida forma, firman el presente Convenio Constitutivo en nombre de sus respectivos Gobiernos.

DADO Y FIRMADO en la ciudad de Quito, Ecuador, a los catorce días del mes de enero de mil novecientos ochenta y dos, en [dos originales de igual valor en español y francés]<sup>1</sup>.

El Gobierno del Ecuador será el depositario del presente Convenio Constitutivo y enviará copias debidamente autenticadas del mismo a los Gobiernos de los demás Estados Signatarios y Adherentes, así como a la Secretaría Permanente del SELA.

Bolivia:

[Signed — Signé]

Arq. PACIFICO MONTES

Haití:

[Signed — Signé]

Arq. MATHIEU B. DUPLAN

Panamá:

[Signed — Signé]

Lcdo. CARLOS GONZALEZ

República Dominicana:

[Signed — Signé]

Ing. FRIDA AYBAR DE SANABIA

Nicaragua:

[Signed — Signé]

Embajador ALVARO TABOADA

Ecuador:

[Signed — Signé]

Ab. JUAN PABLO MONCAGATTA

México:

[Signed — Signé]

Dr. GREGORIO VALNER ONJAS

Paraguay:

[Signed — Signé]

Cap. (S. R.) IGNACIO A. PANE  
(Ad Referéndum)

Venezuela:

[Signed — Signé]

Dr. JULIO MARTI

Costa Rica:

[Signed — Signé]

Embajador FELIX ROBERTO CORTES

<sup>1</sup> The words between brackets reflect the modifications which were effected, in the absence of any objections from the Parties to which they were communicated, by a procès-verbal of rectification of the Minister of Foreign Affairs of the Republic of Ecuador dated at Quito on 9 August 1982 — Les mots entre crochets reflètent les modifications qui ont été effectuées, en l'absence d'objection des Parties auxquelles elles avaient été communiquées, par le procès-verbal de rectification du Ministre des relations extérieures de la République de l'Equateur en date à Quito du 9 août 1982.

## ACCORD<sup>1</sup> CONSTITUTIF DE L'ORGANISATION LATINO-AMÉRICAINNE DU LOGEMENT ET DU DÉVELOPPEMENT DES ÉTABLISSEMENTS HUMAINS

Les Etats d'Amérique Latine dûment représentés à l'Assemblée convoquée pour constituer l'Organisation Latino-Américaine du Logement et du Développement des Etablissements Humains,

### CONSIDÉRANT :

- Que les conditions structurelles qui comprennent entre autres, les réalités économiques, sociales et culturelles de nos peuples, le manque de ressources, l'accroissement démographique, les processus d'urbanisation et la distribution inégale de l'offre formelle du logement, sont les causes du déficit habitationnel, ce qui requiert de la région un effort gigantesque pour atteindre le développement économique et social, et contribuer ainsi à l'amélioration des conditions du logement.
- Que dans les Etablissements Humains de la Région se présentent, avec des caractéristiques communes, des déficiences quantitatives et qualitatives du logement, qui, de par leur nature, peuvent et doivent être abordées conjointement.
- Que les efforts en vue de trouver une solution aux problèmes mentionnés ci-dessus doivent être dirigés, en priorité, vers les secteurs majoritaires de la population, tant rurales qu'urbaines de moindres revenus.
- Qu'il faut avoir une vision intégrale pour affronter les problèmes de logement et de développement des Etablissements Humains, qui comprennent fondamentalement la structuration du territoire, le développement de centres urbains, la considération des composants qui les constituent, tels que la terre, l'infrastructure, l'équipement, et le logement, les facteurs de l'environnement qui les affectent, ainsi que les instruments et moyens qu'ils requièrent.
- Que l'Accord de Panama<sup>2</sup> souligne la nécessité de « promouvoir la coopération régionale, afin d'atteindre un développement intégral autosoutenu et indépendant », des pays de la Région.
- Que, sur ces bases, a été créé en 1977 le Comité d'Action pour le Logement et les Constructions d'Intérêt Social (CAVEIS), dans le but d'identifier et de

<sup>1</sup> Entré en vigueur à l'égard des Etats suivants le 2 juillet 1984, après que la majorité absolue des Etats signataires eut déposé un instrument de ratification auprès du Gouvernement équatorien, conformément à l'article 33 :

<i>Etat</i>	<i>Date de dépôt de l'instrument de ratification</i>
Equateur .....	14 décembre 1982
Haiti .....	24 novembre 1983
Mexique .....	7 avril 1983
Nicaragua .....	18 avril 1983
Panama .....	2 juillet 1984
République dominicaine .....	2 juillet 1984

Par la suite, l'Accord est entré en vigueur pour l'Etat suivant à la date du dépôt de son instrument de ratification auprès du Gouvernement équatorien, conformément à l'article 33 :

<i>Etat</i>	<i>Date de dépôt de l'instrument de ratification</i>
Venezuela .....	19 décembre 1984

<sup>2</sup> Nations Unies, *Recueil des Traités*, vol. 1292, p. 309.

promouvoir les mécanismes de coopération les plus adéquats à satisfaire les besoins et la meilleure utilisation des ressources de la Région, en matière de logement.

- Que la gestion accomplie par le CAVEIS a démontré, de manière positive, le potentiel et la viabilité de la coopération régionale dans ce domaine.
- Que les Etats membres du CAVEIS ont manifesté leur intérêt de créer un mécanisme permanent de coopération dans le domaine du logement et du développement des Etablissements Humains, dans le cadre du SELA, moyennant les Décisions XII, XIV et [XVII]<sup>1</sup> du Comité.
- Que, durant la IV<sup>e</sup> Réunion Ordinaire du CAVEIS a été signée une Lettre d'Intention pour exprimer l'intérêt des Etats présents à cette occasion, de créer un mécanisme latino-américain permanent de coopération dans ce domaine.
- Que, lors de la VII<sup>e</sup> Session du Conseil Latino-Américain du SELA, a été adoptée la Résolution 93, suivant laquelle a été recommandée la création et l'institutionnalisation d'un mécanisme de cette nature, dans le cadre du SELA.
- Que les Etats membres du Comité d'Action pour le Logement et les Constructions d'Intérêt Social ont proposé, lors de leur IV<sup>e</sup> Réunion Extraordinaire, [dans la Décision XX,]<sup>2</sup> la création de l'Organisation Latino-Américaine du Logement et du Développement Urbain.
- Qu'il est indispensable de créer un organisme de caractère permanent qui promouvoir la coopération régionale en ce domaine, en conséquence,  
Décident de conclure l'Accord constitutif suivant :

#### CHAPITRE I. NATURE ET BUTS

*Article 1.* Par cet Acte, est constituée l'Organisation Latino-Américaine du Logement et [du Développement]<sup>3</sup> des Etablissements Humains, dénommée OLAVI, personne juridique de Droit International Public, qui sera régie par les normes qui s'énoncent ci-dessous :

*Article 2.* Les buts fondamentaux de OLAVI sont :

- a) De promouvoir la coopération régionale en ce qui concerne la planification et l'exécution d'actions concrètes en matière de logement et de développement des Etablissements Humains.
- b) De coordonner actions et stratégies communes par-devant des organismes et les forums internationaux, les tiers pays et les groupements de pays, en matière de logement et développement des Etablissements Humains.

*Article 3.* L'OLAVI est constituée dans le cadre du Système Economique Latino-Américain (SELA) et se base sur les principes et objectifs compris dans l'Accord de Panama.

<sup>1</sup> Le texte entre crochets se lit « XVIII » dans le texte authentique espagnol — The text between brackets reads "XVIII" in the authentic Spanish text.

<sup>2</sup> Le texte entre crochets n'apparaît que dans le texte authentique espagnol et a été traduit par le Secrétariat de l'Organisation des Nations Unies — The text between brackets appears only in the authentic Spanish text and has been translated by the Secretariat of the United Nations.

<sup>3</sup> Les mots entre crochets reflètent les modifications qui ont été effectuées, en l'absence d'objection des Parties auxquelles elles avaient été communiquées, par le procès-verbal de rectification du Ministre des relations extérieures de la République de l'Equateur en date à Quito du 9 août 1982.

*Article 4.* L'OLAVI aura aussi pour base de fonctionnement les critères suivants :

- a) Obtenir son autofinancement grâce aux entreprises, programmes et projets qu'elle organise et réalise.
- b) Maintenir un mécanisme opératif simple et efficace, qui cultive l'esprit d'organisation, principal promoteur de coopération régionale en matière de logement et de développement des Etablissements Humains.

## CHAPITRE II. OBJECTIFS

*Article 5.* Les objectifs de OLAVI sont :

1. De promouvoir la coopération multinationale dans le domaine du logement et du développement des Etablissements Humains et de contribuer à l'amélioration des conditions habitationnelles des habitants des Etats membres, principalement celles des habitants dont les revenus sont les plus bas, qui vivent dans les zones rurales et urbaines, ceci par des actions orientées vers :

- a) La création, l'expansion, l'adaptation et l'échange de technologies, en coordination avec les entités régionales compétentes, pour la production de matériaux et composants de la construction, de systèmes d'édification et de machines, équipements et outils utilisés pour l'exécution de projets habitationnels.
- b) Le développement de la technologie et l'utilisation des sources alternatives d'énergie dans l'habitat et les Etablissements Humains, en particulier dans les zones rurales.
- c) L'échange des expériences et des critères dans le développement des normes techniques de planification territoriale, d'urbanisation et de logement, ainsi qu'en ce qui concerne la normalisation des matériaux et composants de la construction en vue de leur compatibilisation.
- d) L'échange commercial de matériaux et composants de la construction, de machines, d'équipements et outils pour la construction, de services de consultation, d'assistance technique et de capacitation en planification, programmation et exécution de projets de logement et de développement des Etablissements Humains.
- e) L'échange des expériences, résultats de l'utilisation de stratégies basées sur la coopération communautaire, afin de résoudre les problèmes de logement et de développement des Etablissements Humains.
- f) La protection, la conservation et l'amélioration de l'environnement, en rapport avec le logement et le développement des Etablissements Humains.
- g) Le développement et le profit des ressources humaines, scientifiques et technologiques des Etats membres, dans le domaine du logement et du développement des Etablissements Humains.
- h) L'échange d'expériences méthodologiques et techniques pour l'élaboration de plans, programmes et projets de logement et de développement des Etablissements Humains, ainsi que des systèmes de gestion pour leur réalisation.
- i) La systématisation, l'évaluation et l'échange d'expériences visant à accroître l'accessibilité des secteurs de bas revenus à la terre, aux matériaux, à la technologie et au financement du logement, de l'infrastructure et de l'équipement nécessaires.
- j) La connaissance, de manière permanente et systématique de la réalité de l'habitat dans les pays de la Région.

2. Promouvoir la création d'instruments de coopération et d'échange permanent, au niveau des entreprises, entre les Etats membres, entre ceux-ci et les autres Etats et organes intégrant du SELA, dans des domaines comme l'information, le financement, la prévention et la considération des urgences qui affectent le logement et l'habitat, et la commercialisation des éléments signalés dans le paragraphe *d*) du numéro 1 de cet article, ainsi que dans d'autres domaines qui intéressent le développement de l'Organisation.

3. Promouvoir des programmes de coopération dans le domaine de la prévention, de l'évaluation des dommages et de la réhabilitation, en cas d'urgences qui affectent le logement et l'habitat.

4. Promouvoir des actions et stratégies adoptées par les Etats membres, qui permettent :

- a) D'améliorer la capacité de négociation par devant les organismes internationaux qui financent des actions dans le domaine du logement et du développement des Etablissements Humains.
- b) De proposer des mesures afin de s'assurer que les entreprises transnationales, qui opèrent dans les domaines en rapport avec le logement et le développement urbain, se soumettent aux objectifs d'expansion de la Région et aux intérêts nationaux des Etats membres, ainsi qu'à l'échange d'information sur les activités que développent ces entreprises.
- c) Négocier le financement des études, plans, programmes et projets par-devant des organismes financiers nationaux, subrégionaux, régionaux et internationaux en matière de logement et de développement des Etablissements Humains.

### CHAPITRE III. MEMBRES ET SIÈGE

*Article 6.* Sont membres de OLAVI les Etats Latino-Américains qui constituent le Système Economique Latino-Américain (SELA), qui souscrivent et ratifient le présent Accord Constitutif.

*Article 7.* Sont également membres de l'Organisation, les Etats Latino-Américains qui, n'ayant pas souscrit l'Accord Constitutif, décideraient d'adhérer à OLAVI.

*Article 8.* Le siège de OLAVI est la ville de Quito, Capitale de la République de l'Equateur.

### CHAPITRE IV. STRUCTURE ORGANIQUE

*Article 9.* Sont organes de OLAVI :

- a) L'Assemblée Générale.
- b) Le Secrétariat Exécutif.

#### Titre I. DE L'ASSEMBLÉE GÉNÉRALE

*Article 10.* L'Assemblée Générale est l'organe suprême de OLAVI et se compose des Représentants des Etats membres. Elle pourra se constituer en Réunion Ministérielle.

*Article 11.* Les attributions de l'Assemblée Générale seront :

- a) De déterminer les politiques et les lignes directrices à suivre pour atteindre les buts et objectifs de l'Organisation.



- b) D'approuver les programmes, les projets, les budgets et la répartition des cotisations.
- c) D'établir les organes auxiliaires temporaires ou permanents et les commissions ou groupes de travail considérés nécessaires.
- d) De déterminer, dans chaque cas, la convenance d'établir des accords de coopération scientifique, technique et financière avec d'autres organismes qui contribuent à la réalisation des desseins de l'Organisation.
- e) D'analyser et d'approuver, suivant le cas, les rapports d'activité, les états financiers et les bilans annuels formulés par le Secrétariat Exécutif.
- f) De prendre connaissance et d'approuver suivant le cas, les rapports du Président, à l'issue de sa mission.
- g) D'élire, entre ses membres, le Président et le Vice-Président de l'Organisation, pour une période d'un an.
- h) De désigner ou révoquer le Secrétaire Exécutif de l'Organisation.
- i) D'établir la structure organisatrice et approuver les règlements internes de l'Organisation.

*Article 12.* L'Assemblée Générale se réunira en sessions ordinaires une fois l'an, et en sessions extraordinaires, dans les cas suivants :

- a) Par arrêté de cette Assemblée Générale.
- b) A la demande des Etats membres chaque fois que cette proposition recueille l'acceptation d'au moins deux tiers de ceux-ci.
- c) A pétition de l'un des Etats membres en situation d'urgence nationale qui affecte le logement et les Etablissements Humains.
- d) A la requête du Président.

*Article 13.* Les attributions spécifiques du Président sont :

- a) D'exercer la représentation légale et officielle de OLAVI dans les cas déterminés par l'Assemblée.
- b) Provoquer des réunions conjointement avec le Secrétaire Exécutif.
- c) De présider les sessions et de soumettre à la considération de l'Assemblée Générale les points qui figurent à l'ordre du jour.
- d) De contribuer à la promotion des activités de OLAVI.
- e) De faire appliquer les dispositions exposées dans cet Accord Constitutif et proposer les mesures qu'il estime opportunes pour le meilleur déroulement des travaux.
- f) De présenter à l'Assemblée Générale un rapport annuel de sa gestion.
- g) De demander la délibération en session extraordinaire de l'Assemblée Générale.

*Article 14.* L'Assemblée Générale siégera en présence d'au moins deux tiers des Etats membres.

*Article 15.* Les motions adoptées par l'Assemblée Générale sur les modifications du présent Accord ou en rapport avec ses politiques, règlements, budget ou répartition des cotisations devront être approuvées par consentement général, chaque fois que les réunions correspondantes seront convoquées à cette fin. Les

autres accords requièreront le vote de la majorité des Etats membres. Tous les Etats membres se soumettront aux obligations émanant des décisions adoptées par l'Assemblée.

*Article 16.* Le Secrétariat Permanent de SELA sera invité à participer aux réunions de l'Assemblée en qualité d'observateur et aura le droit de s'exprimer.

*Article 17.* Pendant les périodes de sessions de l'Assemblée Générale, pourront participer en qualité d'observateurs, des délégués dûment accrédités, des Etats non membres de OLAVI ainsi que des invités spéciaux. Les participants mentionnés dans cet article auront le droit de s'exprimer et non pas de voter.

## *Titre II. DU SECRÉTARIAT EXÉCUTIF*

*Article 18.* Le Secrétariat Exécutif sera l'organe technique et administratif de OLAVI, chargé de l'exécution des résolutions adoptées par l'Assemblée Générale.

*Article 19.* Le Secrétariat Exécutif sera logé au siège de OLAVI.

*Article 20.* Il sera dirigé par un Secrétaire Exécutif et comprendra les unités techniques et administratives approuvées par l'Assemblée.

*Article 21.* Les obligations du Secrétariat Général sont les suivantes :

- a) Informer l'Assemblée Générale du déroulement de ses activités et de la gestion du budget.
- b) Elaborer un plan général d'action à moyen terme, le programme des activités et le projet annuel afin de les soumettre, après appréciation préalable des Etats membres, à l'approbation de l'Assemblée Générale.
- c) Préparer, conjointement avec les Etats membres des propositions de recommandations au niveau des stratégies, des programmes et des opérations, qui seront considérées par l'Assemblée Générale.
- d) Servir de liaison entre OLAVI et le Secrétariat Permanent du SELA.
- e) Formuler son propre règlement interne afin de le soumettre à l'approbation de l'Assemblée Générale.
- f) Soumettre à la considération de l'Assemblée Générale les rapports financiers, bilans annuels et de comptabilité externe (audit).

*Article 22.* Les attributions spécifiques du Secrétariat Exécutif sont :

- a) D'exercer la représentation légale du Secrétariat Exécutif et, pour les cas spécifiques déterminés par l'Assemblée, représenter légalement ou officiellement OLAVI.
- b) De convoquer les Etats membres aux dates ordinaires et extraordinaires de sessions de l'Assemblée Générale.
- c) D'assumer le rôle de Secrétaire-Rapporteur de l'Assemblée Générale.
- d) D'élaborer et soumettre à la considération des Etats membres, l'ordre du jour des réunions de l'Assemblée, préparer et distribuer les documents relatifs à ce même ordre du jour.
- e) De promouvoir et coordonner, après approbation de l'Assemblée Générale des plans d'études, programmes et projets en collaboration avec des organismes et

institutions internationales, spécialement celles de caractère national, subrégional et régional.

- f) De recueillir les cotisations des Etats membres, administrer le patrimoine et gérer le budget de OLAVI.
- g) [De] sélectionner et engager le personnel technique et administratif du Secrétariat.
- h) Toutes celles qui seront assignées par l'Assemblée Générale et seront stipulées dans les règlements.

*Article 23.* Le Secrétaire Exécutif devra être citoyen d'un des Etats membres et sera désigné pour une durée de quatre ans; il ne pourra être réélu qu'une seule fois, mais non de façon consécutive, ni être substitué par une personne de même nationalité.

*Article 24.* Pour le bon déroulement de ses activités, le Secrétaire Exécutif pourra assigner des programmes et des tâches à des groupes de travail spécifiques, composés de fonctionnaires désignés et financés par leurs Gouvernements respectifs.

#### CHAPITRE V. PATRIMOINE ET RESSOURCES FINANCIÈRES

*Article 25.* Tous les biens et obligations acquis par OLAVI à titre gratuit ou onéreux constituent son patrimoine.

*Article 26.* Les ressources financières de OLAVI sont les suivantes :

- a) Les cotisations annuelles qui, en fonction des requêtes budgétaires, sont fixées de façon à obtenir son autofinancement.
- b) Les contributions des entreprises créées dans le cadre de OLAVI.
- c) Les apports spéciaux des Etats membres.
- d) Les apports remboursables ou non, provenant d'organismes financiers, de coopération technique ou autres.
- e) Dons et legs.
- f) Autres ressources obtenues à travers de modalités pertinentes que l'Assemblée identifie et établit en temps opportun.

*Article 27.* Les cotisations seront fixées proportionnellement à leur participation dans le Système Economique Latino-Américain, pondérées suivant le nombre des Etats membres.

#### CHAPITRE VI. CAPACITÉ JURIDIQUE, IMMUNITÉS ET PRIVILÈGES

*Article 28.* OLAVI, en tant que personne juridique, pourra conclure toutes sortes d'actes et contrats, et en général réaliser toutes les activités nécessaires à l'accomplissement de ses objectifs.

*Article 29.* OLAVI et ses organes, les fonctionnaires du Secrétariat Exécutif et les représentants gouvernementaux jouiront, dans le territoire du Pays Siège, de la capacité juridique, privilèges et immunités indispensables à l'exercice de leurs fonctions. Dans cette intention, les actes correspondants se concluront avec le Gouvernement de l'Equateur.

*Article 30.* Les Etats membres accorderont les facilités nécessaires aux représentants gouvernementaux et aux fonctionnaires du Secrétariat Exécutif, pour l'accomplissement de leurs activités, lorsque ceux-ci se trouveront en

mission officielle, sur leurs territoires respectifs. L'Assemblée Générale pourra faire des recommandations pour déterminer les détails de l'application de cet article ou proposer des Conventions sur la matière.

*Article 31.* Au cas où l'Organisation établirait des bureaux ou des agences dans un autre des Etats membres, on conviendrait des actes relatifs aux immunités et privilèges.

#### CHAPITRE VII. RATIFICATION, VALIDITÉ ET ADHÉSION

*Article 32.* Chaque Etat signataire ratifiera l'Acte constitutif conformément à ses lois respectives.

Les titres de ratification et d'adhésion seront déposés par-devant le Gouvernement de l'Equateur, lequel communiquera la date du dépôt aux gouvernements des Etats qui auront signé l'Acte constitutif et, en l'occurrence, à ceux qui y auront adhéré.

*Article 33.* Le présent Accord entrera en vigueur, pour les pays qui le ratifieront, lorsque la majorité absolue des Etats signataires aura effectué le dépôt du titre de ratification; pour les autres Etats signataires et les adhérents, à partir de la date du dépôt du respectif titre de ratification ou d'adhésion, dans l'ordre où ils furent déposés.

*Article 34.* Les amendements au présent Accord, proposés par quelque Etat membre, seront sujets à l'approbation de l'Assemblée Générale.

Les réformes entreront en vigueur, quand les deux tiers des membres auront effectué le dépôt du titre correspondant.

*Article 35.* Le présent Accord aura force de loi indéfiniment. Il pourra être dénoncé à tout moment par chacun des Etats membres, au moyen d'un rapport écrit dirigé au Gouvernement de l'Equateur.

La dénonciation prendra effet cent quatre-vingts jours à partir de la date à laquelle le Gouvernement de l'Equateur aura reçu la notification de la dénonciation.

La notification de dénonciation, ainsi que la date à partir de laquelle elle prendra effet, sera communiquée aux Etats qui auront signé le présent Accord ou qui en feront partie, par le Gouvernement de l'Equateur.

Avant de notifier son retrait, l'Etat membre s'acquittera de toutes les obligations auxquelles il s'est soumis, nonobstant le fait que celles-ci se prolongent sur un délai postérieur à la date effective de son retrait.

*Article 36.* Aucune réserve ne pourra être faite au présent Accord au moment de la souscription, ratification ou adhésion.

#### CHAPITRE VIII. DISPOSITIONS GÉNÉRALES

*Article 37.* Les langues officielles de l'Organisation seront celles reconnues comme telles par le Système Economique Latino-Américain.

*Article 38.* Le présent Accord sera enregistré au Secrétariat Général des Nations Unies par le Gouvernement de l'Equateur.

*Article 39.* Chaque Etat membre établira les modalités les plus adéquates pour coordonner, soutenir et administrer les programmes et projets relatifs à OLAVI, suivant les recommandations de l'Assemblée Générale.

## DISPOSITION TRANSITOIRE

Le présent Accord restera ouvert pour sa signature par-devant le Gouvernement de l'Equateur pendant une période de soixante (60) jours, à partir du quatorze janvier mil neuf cent quatre-vingt-deux, date à partir de laquelle il restera ouvert à adhésion.

EN FOI DE QUOI, les Plénipotentiaires qui souscrivent, ayant déposé leurs pleins pouvoirs, en bonne et due forme, signent le présent Accord constitutif au nom de leurs Gouvernements respectifs.

FAIT ET SIGNÉ à Quito, Equateur, le quatorzième jour du mois de janvier de l'année mil neuf cent quatre-vingt-deux, en [deux originaux de même valeur, en espagnol et en français]<sup>1</sup>.

Le Gouvernement de l'Equateur sera le dépositaire du présent Accord constitutif et enverra les copies dûment authentifiées de ce même Accord aux Gouvernements des autres Etats signataires et adhérents, ainsi qu'au Secrétariat Permanent du SELA.

Bolivie :

[Signé]

M. PACIFICO MONTES

Equateur :

[Signé]

M. JUAN PABLO MONCAGATTA

Haïti :

[Signé]

M. MATHIEU B. DUPLAN

Mexique :

[Signé]

M. GREGORIO VALNER ONJAS

Panama :

[Signé]

M. CARLOS GONZALEZ

Paraguay :

[Signé]

M. IGNACIO A. PANE  
(Ad Referendum)

République dominicaine :

[Signé]

M<sup>me</sup> FRIDA AYBAR DE SANABIA

Venezuela :

[Signé]

M. JULIO MARTI

Nicaragua :

[Signé]

M. ALVARO TABOADA  
(Ambassadeur du Nicaragua  
en Equateur)

Costa Rica :

[Signé]

M. FÉLIX ROBERTO CORTES  
(Ambassadeur du Costa Rica  
en Equateur)

<sup>1</sup> Les mots entre crochets reflètent les modifications qui ont été effectuées, en l'absence d'objection des Parties auxquelles elles avaient été communiquées, par un procès-verbal de rectification du Ministre des relations extérieures de la République de l'Equateur en date à Quito du 9 août 1982.

## [TRANSLATION — TRADUCTION]

AGREEMENT<sup>1</sup> ESTABLISHING THE LATIN AMERICAN  
HOUSING AND HUMAN SETTLEMENTS DEVELOPMENT  
ORGANIZATION (OLAVI)

The Latin American States, duly represented at the meeting convened to establish the Latin American Housing and Human Settlements Development Organization,

## WHEREAS:

- The structural conditions, which include, *inter alia*, the economic, social and cultural situation of our peoples, the scarcity of resources, demographic growth, the processes of urbanization and the inequitable allocation of the official supply of housing, are the causes of the housing shortage which compels the Region to make an enormous effort to achieve economic and social development, and thereby contribute to the improvement of housing conditions;
- Qualitative and quantitative housing shortages, being common characteristics of the human settlements of the Region, because of their nature can and should be tackled jointly;
- Efforts to solve such problems must be directed as a matter of priority to the majority sectors of the low-income population, both rural and urban;
- An integrated approach is required to confront the problems of housing and human settlements development, one that basically includes territorial structuring, the development of population centres, the study of their constituent components such as land, infrastructure, equipment and housing and the environmental factors which affect them, and instruments and means of dealing with them;
- The Convention of Panama<sup>2</sup> stresses the need to “promote regional co-operation, with a view to attaining self-sustained, independent and integral development” of the countries of the Region;
- On those bases, in 1977, the Action Committee on Housing and Social Constructions (CAVEIS) was established for the purpose of identifying and

<sup>1</sup> Came into force in respect of the following States on 2 July 1984, after the absolute majority of the signatory States had deposited an instrument of ratification with the Government of Ecuador, in accordance with article 33:

<i>State</i>	<i>Date of deposit of the instrument of ratification</i>
Dominican Republic .....	2 July 1984
Ecuador .....	14 December 1982
Haiti .....	24 November 1983
Mexico .....	7 April 1983
Nicaragua .....	18 April 1983
Panama .....	2 July 1984

Subsequently, the Agreement entered into force for the following State on the date of the deposit of its instrument of ratification with the Government of Ecuador, in accordance with article 33:

<i>State</i>	<i>Date of deposit of the instrument of ratification</i>
Venezuela .....	19 December 1984

<sup>2</sup> United Nations, *Treaty Series*, vol. 1292, p. 309.

- promoting mechanisms for co-operation that would be best suited to meet the needs and making the most of the Region's resources in respect of housing;
- The activities undertaken by CAVEIS have clearly demonstrated the potential and viability of regional co-operation in this respect;
  - The member States of CAVEIS have indicated their interest in establishing a permanent mechanism for co-operation in the area of housing and human settlements development within the framework of SELA, under agreements XII, XIV and XVIII of the Committee;
  - During the IVth regular meeting of CAVEIS a Letter of Intent was signed to express the interest of the countries present on that occasion in establishing a permanent Latin American mechanism for co-operation in that sphere;
  - At the VIIth session of the Latin American Council of SELA, Decision 93 was adopted, recommending the establishment and institutionalization of a mechanism of that nature, within the framework of SELA;
  - The member States of the Action Committee on Housing and Social Constructions proposed at the fourth special meeting of that Committee, in Agreement XX, the establishment of the Latin American Housing and Human Settlements Development Organization;
  - It is essential to establish a permanent body to promote regional co-operation in this sphere, accordingly:

Agree to the following Agreement:

#### CHAPTER I. ESTABLISHMENT AND PURPOSE

*Article 1.* The Latin American Housing and Human Settlements [Development]<sup>1</sup> Organization, known as OLAVI, is hereby established as a legal entity under public international law, which shall be regulated by the norms established under that law.

*Article 2.* The fundamental purposes of OLAVI shall be:

- (a) To promote regional co-operation in the planning and implementation of concrete action in respect of housing and human settlements development;
- (b) To co-ordinate action and strategies in international bodies and forums and with third countries and groups of countries in respect of housing and human settlements development.

*Article 3.* OLAVI shall be established within the framework of the Latin American Economic System (SELA) and shall be based on the principles and objectives contained in the Convention of Panama.

*Article 4.* OLAVI shall also have as the basis of its operation the following criteria:

- (a) To become self-financing through the enterprises, programmes and projects it establishes and carries out;
- (b) To maintain a simple and efficient operating mechanism in the spirit of an organization which is fundamentally designed to promote regional co-operation in respect of housing and human settlements development.

<sup>1</sup> The words between brackets reflect the modifications which were effected, in the absence of any objections from the Parties to which they were communicated, by a procès-verbal of rectification of the Minister of Foreign Affairs of the Republic of Ecuador dated at Quito on 9 August 1982.

## CHAPTER II. OBJECTIVES

*Article 5.* The objectives of OLAVI shall be:

1. To promote multinational co-operation in the field of housing and human settlements development and to contribute to the improvement of the living conditions of the inhabitants of the Member States, essentially those with the lowest incomes settled in rural and urban areas, through activities designed to:

- (a) Establish, develop, adapt and exchange technologies in co-ordination with the regional bodies which are specialized in the production of construction materials and components, building systems and machinery, and equipment and tools used in executing housing projects;
- (b) Develop technology and the use of alternative sources of energy in housing and human settlements, particularly in rural areas;
- (c) Exchange experience and criteria in the development of technical norms of territorial planning, urbanization and housing, and in the standardization of construction materials and components with a view to making them compatible;
- (d) Encourage the commercial exchange of construction materials and components, construction machinery, equipment and tools, advisory services, consultancy and training in the planning, programming and implementation of projects for housing and human settlements development;
- (e) Exchange experience gained from the use of strategies based on community co-operation in solving problems of housing and human settlements development;
- (f) Protect, conserve and improve the environment in relation to housing and human settlements development;
- (g) Develop and use the human, scientific and technological resources of the Member States in the field of housing and human settlements development;
- (h) Exchange methodological and technical experience in formulating plans, programmes and projects for housing and human settlements development and management systems to implement them;
- (i) Systematize, evaluate and exchange experience designed to broaden the access of low-income groups to land, materials, technology and financing for the necessary housing, infrastructure and equipment;
- (j) Provide continuous and systematic information on the housing situation in the countries of the Region.

2. To promote the creation of permanent instruments of co-operation and exchange of an entrepreneurial nature among Member States and between Member States and other States and bodies which are part of SELA in such fields as information, financing, the prevention and solution of emergencies affecting housing and habitat and the commercialization of the elements referred to in paragraph 1, subparagraph (d) of this article, and in other fields of interest for the development of the Organization itself.

3. To promote programmes of co-operation in prevention, evaluation of damage and rehabilitation in cases of emergencies affecting housing and habitat.



4. To promote activities and strategies shared by the Member States that would make it possible to:

- (a) Improve and strengthen their negotiating capacity in international bodies which finance activities in the field of housing and human settlements development;
- (b) Propose measures to enable transnational corporations that operate in fields related to housing and urban development to comply with the development objectives of the Region and with the national interests of Member States, and to exchange information on the activities carried out by those corporations;
- (c) Organize the financing of studies, plans, programmes and projects with national, subregional, regional and international financial bodies in the area of housing and human settlements development.

#### CHAPTER III. MEMBERSHIP AND HEADQUARTERS

*Article 6.* Latin American States which are members of the Latin American Economic System (SELA) and which sign and ratify this Agreement shall be members of OLAVI.

*Article 7.* Latin American States that have not signed the Agreement and decide to join OLAVI shall have the same status.

*Article 8.* The Headquarters of OLAVI shall be in the city of Quito, capital of the Republic of Ecuador.

#### CHAPTER IV. ORGANIZATIONAL STRUCTURE

*Article 9.* The organs of OLAVI are:

- (a) The General Assembly;
- (b) The Executive Secretariat.

##### *Title I.* THE GENERAL ASSEMBLY

*Article 10.* The General Assembly is the supreme organ of OLAVI; it shall be composed of representatives of the Member States and it may meet at the ministerial level.

*Article 11.* The functions of the General Assembly shall be:

- (a) To determine the policies and guidelines to be followed to fulfil the purposes and objectives of the Organization;
- (b) To approve the programmes, projects, budgets and scale of contributions of the Organization;
- (c) To establish the temporary or permanent subsidiary bodies and the committees or working groups it deems necessary;
- (d) To determine in each case the advisability of entering into agreements on scientific, technical and financial co-operation with other bodies that may help achieve the purposes of the Organization;
- (e) To analyse and adopt, as appropriate, progress reports, financial statements and annual balance sheets prepared by the Executive Secretariat;
- (f) To study and approve, as appropriate, the report of the President of the Organization at the end of his term of office;

- (g) To elect from among its members the President and Vice-President of the Organization for one-year terms;
- (h) To appoint and dismiss the Executive Secretary of the Organization;
- (i) To establish the organizational structure and approve the Organization's rules of procedure.

*Article 12.* The General Assembly shall meet in regular session once a year and in special session in the following cases:

- (a) By agreement of the General Assembly itself;
- (b) At the request of one of the Member States, provided that such proposal has the acceptance of at least one third of the members;
- (c) At the request of a Member State in a situation of national emergency affecting housing and human settlements;
- (d) At the request of the President.

*Article 13.* The specific functions of the President shall be:

- (a) To act as the legal and official representative of OLAVI when the General Assembly so determines;
- (b) To convene meetings jointly with the Executive Secretary;
- (c) To preside over meetings and submit the items on the agenda to the General Assembly for consideration;
- (d) To assist in promoting the activities of OLAVI;
- (e) To implement the provisions laid down in this Agreement and to propose whatever measures it considers appropriate to enhance the conduct of its work;
- (f) To submit to the General Assembly an annual report on his stewardship;
- (g) To request the holding of special sessions of the General Assembly.

*Article 14.* Meetings of the General Assembly may start when at least two thirds of the Member States are present.

*Article 15.* Any agreement the Assembly adopts concerning amendments to this Agreement or matters relating to its policies, rules, budgets and scale of contributions, must be the product of consensus, provided that the relevant meetings are convened specifically for those purposes. All other agreements shall require the vote of a majority of Member States. All Member States shall comply with the obligations deriving from decisions adopted by the Assembly.

*Article 16.* The Permanent Secretary of SELA shall be invited to participate in meetings of the Assembly with observer status and full right to speak.

*Article 17.* During sessions of the General Assembly, duly accredited delegates from non-member States of OLAVI and special invitees may participate as observers. Participants in the Assembly referred to in this article shall have the right to speak but shall not have the right to vote.

## *Title II. THE EXECUTIVE SECRETARIAT*

*Article 18.* The Executive Secretariat is the technical and administrative body of OLAVI, responsible for implementing the agreements adopted by the General Assembly.

*Article 19.* The Executive Secretariat shall be located at the headquarters of OLAVI.

*Article 20.* It shall be headed by the Executive Secretary and shall have the technical and administrative facilities decided by the General Assembly.

*Article 21.* The obligations of the Executive Secretariat shall be:

- (a) To inform the General Assembly of the progress of its activities and the execution of the budget;
- (b) To draw up a general medium-term plan of action, the programme of activities and the annual plan for submission, following consideration by the Member States, to the General Assembly for approval;
- (c) To draw up, in consultation with the Member States, draft recommendations concerning strategy, programming or operations, for consideration by the General Assembly;
- (d) To provide liaison between OLAVI and the Permanent Secretariat of SELA;
- (e) To formulate its own rules of procedure for submission to the General Assembly for approval;
- (f) To submit to the General Assembly for consideration, the financial statements, annual balance sheets and reports of the external auditors.

*Article 22.* The specific functions of the Executive Secretary shall be:

- (a) To act as the legal representative of the Executive Secretariat and, in specific cases determined by the Assembly, to act as the legal and official representative of OLAVI;
- (b) To convene Member States to regular and special sessions of the General Assembly;
- (c) To act as Secretary-Rapporteur of the General Assembly;
- (d) To formulate and submit to Member States for consideration, the provisional agenda for meetings of the Assembly and to prepare and distribute documents relating to that agenda;
- (e) To promote and co-ordinate, subject to the approval of the Assembly, arrangements for the execution of studies, programmes and projects with international bodies and institutions, especially those of a national, sub-regional and regional nature;
- (f) To collect the contributions of Member States, manage the assets and execute the budget of OLAVI;
- (g) To select and hire the technical and administrative personnel of the Secretariat;
- (h) All functions which may be assigned to it by the General Assembly and laid down in the regulations.

*Article 23.* The Executive Secretary, who must be a citizen of one of the Member States shall be appointed for a four-year term. He may be reappointed once, but not for a consecutive term; he may not be replaced by a person of the same nationality.

*Article 24.* In order to carry out its activities, the Executive Secretary may allocate programmes and tasks to special working groups consisting of officials appointed and financed by their respective Governments.

#### CHAPTER V. ASSETS AND FINANCIAL RESOURCES

*Article 25.* The net assets of OLAVI shall consist of all acquisitions by gift or purchase, less liabilities.

*Article 26.* The financial resources of OLAVI shall consist of:

- (a) Annual contributions to be established on the basis of budgetary requirements, until the Organization becomes self-financing;
- (b) Contributions from the enterprises established within the framework of OLAVI;
- (c) Special contributions from Member States;
- (d) Contributions, whether reimbursable or not, from financial, technical cooperation or other bodies;
- (e) Donations and bequests;
- (f) Other resources obtained by means of any relevant modalities which the Assembly may identify and establish.

*Article 27.* The contributions shall be fixed at a similar proportion to participation in the Latin American Economic System, weighted according to the number of Member States.

#### CHAPTER VI. LEGAL CAPACITY, IMMUNITIES AND PRIVILEGES

*Article 28.* OLAVI, as a legal entity, may enter into any agreement or contract and, in general, undertake all of the activities necessary for the attainment of its objectives.

*Article 29.* OLAVI, its bodies, the officials of the Executive Secretariat and government representatives shall have, in the territory of the host country, the legal capacity, privileges and immunities which are essential for the performance of their functions. For that purpose, the appropriate agreements shall be drawn up with the Government of Ecuador.

*Article 30.* The Member States shall grant the necessary facilities to government representatives and officials of the Executive Secretariat for the performance of their functions when they are on official business, within their respective territories. The General Assembly may make recommendations to determine the details of the application of this article or to propose agreements on the subject.

*Article 31.* In the event that the Organization establishes offices or agencies in another Member State, appropriate agreements on immunities and privileges shall be drawn up.

#### CHAPTER VII. RATIFICATION, DURATION AND ACCESSION

*Article 32.* Each signatory State shall ratify the Agreement in accordance with its own legislation.

The instruments of ratification and accession shall be deposited with the Government of Ecuador, which shall communicate the date of deposit to the Governments of the States which have signed the Agreement and, where applicable, to those that have acceded to it.

*Article 33.* This Agreement shall enter into force for the countries which ratify it when the absolute majority of signatory States have deposited the instrument of ratification; for other signatory and acceding States, on the date of deposit of the respective instrument of ratification or accession, in the order in which those instruments were deposited.

*Article 34.* Amendments to this Agreement, which may be proposed by any Member State, shall be subject to approval by the General Assembly.

Such amendments shall become effective when two thirds of the Member States have deposited the corresponding instrument.

*Article 35.* This Agreement shall remain in force indefinitely but any Contracting State may denounce it, at any time, by means of written notification to the Government of Ecuador.

Such denunciation shall take effect 180 days after the date on which the notification has been received by the Depositary.

The Government of Ecuador shall inform States that have signed, or are parties to this Agreement, of the notification of denunciation and of the date from which it shall take effect.

Such Member State shall fulfil any obligations it undertook before notifying its withdrawal, even if such obligations extend for a period subsequent to the date on which the withdrawal takes effect.

*Article 36.* No reservation may be made at the time of signature or ratification of or accession to this Agreement.

#### CHAPTER VIII. GENERAL PROVISIONS

*Article 37.* The official languages of the Organization shall be those recognized as such by the Latin American Economic System.

*Article 38.* This Agreement shall be registered with the United Nations Secretariat by the Government of Ecuador.

*Article 39.* Each Member State shall establish the most appropriate modalities for co-ordinating, supporting and administering the activities, programmes and projects relating to OLAVI, following the recommendations of the General Assembly.

#### TRANSITIONAL PROVISION

This Agreement shall be open for signature with the Government of Ecuador for a period of sixty (60) days, starting on 14 January 1982, and after that date shall be open to accession.

IN WITNESS WHEREOF the plenipotentiaries, having deposited their full powers, found in good and due form, have signed this Agreement on behalf of their respective Governments.

DONE AND SIGNED at the City of Quito, Ecuador, on 14 January 1982, [in duplicate in the Spanish and French languages, both texts being equally authentic].<sup>1</sup>

The Government of Ecuador shall be the depositary of this Agreement and shall send duly certified copies of it to the Governments of the other signatory and acceding States, and to the Permanent Secretariat of SELA.

Bolivia:

[Signed]

PACIFICO MONTES

Ecuador:

[Signed]

JUAN PABLO MONCAGATTA

Haiti:

[Signed]

MATHIEU B. DUPLAN

Mexico:

[Signed]

Dr. GREGORIO VALNER ONJAS

Panama:

[Signed]

CARLOS GONZALEZ

Paraguay:

[Signed]

IGNACIO A. PANE  
(*Ad Referendum*)

Dominican Republic:

[Signed]

FRIDA AYBAR DE SANABIA

Venezuela:

[Signed]

JULIO MARTI

Nicaragua:

[Signed]

ALVARO TABOADA  
(Ambassador of Nicaragua  
to Ecuador)

Costa Rica:

[Signed]

FELIX ROBERTO CORTES  
(Ambassador of Costa Rica  
to Ecuador)

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<sup>1</sup> The words between brackets reflect the modifications which were effected, in the absence of any objections from the Parties to which they were communicated, by a procès-verbal of rectification of the Minister of Foreign Affairs of the Republic of Ecuador dated at Quito on 9 August 1982.

**ANNEX A**

*Ratifications, accessions, prorogations, etc.,  
concerning treaties and international agreements  
registered  
with the Secretariat of the United Nations*

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**ANNEXE A**

*Ratifications, adhésions, prorogations, etc.,  
concernant des traités et accords internationaux  
enregistrés  
au Secrétariat de l'Organisation des Nations Unies*

## ANNEX A

## ANNEXE A

No. 1342. CONVENTION FOR THE SUPPRESSION OF THE TRAFFIC IN PERSONS AND OF THE EXPLOITATION OF THE PROSTITUTION OF OTHERS. OPENED FOR SIGNATURE AT LAKE SUCCESS, NEW YORK, ON 21 MARCH 1950<sup>1</sup>

N° 1342. CONVENTION POUR LA RÉPRESSION DE LA TRAITE DES ÊTRES HUMAINS ET DE L'EXPLOITATION DE LA PROSTITUTION D'AUTRUI. OUVERTE À LA SIGNATURE À LAKE SUCCESS (NEW YORK), LE 21 MARS 1950<sup>1</sup>

## ACCESSION

*Instrument deposited on:*

21 May 1985

AFGHANISTAN

(With effect from 19 August 1985.)

With the following reservation:

“Whereas, the Government of the Democratic Republic of Afghanistan does not agree with the procedure of referring disputes arising between the Parties to the Convention relating to its interpretation of application, to the International Court of Justice, at the request of any one of the Parties to the dispute, therefore, it does not undertake any commitment regarding observation of article 22 of the present Convention.”

*Registered ex officio on 21 May 1985.*

## ADHÉSION

*Instrument déposé le :*

21 mai 1985

AFGHANISTAN

(Avec effet au 19 août 1985.)

Avec la réserve suivante :

[TRADUCTION — TRANSLATION]

Considérant que le Gouvernement de la République démocratique d'Afghanistan n'approuve pas la procédure selon laquelle les différends qui s'élèveraient entre les Parties à ladite Convention, concernant l'interprétation et l'application de celle-ci, seraient soumis à la Cour internationale de Justice à la demande de l'une quelconque des Parties au différend, il ne prend aucun engagement en ce qui concerne le respect des dispositions de l'article 22 de la présente Convention.

*Enregistré d'office le 21 mai 1985.*

<sup>1</sup> United Nations. *Treaty Series*, vol. 96, p. 271; for subsequent actions, see references in Cumulative Indexes Nos. 2 to 10, 13 and 14, as well as annex A in volumes 943, 1001, 1045, 1052, 1080, 1130, 1132, 1141, 1155, 1249, 1252, 1263, 1334 and 1389.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 96, p. 271; pour les faits ultérieurs, voir les références données dans les Index cumulatifs nos 2 à 10, 13 et 14, ainsi que l'annexe A des volumes 943, 1001, 1045, 1052, 1080, 1130, 1132, 1141, 1155, 1249, 1252, 1263, 1334 et 1389.



No. 4214. CONVENTION ON THE INTERNATIONAL MARITIME ORGANIZATION. DONE AT GENEVA ON 6 MARCH 1948<sup>1</sup>

N° 4214. CONVENTION PORTANT CRÉATION DE L'ORGANISATION MARITIME INTERNATIONALE. FAITE À GENÈVE LE 6 MARS 1948<sup>1</sup>

ACCEPTANCE of the amendments to the above-mentioned Convention, adopted by the Intergovernmental Maritime Consultative Organization Assembly by resolution A.450 (XI) of 15 November 1979<sup>2</sup>

ACCEPTATION des amendements à la Convention susmentionnée, adoptés par l'Assemblée de l'Organisation maritime consultative intergouvernementale par la résolution A.450 (XI) du 15 novembre 1979<sup>2</sup>

*Instrument deposited on:*

15 May 1985

SAUDI ARABIA

(The amendments came into force for all States members of the International Maritime Organization, including Saudi Arabia, on 10 November 1984, in accordance with article 62 of the Convention.)

*Registered ex officio on 15 May 1985.*

*Instrument déposé le :*

15 mai 1985

ARABIE SAOUDITE

(Les amendements sont entrés en vigueur pour tous les Etats membres de l'Organisation maritime internationale, y compris l'Arabie saoudite, le 10 novembre 1984, conformément à l'article 62 de la Convention.)

*Enregistré d'office le 15 mai 1985.*

<sup>1</sup> United Nations, *Treaty Series*, vol. 289, p. 3; for subsequent actions, see references in Cumulative Indexes Nos. 4 to 14, as well as annex A in volumes 907, 913, 928, 942, 954, 963, 973, 980, 985, 987, 999, 1001, 1006, 1007, 1017, 1021, 1023, 1025, 1031, 1042, 1043, 1060, 1080, 1089, 1092, 1106, 1110, 1120, 1122, 1126, 1128, 1130, 1144, 1146, 1153, 1156, 1161, 1162, 1166, 1175, 1181, 1196, 1213, 1216, 1224, 1271, 1276 (adoption of new title), 1285, 1302, 1317, 1325, 1338, 1358, 1380, 1386 and 1387.

<sup>2</sup> *Ibid.*, vol. 1380, p. 268.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 289, p. 3; pour les faits ultérieurs, voir les références données dans les Index cumulatifs n° 4 à 14, ainsi que l'annexe A des volumes 907, 913, 928, 942, 954, 963, 973, 980, 985, 987, 999, 1001, 1006, 1007, 1017, 1021, 1023, 1025, 1031, 1042, 1043, 1060, 1080, 1089, 1092, 1106, 1110, 1120, 1122, 1126, 1128, 1130, 1144, 1146, 1153, 1156, 1161, 1162, 1166, 1175, 1181, 1196, 1213, 1216, 1224, 1271, 1276 (adoption du nouveau titre), 1285, 1302, 1317, 1325, 1338, 1358, 1380, 1386 et 1387.

<sup>2</sup> *Ibid.*, vol. 1380, p. 275.

No. 7247. INTERNATIONAL CONVENTION FOR THE PROTECTION OF PERFORMERS, PRODUCERS OF PHONOGRAMS AND BROADCASTING ORGANISATIONS. DONE AT ROME ON 26 OCTOBER 1961<sup>1</sup>

N° 7247. CONVENTION INTERNATIONALE SUR LA PROTECTION DES ARTISTES INTERPRÈTES OU EXÉCUTANTS, DES PRODUCTEURS DE PHONOGRAMMES ET DES ORGANISMES DE RADIODIFFUSION. FAITE À ROME LE 26 OCTOBRE 1961<sup>1</sup>

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ACCESSION

*Instrument deposited on:*

7 May 1985

PERU

(With effect from 7 August 1985.)

*Registered ex officio on 7 May 1985.*

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ADHÉSION

*Instrument déposé le :*

7 mai 1985

PÉROU

(Avec effet au 7 août 1985.)

*Enregistré d'office le 7 mai 1985.*

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<sup>1</sup> United Nations, *Treaty Series*, vol. 496, p. 43; for subsequent actions, see references in Cumulative Indexes Nos. 7, 8, and 10 to 14, as well as annex A in volumes 939, 958, 987, 1009, 1025, 1039, 1080, 1131, 1138, 1316, 1317, 1324 and 1360.

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<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 496, p. 43; pour les faits ultérieurs, voir les références données dans les Index cumulatifs n°s 7, 8, et 10 à 14, ainsi que l'annexe A des volumes 939, 958, 987, 1009, 1025, 1039, 1080, 1131, 1138, 1316, 1317, 1324 et 1360.

No. 13444. UNIVERSAL COPYRIGHT CONVENTION AS REVISED AT PARIS ON 24 JULY 1971. CONCLUDED AT PARIS ON 24 JULY 1971<sup>1</sup>

N° 13444. CONVENTION UNIVERSELLE SUR LE DROIT D'AUTEUR RÉVISÉE À PARIS LE 24 JUILLET 1971. CONCLUE À PARIS LE 24 JUILLET 1971<sup>1</sup>

ACCESSIONS to the above-mentioned Convention and to its annexed Protocols 1<sup>2</sup> and 2<sup>2</sup>

ADHÉSIONS à la Convention susmentionnée et à ses Protocoles annexes 1<sup>2</sup> et 2<sup>2</sup>

*Instruments deposited with the Director-General of the United Nations Educational, Scientific and Cultural Organization on:*

*Instruments déposés auprès du Directeur général de l'Organisation des Nations Unies pour l'éducation, la science et la culture le :*

22 April 1985

22 avril 1985

PERU

PÉROU

(With effect from 22 July 1985.)

(Avec effet au 22 juillet 1985.)

*Certified statements were registered by the United Nations Educational, Scientific and Cultural Organization on 15 May 1985.*

*Les déclarations certifiées ont été enregistrées par l'Organisation des Nations Unies pour l'éducation, la science et la culture le 15 mai 1985.*

<sup>1</sup> United Nations, *Treaty Series*, vol. 943, p. 178, and annex A in volumes 950, 952, 954, 962, 974, 976, 982, 990, 1007, 1015, 1026, 1033, 1053, 1063, 1089, 1122, 1136, 1150, 1153, 1157, 1183, 1199, 1226, 1248, 1276, 1301, 1312 and 1342.

<sup>2</sup> *Ibid.*, vol. 943, p. 178.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 943, p. 179, et annexe A des volumes 950, 952, 954, 962, 974, 976, 982, 990, 1007, 1015, 1026, 1033, 1053, 1063, 1089, 1122, 1136, 1150, 1153, 1157, 1183, 1199, 1226, 1248, 1276, 1301, 1312 et 1342.

<sup>2</sup> *Ibid.*, vol. 943, p. 179.

No. 14458. CONVENTION ON THE  
REDUCTION OF STATELESSNESS.  
CONCLUDED AT NEW YORK ON  
30 AUGUST 1961<sup>1</sup>

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RATIFICATION

*Instrument deposited on:*

13 May 1985

NETHERLANDS

(For the Kingdom in Europe and the Netherlands Antilles. With effect from 11 August 1985.)

*Registered ex officio on 13 May 1985.*

N° 14458. CONVENTION SUR LA RÉ-  
DUCTION DES CAS D'APATRIDIE.  
CONCLUE À NEW YORK LE 30 AOÛT  
1961<sup>1</sup>

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RATIFICATION

*Instrument déposé le :*

13 mai 1985

PAYS-BAS

(Pour le Royaume en Europe et les Antilles néerlandaises. Avec effet au 11 août 1985.)

*Enregistré d'office le 13 mai 1985.*

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No. 14531. INTERNATIONAL COVE-  
NANT ON ECONOMIC, SOCIAL AND  
CULTURAL RIGHTS. ADOPTED BY  
THE GENERAL ASSEMBLY OF THE  
UNITED NATIONS ON 16 DECEM-  
BER 1966<sup>2</sup>

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ACCESSION

*Instrument deposited on:*

16 May 1985

GREECE

(With effect from 16 August 1985.)

*Registered ex officio on 16 May 1985.*

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N° 14531. PACTE INTERNATIONAL  
RELATIF AUX DROITS ÉCONO-  
MIQUES, SOCIAUX ET CULTURELS.  
ADOPTÉ PAR L'ASSEMBLÉE GÉ-  
NÉRALE DES NATIONS UNIES LE  
16 DÉCEMBRE 1966<sup>2</sup>

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ADHÉSION

*Instrument déposé le :*

16 mai 1985

GRÈCE

(Avec effet au 16 août 1985.)

*Enregistré d'office le 16 mai 1985.*

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<sup>1</sup> United Nations, *Treaty Series*, vol. 989, p. 175, and annex A in volumes 1048, 1054, 1058, 1097 and 1341.

<sup>2</sup> *Ibid.*, vol. 993, p. 3, and annex A in volumes 994, 1007, 1008, 1026, 1031, 1035, 1037, 1038, 1039, 1065, 1066, 1075, 1088, 1098, 1103, 1106, 1120, 1132, 1136, 1138, 1144, 1151, 1161, 1181, 1197, 1202, 1203, 1207, 1211, 1213, 1214, 1216, 1218, 1225, 1249, 1256, 1259, 1271, 1286, 1289, 1299, 1312, 1329, 1333, 1334, 1354, 1357, 1360 and 1390.

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<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 989, p. 175, et annexe A des volumes 1048, 1054, 1058, 1097 et 1341.

<sup>2</sup> *Ibid.*, vol. 993, p. 3, et annexe A des volumes 994, 1007, 1008, 1026, 1031, 1035, 1037, 1038, 1039, 1065, 1066, 1075, 1088, 1098, 1103, 1106, 1120, 1132, 1136, 1138, 1144, 1151, 1161, 1181, 1197, 1202, 1203, 1207, 1211, 1213, 1214, 1216, 1218, 1225, 1249, 1256, 1259, 1271, 1286, 1289, 1299, 1312, 1329, 1333, 1334, 1354, 1357, 1360 et 1390.

No. 16899. ADDITIONAL CONVENTION TO THE INTERNATIONAL CONVENTION CONCERNING THE CARRIAGE OF PASSENGERS AND LUGGAGE BY RAIL (CIV) OF 25 FEBRUARY 1961, RELATING TO THE LIABILITY OF THE RAILWAY FOR DEATH OF AND PERSONAL INJURY TO PASSENGERS. CONCLUDED AT BERNE ON 26 FEBRUARY 1966<sup>1</sup>

N° 16899. CONVENTION ADDITIONNELLE À LA CONVENTION INTERNATIONALE CONCERNANT LE TRANSPORT DES VOYAGEURS ET DES BAGAGES PAR CHEMINS DE FER (CIV) DU 25 FÉVRIER 1961, RELATIVE À LA RESPONSABILITÉ DU CHEMIN DE FER POUR LA MORT ET LES BLESSURES DES VOYAGEURS. CONCLUE À BERNE LE 26 FÉVRIER 1966<sup>1</sup>

No. 16900. INTERNATIONAL CONVENTION CONCERNING THE CARRIAGE OF GOODS BY RAIL (CIM). CONCLUDED AT BERNE ON 7 FEBRUARY 1970<sup>2</sup>

N° 16900. CONVENTION INTERNATIONALE CONCERNANT LE TRANSPORT DES MARCHANDISES PAR CHEMINS DE FER (CIM). CONCLUE À BERNE LE 7 FÉVRIER 1970<sup>2</sup>

No. 16901. INTERNATIONAL CONVENTION CONCERNING THE CARRIAGE OF PASSENGERS AND LUGGAGE BY RAIL (CIV). CONCLUDED AT BERNE ON 7 FEBRUARY 1970<sup>3</sup>

N° 16901. CONVENTION INTERNATIONALE CONCERNANT LE TRANSPORT DES VOYAGEURS ET DES BAGAGES PAR CHEMINS DE FER (CIV). CONCLUE À BERNE LE 7 FÉVRIER 1970<sup>3</sup>

#### TERMINATIONS

The above-mentioned Conventions ceased to have effect on 1 May 1985, the date of entry into force of the Convention concerning international carriage by rail (COTIF) concluded at Berne on 9 May 1980,<sup>4</sup> in accordance with article 24 (2) of the latter Convention of 1980.

*Certified statements were registered by Switzerland on 1 May 1985.*

#### ABROGATIONS

Les Conventions susmentionnées ont cessé d'avoir effet le 1<sup>er</sup> mai 1985, date de l'entrée en vigueur de la Convention relative aux transports internationaux ferroviaires (COTIF) conclue à Berne le 9 mai 1980<sup>4</sup>, conformément au paragraphe 2 de l'article 24 de ladite Convention de 1980.

*Les déclarations certifiées ont été enregistrées par la Suisse le 1<sup>er</sup> mai 1985.*

<sup>1</sup> United Nations, *Treaty Series*, vol. 1101, p. 82, and annex A in volume 1305.

<sup>2</sup> *Ibid.*, p. 164, and annex A in volumes 1151 and 1305.

<sup>3</sup> *Ibid.*, p. 340, and annex A in volume 1305.

<sup>4</sup> See p. 2 of this volume.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 1101, p. 83, et annexe A du volume 1305.

<sup>2</sup> *Ibid.*, p. 165, et annexe A des volumes 1151 et 1305.

<sup>3</sup> *Ibid.*, p. 341, et annexe A du volume 1305.

<sup>4</sup> Voir p. 3 du présent volume.

No. 17949. CONVENTION RELATING TO THE DISTRIBUTION OF PROGRAMME-CARRYING SIGNALS TRANSMITTED BY SATELLITE. DONE AT BRUSSELS ON 21 MAY 1974<sup>1</sup>

N° 17949. CONVENTION CONCERNANT LA DISTRIBUTION DE SIGNAUX PORTEURS DE PROGRAMMES TRANSMIS PAR SATELLITE. FAITE À BRUXELLES LE 21 MAI 1974<sup>1</sup>

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ACCESSION

*Instrument deposited on:*

7 May 1985

PERU

(With effect from 7 August 1985.)

*Registered ex officio on 7 May 1985.*

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ADHÉSION

*Instrument déposé le :*

7 mai 1985

PÉROU

(Avec effet au 7 août 1985.)

*Enregistré d'office le 7 mai 1985.*

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No. 19487. PROTOCOL TO THE CONVENTION ON THE CONTRACT FOR THE INTERNATIONAL CARRIAGE OF GOODS BY ROAD (CMR). CONCLUDED AT GENEVA ON 5 JULY 1978<sup>2</sup>

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N° 19487. PROTOCOLE À LA CONVENTION RELATIVE AU CONTRAT DE TRANSPORT INTERNATIONAL DE MARCHANDISES PAR ROUTE (CMR). CONCLU À GENÈVE LE 5 JUILLET 1978<sup>2</sup>

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ACCESSION

*Instrument deposited on:*

16 May 1985

GREECE

(With effect from 14 August 1985.)

*Registered ex officio on 16 May 1985.*

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ADHÉSION

*Instrument déposé le :*

16 mai 1985

GRÈCE

(Avec effet au 14 août 1985.)

*Enregistré d'office le 16 mai 1985.*

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<sup>1</sup> United Nations. *Treaty Series*, vol. 1144, p. 3, and annex A in volumes 1223, 1276, 1308 and 1386.

<sup>2</sup> *Ibid.*, vol. 1208, p. 427, and annex A in volumes 1214, 1224, 1273, 1275, 1288, 1291, 1316, 1334, 1367 and 1394.

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<sup>1</sup> Nations Unies. *Recueil des Traités*, vol. 1144, p. 3, et annexe A des volumes 1223, 1276, 1308 et 1386.

<sup>2</sup> *Ibid.*, vol. 1208, p. 427, et annexe A des volumes 1214, 1224, 1273, 1275, 1288, 1291, 1316, 1334, 1367 et 1394.

No. 21052. AGREEMENT ESTABLISHING THE AFRICAN DEVELOPMENT BANK, AS AMENDED. CONCLUDED AT LUSAKA ON 7 MAY 1982<sup>1</sup>

N° 21052. ACCORD PORTANT CRÉATION DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT, TEL QUE MODIFIÉ. CONCLU À LUSAKA LE 7 MAI 1982<sup>1</sup>

ADMISSION to membership in the Bank in accordance with the general rules governing participation of non regional countries

ADMISSION en qualité de membre de la Banque conformément aux règles générales régissant la participation des pays non régionaux

10 May 1985

10 mai 1985

CHINA

CHINE

(The instrument of acceptance was deposited on 9 May 1985, with effect from 10 May 1985, the date on which the President of the Bank declared that China had fulfilled the conditions provided for in section 3 (c) of the general rules annexed to resolution 07-79 adopted by the Board of Governors of the Bank on 17 May 1979.)

(L'instrument d'acceptation a été déposé le 9 mai 1985, avec effet au 10 mai 1985, date à laquelle le Président de la Banque a déclaré que la Chine avait rempli les conditions prévues à l'alinéa c de la section 3 des règles générales annexées à la résolution 07-79 adoptée par le Conseil des Gouverneurs de la Banque le 17 mai 1979.)

*Registered ex officio on 10 May 1985.*

*Enregistré d'office le 10 mai 1985.*

No. 21139. SIXTH INTERNATIONAL TIN AGREEMENT. CONCLUDED AT GENEVA ON 26 JUNE 1981<sup>2</sup>

N° 21139. SIXIÈME ACCORD INTERNATIONAL SUR L'ÉTAIN. CONCLU À GENÈVE LE 26 JUIN 1981<sup>2</sup>

RATIFICATION

RATIFICATION

*Instrument deposited on:*

*Instrument déposé le :*

16 May 1985

16 mai 1985

GREECE

GRÈCE

(With effect from 16 May 1985. The Agreement came into force provisionally on 1 July 1982 for Greece, which, by that date, had notified its intention to apply it, in accordance with article 55 (3).)

(Avec effet au 16 mai 1985. L'Accord est entré en vigueur à titre provisoire le 1<sup>er</sup> juillet 1982 pour la Grèce, qui, à cette date, avait notifié son intention de l'appliquer, conformément au paragraphe 3 de l'article 55.)

*Registered ex officio on 16 May 1985.*

*Enregistré d'office le 16 mai 1985.*

<sup>1</sup> United Nations, *Treaty Series*, vol. 1276, p. 3, and annex A in volumes 1296, 1332, 1342, 1343 and 1351.

<sup>2</sup> *Ibid.*, vol. 1282, p. 205, and annex A in volumes 1287, 1294, 1295, 1300, 1312, 1314, 1317, 1321, 1323, 1329, 1342, 1352, 1360 and 1386.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 1276, p. 3, et annexe A des volumes 1296, 1332, 1342, 1343 et 1351.

<sup>2</sup> *Ibid.*, vol. 1282, p. 205, et annexe A des volumes 1287, 1294, 1295, 1300, 1312, 1314, 1317, 1321, 1323, 1329, 1342, 1352, 1360 et 1386.

No. 23225. INTERNATIONAL SUGAR AGREEMENT, 1984. CONCLUDED AT GENEVA ON 5 JULY 1984<sup>1</sup>

N° 23225. ACCORD INTERNATIONAL DE 1984 SUR LE SUCRE. CONCLU À GENÈVE LE 5 JUILLET 1984<sup>1</sup>

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RATIFICATION and ACCESSION (a)

*Instruments deposited on:*

7 May 1985 a

FINLAND

(With effect from 7 May 1985.)

*Registered ex officio on 7 May 1985.*

20 May 1985

EL SALVADOR

(With effect from 20 May 1985. The Agreement came into force provisionally on 16 January 1985 for El Salvador which, on that date, had notified its intention to apply it, in accordance with article 37 (1).)

*Registered ex officio on 20 May 1985.*

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RATIFICATION et ADHÉSION (a)

*Instruments déposés les :*

7 mai 1985 a

FINLANDE

(Avec effet au 7 mai 1985.)

*Enregistré d'office le 7 mai 1985.*

20 mai 1985

EL SALVADOR

(Avec effet au 20 mai 1985. L'Accord est entré en vigueur à titre provisoire le 16 janvier 1985 pour El Salvador qui, à cette date, avait notifié son intention de l'appliquer, conformément au paragraphe 1 de l'article 37.)

*Enregistré d'office le 20 mai 1985.*

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<sup>1</sup> United Nations, *Treaty Series*, vol. 1388, p. 3, and annex A in volumes 1389, 1390, 1392, 1393 and 1394.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 1388, p. 3, et annexe A des volumes 1389, 1390, 1392, 1393 et 1394.



No. 23317. INTERNATIONAL TROPICAL TIMBER AGREEMENT, 1983. CONCLUDED AT GENEVA ON 18 NOVEMBER 1983<sup>1</sup>

N° 23317. ACCORD INTERNATIONAL DE 1983 SUR LES BOIS TROPICAUX. CONCLU À GENÈVE LE 18 NOVEMBRE 1983<sup>1</sup>

RATIFICATION and ACCEPTANCE (A)

*Instruments deposited on:*

9 May 1985

SWITZERLAND

(With provisional effect from 9 May 1985.)

*Registered ex officio on 9 May 1985.*

20 May 1985 A

UNION OF SOVIET SOCIALIST REPUBLICS

(With provisional effect from 20 May 1985.)

With the following declaration:

RATIFICATION et ACCEPTATION (A)

*Instruments déposés les :*

9 mai 1985

SUISSE

(Avec effet à titre provisoire au 9 mai 1985.)

*Enregistré d'office le 9 mai 1985.*

20 mai 1985 A

UNION DES RÉPUBLIQUES SOCIALISTES SOVIÉTIQUES

(Avec effet à titre provisoire au 20 mai 1985.)

Avec la déclaration suivante :

[RUSSIAN TEXT — TEXTE RUSSE]

« a) в случае, если участником настоящего Соглашения станет Европейское экономическое сообщество, участие в Соглашении Союза Советских Социалистических Республик не будет создавать для него каких-либо обязательств в отношении этого Сообщества;

б) в свете своей известной позиции по корейскому вопросу Союз Советских Социалистических Республик не может признать правомерным наименование « Корейская Республика », содержащееся в приложении В к Соглашению ».

[TRANSLATION]

a) In the event that the European Economic Community becomes a Party to the present Agreement, the participation of the Union of Soviet Socialist Republics in the Agreement shall not give rise to any obligations on its part in relation to the Community.

b) In view of its well-known position on the Korean question, the Union of Soviet Socialist Republics cannot recognize as lawful the designation "Republic of Korea" contained in Annex "B" to the Agreement.

*Registered ex officio on 20 May 1985.*

[TRADUCTION]

a) Au cas où la Communauté économique européenne deviendrait Partie au présent Accord, la participation de l'Union des Républiques socialistes soviétiques à l'Accord ne lui créera aucune obligation en ce qui concerne la Communauté.

b) Etant donné sa position bien connue sur la question de Corée, l'Union des Républiques socialistes soviétiques ne peut reconnaître comme légale la désignation « République de Corée » figurant à l'annexe B à l'Accord.

*Enregistré d'office le 20 mai 1985.*

<sup>1</sup> United Nations, *Treaty Series*, vol. 1393, p. 67, and annex A in volume 1394.

<sup>1</sup> Nations Unies, *Recueil des Traités*, vol. 1393, p. 67, et annexe A du volume 1394.

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*INTERNATIONAL LABOUR ORGANISATION<sup>1</sup>*

No. 594. CONVENTION (No. 11) CONCERNING THE RIGHTS OF ASSOCIATION AND COMBINATION OF AGRICULTURAL WORKERS, ADOPTED BY THE GENERAL CONFERENCE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS THIRD SESSION, GENEVA, 12 NOVEMBER 1921, AS MODIFIED BY THE FINAL ARTICLES REVISION CONVENTION, 1946<sup>2</sup>

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RATIFICATION

*Instrument registered with the Director-General of the International Labour Office on:*

1 April 1985

IRAQ

(With effect from 1 April 1985.)

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<sup>1</sup> Ratification of any of the Conventions adopted by the General Conference of the International Labour Organisation in the course of its first 32 sessions, i.e., up to and including Convention No. 98, is deemed to be the ratification of that Convention as modified by the Final Articles Revision Convention, 1961, in accordance with article 2 of the latter Convention (see United Nations, *Treaty Series*, vol. 423, p. 11).

<sup>2</sup> United Nations, *Treaty Series*, vol. 38, p. 153; for subsequent actions, see references in Cumulative Indexes Nos. 2 to 11, 13 and 14, as well as annex A in volumes 917, 936, 1010, 1015, 1050, 1057, 1078, 1090, 1106, 1111, 1143, 1182, 1302 and 1348.

*ORGANISATION INTERNATIONALE DU TRAVAIL<sup>1</sup>*

N° 594. CONVENTION (N° 11) CONCERNANT LES DROITS D'ASSOCIATION ET DE COALITION DES TRAVAILLEURS AGRICOLES, ADOPTÉE PAR LA CONFÉRENCE GÉNÉRALE DE L'ORGANISATION INTERNATIONALE DU TRAVAIL À SA TROISIÈME SESSION, GENÈVE, 12 NOVEMBRE 1921, TELLE QU'ELLE A ÉTÉ MODIFIÉE PAR LA CONVENTION PORTANT RÉVISION DES ARTICLES FINALS, 1946<sup>2</sup>

## RATIFICATION

*Instrument enregistré auprès du Directeur général du Bureau international du Travail*  
le :

1<sup>er</sup> avril 1985

IRAQ

(Avec effet au 1<sup>er</sup> avril 1985.)

<sup>1</sup> La ratification de toute Convention adoptée par la Conférence générale de l'Organisation internationale du Travail au cours de ses 32 premières sessions, soit jusqu'à la Convention n° 98 inclusivement, est réputée valoir ratification de cette Convention sous sa forme modifiée par la Convention portant révision des articles finals, 1961, conformément à l'article 2 de cette dernière Convention (voir Nations Unies, *Recueil des Traités*, vol. 423, p. 11).

<sup>2</sup> Nations Unies, *Recueil des Traités*, vol. 38, p. 153; pour les faits ultérieurs, voir les références données dans les Index cumulatifs n°s 2 à 11, 13 et 14, ainsi que l'annexe A des volumes 917, 936, 1010, 1015, 1050, 1057, 1078, 1090, 1106, 1111, 1143, 1182, 1302 et 1348.

No. 17906. CONVENTION (No. 148) CONCERNING THE PROTECTION OF WORKERS AGAINST OCCUPATIONAL HAZARDS IN THE WORKING ENVIRONMENT DUE TO AIR POLLUTION, NOISE AND VIBRATION. ADOPTED BY THE GENERAL CONFERENCE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS SIXTY-THIRD SESSION, GENEVA, 20 JUNE 1977<sup>1</sup>

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No. 20691. CONVENTION (No. 152) CONCERNING OCCUPATIONAL SAFETY AND HEALTH IN DOCK WORK. ADOPTED BY THE GENERAL CONFERENCE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS SIXTY-FIFTH SESSION, GENEVA, 25 JUNE 1979<sup>2</sup>

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No. 21608. CONVENTION (No. 153) CONCERNING HOURS OF WORK AND REST PERIODS IN ROAD TRANSPORT. ADOPTED BY THE GENERAL CONFERENCE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS SIXTY-FIFTH SESSION, GENEVA, 27 JUNE 1979<sup>3</sup>

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#### RATIFICATIONS

*Instruments registered with the Director-General of the International Labour Office on:*

17 April 1985

IRAQ

(With effect from 17 April 1986.)

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<sup>1</sup> United Nations, *Treaty Series*, vol. 1141, p. 106, and annex A in volumes 1145, 1147, 1153, 1172, 1182, 1197, 1198, 1211, 1216, 1236, 1242, 1263, 1284, 1317, 1348 and 1391.

<sup>2</sup> *Ibid.*, vol. 1260, p. 3, and annex A in volumes 1271, 1275, 1284, 1295, 1297 and 1317.

<sup>3</sup> *Ibid.*, vol. 1301, p. 185, and annex A in volumes 1331 and 1391.

N° 17906. CONVENTION (N° 148) CONCERNANT LA PROTECTION DES TRAVAILLEURS CONTRE LES RISQUES PROFESSIONNELS DUS À LA POLLUTION DE L'AIR, AU BRUIT ET AUX VIBRATIONS SUR LES LIEUX DE TRAVAIL. ADOPTÉE PAR LA CONFÉRENCE GÉNÉRALE DE L'ORGANISATION INTERNATIONALE DU TRAVAIL À SA SOIXANTE-TROISIÈME SESSION, GENÈVE, 20 JUIN 1977<sup>1</sup>

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N° 20691. CONVENTION (N° 152) CONCERNANT LA SÉCURITÉ ET L'HYGIÈNE DU TRAVAIL DANS LES MANUTENTIONS PORTUAIRES. ADOPTÉE PAR LA CONFÉRENCE GÉNÉRALE DE L'ORGANISATION INTERNATIONALE DU TRAVAIL À SA SOIXANTE-CINQUIÈME SESSION, GENÈVE, 25 JUIN 1979<sup>2</sup>

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N° 21608. CONVENTION (N° 153) CONCERNANT LA DURÉE DU TRAVAIL ET LES PÉRIODES DE REPOS DANS LES TRANSPORTS ROUTIERS. ADOPTÉE PAR LA CONFÉRENCE GÉNÉRALE DE L'ORGANISATION INTERNATIONALE DU TRAVAIL À SA SOIXANTE-CINQUIÈME SESSION, GENÈVE, 27 JUIN 1979<sup>3</sup>

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#### RATIFICATIONS

*Instruments enregistrés auprès du Directeur général du Bureau international du Travail le :*

17 avril 1985

IRAQ

(Avec effet au 17 avril 1986.)

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<sup>1</sup> Nations Unies. *Recueil des Traités*, vol. 1141, p. 107, et annexe A des volumes 1145, 1147, 1153, 1172, 1182, 1197, 1198, 1211, 1216, 1236, 1242, 1263, 1284, 1317, 1348 et 1391.

<sup>2</sup> *Ibid.*, vol. 1260, p. 3, et annexe A des volumes 1271, 1275, 1284, 1295, 1297 et 1317.

<sup>3</sup> *Ibid.*, vol. 1301, p. 185, et annexe A des volumes 1331 et 1391.

No. 22345. CONVENTION (No. 155) CONCERNING OCCUPATIONAL SAFETY AND HEALTH AND THE WORKING ENVIRONMENT. ADOPTED BY THE GENERAL CONFERENCE OF THE INTERNATIONAL LABOUR ORGANISATION AT ITS SIXTY-SEVENTH SESSION, GENEVA, 22 JUNE 1981<sup>1</sup>

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#### RATIFICATION

*Instrument registered with the Director-General of the International Labour Office on:*

24 April 1985

FINLAND

(With effect from 24 April 1986.)

*Certified statements were registered by the International Labour Organisation on 17 May 1985.*

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<sup>1</sup> United Nations. *Treaty Series*, vol. 1331, p. 279, and annex A in volumes 1351 and 1363.

N° 22345. CONVENTION (N° 155) CONCERNANT LA SÉCURITÉ, LA SANTÉ DES TRAVAILLEURS ET LE MILIEU DE TRAVAIL. ADOPTÉE PAR LA CONFÉRENCE GÉNÉRALE DE L'ORGANISATION INTERNATIONALE DU TRAVAIL À SA SOIXANTE-SEPTIÈME SESSION, GENÈVE, 22 JUIN 1981<sup>1</sup>

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#### RATIFICATION

*Instrument enregistré auprès du Directeur général du Bureau international du Travail le :*

24 avril 1985

FINLANDE

(Avec effet au 24 avril 1986.)

*Les déclarations certifiées ont été enregistrées par l'Organisation internationale du Travail le 17 mai 1985.*

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<sup>1</sup> Nations Unies. *Recueil des Traités*, vol. 1331, p. 279, et annexe A des volumes 1351 et 1363.





## ANNEX C

*Ratifications, accessions, prorogations, etc.,  
concerning treaties and international agreements  
registered  
with the Secretariat of the League of Nations*

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## ANNEXE C

*Ratifications, adhésions, prorogations, etc.,  
concernant des traités et accords internationaux  
enregistrés  
au Secrétariat de la Société des Nations*

## ANNEX C

## ANNEXE C

No. 4319. INTERNATIONAL CONVENTION CONCERNING THE USE OF BROADCASTING IN THE CAUSE OF PEACE. SIGNED AT GENEVA, SEPTEMBER 23rd, 1936<sup>1</sup>

N° 4319. CONVENTION INTERNATIONALE CONCERNANT L'EMPLOI DE LA RADIODIFFUSION DANS L'INTÉRÊT DE LA PAIX. SIGNÉE À GENÈVE, LE 23 SEPTEMBRE 1936<sup>1</sup>

## DENUNCIATION

*Notification received on:*

17 May 1985

AUSTRALIA

(With effect from 17 May 1986.)

*Registered by the Secretariat on 17 May 1985.*

## DÉNONCIATION

*Notification reçue le :*

17 mai 1985

AUSTRALIE

(Avec effet au 17 mai 1986.)

*Enregistré par le Secrétariat le 17 mai 1985.*

<sup>1</sup> League of Nations, *Treaty Series*, vol. CLXXXVI, p. 301; for subsequent actions published in the League of Nations *Treaty Series*, see references in General Indexes Nos. 8 and 9, and for those published in the United Nations *Treaty Series*, see references in Cumulative Indexes Nos. 8, 10 and 13, as well as annex C in volumes 1291, 1299, 1342, 1354, 1369, 1381, 1386, 1389 and 1390.

<sup>1</sup> Société des Nations, *Recueil des Traités*, vol. CLXXXVI, p. 301; pour les faits ultérieurs publiés dans le *Recueil des Traités* de la Société des Nations, voir les références données dans les Index généraux n°s 8 et 9, et pour ceux publiés dans le *Recueil des Traités* des Nations Unies, voir les références données dans les Index cumulatifs n°s 8, 10 et 13, ainsi que l'annexe C des volumes 1291, 1299, 1342, 1354, 1369, 1381, 1386, 1389 et 1390.