



ZF Services UK 'moves' forward with next-generation autonomous Level 4 shuttle

- **UK to have first look at ZF next-generation autonomous Level 4 shuttle**
- **Visitors to Move 23 invited to get a taste of new shuttle**
- **Complete service offering provided from ZF**

ZF Services UK will be launching the new-generation autonomous Level 4 shuttle in the UK on stand V17 at MOVE 23, taking place at the ExCeL, London on 21st – 22nd June.

The new shuttle generation uses ZF's latest Autonomous Driving (AD) hardware and software and provides the shuttle with Level 4 AD capability. Visitors to the forward-thinking exhibition will have the chance to see the shuttle for the first time and learn more about ZF's complete service offering for the future of mobility.

Holding up to 22 passengers, the shuttle has a flexible interior, offering different configurations for the customer's specific operational requirements. The autonomous, emission-free ZF shuttles can operate on defined routes and is capable to manoeuvre in mixed traffic without a safety steward. It provides up to 15 seats in various configurations, as well as different floor and seat materials and colours.

What's more, with its global expertise, ZF offers an entire service concept, providing whole-life support from planning to implementation, deployment, operation and after service, working closely with its clients to deliver a tailor-made package to meet their needs and ensure the process is as seamless as possible. Whether they want to maintain the system themselves or have a 'hands off' approach, ZF has a solution just for them.

Proposed support includes: access to 24/7 support; dedicated workshop connection; worldwide service network; access to OE know-



PRESSE-INFORMATION
PRESS RELEASE

Page 2/4, June 14, 2023

how; fast spare parts supply; and, access to a range of training packages.

Autonomous vehicles require cutting-edge components to process the large amount of data required to operate at Level 4 capability. In addition, the components need to be suitable for sustained use in an automotive environment. To ensure the core components meet or exceed this requirement, ZF has designed and manufactures the key hardware needed to automotive grade, ensuring reliability, repeatability, quality and safety.

At the heart of the system is ZF's ProAI supercomputer, which can execute up to 1,500 TOPS. For the Shuttle to talk to its environment, the ZF ProAI interacts with the ZF's ProConnect, a high-performance connectivity platform with advanced digital services. High flexibility, modular hardware and customisable software covers a wide bandwidth of use cases for any sort of vehicle. Various remote features include state-of-the-art technology customised for the perfect fitting solution with LTE & 5G, WiFi 6, Bluetooth 5, C-V2X, DSRC and high precision GNSS. It also offers cutting-edge cyber security.

In addition, the shuttles are equipped with state-of-the-art automotive grade sensor technology consisting of lidar, radar, camera, and audio systems that provide precise environmental detection.

As well as automotive grade hardware, ZF has also developed the Level 4 software package, the Virtual Driver. The software stack consists of two major parts: the performance path and the safety path. Together, both enable an operation of Level 4 shuttles or other transportation carriers in a safe and reliable way.

The safety path monitors comprehensive situations under safety aspects, defines virtual guardrails for the performance path, and intervenes if necessary to help mitigate critical situations. Meanwhile, the performance path enables smooth driving in complex scenarios. ZF



PRESSE-INFORMATION
PRESS RELEASE

Page 3/4, June 14, 2023

developed this in partnership with Oxa (formally Oxbotica), a global leader in autonomous vehicle software for businesses.

David Morgan, UK sales manager for Autonomous Transport Systems, ZF Group UK, said: "At ZF, we invest heavily in research and development to ensure we can bring future technologies to market, ensuring customers have access to support at every level and receive a complete commercial offering."

"We're so excited to be showcasing our new next-generation autonomous Level 4 shuttle in the UK for the very first time, and what better place to do it than at Move 23, where all of the industry's leading professionals will be gathering and connecting to learn and share the latest in the future of mobility."

ZF has more than 25 years' experience working on ATS technology, with its autonomous and fully electric shuttles covering over 62 million miles, as well as carrying more than 14 million passengers since going operational in 1997.

Its autonomous transport system offers a concept to ease the pressure on urban districts and connect rural areas more conveniently, delivering network of electrically powered driverless shuttles with on-demand scheduling and a seamless connection to other public transport systems such as buses and trains represents a true alternative to privately owned cars.

More information on ZF's ATS range can be found here: [Autonomous Transport Systems - ZF](#)

Those looking to attend MOVE 23 can sign up [here](#).

Captions:

1, 2) With the presentation of the next-generation shuttle ZF is enabling the operation of autonomous transport systems in densely populated



PRESSE-INFORMATION
PRESS RELEASE

Page 4/4, June 14, 2023

areas with no need for segregated or dedicated shuttle lanes and making an important contribution to decarbonization.

Images: ZF

Press contacts:

Paulina Dolega, Marketing and Social Media Specialist,
Phone: 01978 667800; e-mail: paulina.dolega@zf.com

Emma Caveney, Marketing Specialist,
Phone: 01978 667800; e-mail: emma.caveney@zf.com

About ZF

ZF is a global technology company supplying systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. ZF allows vehicles to see, think and act. In the four technology domains of Vehicle Motion Control, Integrated Safety, Automated Driving, and Electric Mobility, ZF offers comprehensive product and software solutions for established vehicle manufacturers and newly emerging transport and mobility service providers. ZF electrifies a wide range of vehicle types. With its products, the company contributes to reducing emissions, protecting the climate and enhancing safe mobility.

With some 165,000 employees worldwide, ZF reported sales of €43.8 billion in fiscal 2022. The company operates 168 production locations in 32 countries.

ZF's leading aftermarket and fleet solutions portfolio is built on its strong brands LEMFÖRDER, SACHS, TRW and WABCO. A broad product and service offering, advanced connectivity solutions for digital mobility management and a global service network, support and enhance the performance and efficiency of all vehicle types throughout their life cycle. The company's aftermarket organization is both an architect and pacesetter for the Next Generation Aftermarket and the preferred partner for fleet and aftermarket customers worldwide.

Further press information and images can be found at: www.zf.com