ZF Unveils its Networked eLSD Rear Axle Transmission for Off-Road and Sports Vehicles

- **eLSD, with its networked braking system, helps to improve vehicle off-road climbing ability and stability**
- **Improved control unit supports the most current safety and service requirements**

Friedrichshafen, Germany. With the new generation of electronic limited slip differential (eLSD), ZF has opened the next digital chapter for off-road and sports vehicles. The heart of this improved active rear axle drive is a newly developed control unit that meets cyber-security standards for software updates via the cloud. In addition, ZF has fully networked the limited slip differential with the vehicle's brake system, increasing both off-road and on-road driving dynamics, stability and comfort.

With the redesigned electronic slip differential or eLSD, drivers of off-road vehicles and sports cars can enjoy adventures even more. "The new generation of our eLSD rear axle transmission supports a comprehensive, high-quality system network with additional vehicle functions," said Sebastian Dendorfer, project manager at ZF. "This means that driving conditions can be handled more easily, which leads to advantages in dynamics, safety and comfort."

Space-saving design, more functions

Rear axle transmissions from ZF have been successfully deployed in vehicles produced by major European and American manufacturers for more than 20 years. For the new generation of eLSDs, hardware requirements have been significantly reduced which, in turn, increases the available space for the design of passenger compartments. ZF has also completely overhauled the electronic control unit (ECU). Thanks to a new chip set, the ECU supports over-the-air-updates, allowing vehicle software to be updated via the cloud with the most current cyber-security standards protecting the update process. Additional interfaces, such as the CAN with flexible data-rate (CAN FD)

ZF Friedrichshafen AG
Global Corporate &
Marketing Communications
88038 Friedrichshafen
Deutschland · Germany
press.zf.com

now allow for a connection between the eLSD and ZF's Integrated Brake Control system (IBC). This allows for close interaction between drive and brakes. The result is better traction and oversteer protection as well as increased stability when towing or during lane changes. Off-road, the eLSD plays to its advantage, particularly when climbing hills. Moreover, the active limited slip differential helps to improve vehicle control during acceleration and µ-split braking. Improved modulated automatic braking and avoidance of high engine revving at traction maneuvers make for greater comfort.

The new ZF eLSD system features a potential locking torque of up to 3,000 Nm and is therefore also suitable for heavy vehicles and high-performance engines. Thanks to its modular principle, the eLSD is both compatible with different final drive ratios as well as different axle drive sizes.

Caption:
Connects driveline and braking system: the improved eLSD rear axle transmission from ZF.

Photo: ZF

Press contact:
Robert Buchmeier, head of Technology and
Product Communications, Heritage Communications,
Phone: +49 7541 77-2488, e-mail: robert.buchmeier@zf.com

Gary Mason, External Communications Lead ZF North America,
Phone: +1 248-756-4728, e-mail: gary.mason@zf.com

ZF Friedrichshafen AG
ZF is a global leader in driveline and chassis technology as well as active and passive safety technology. The company has a global workforce of 146,000 with approximately

230 locations in some 40 countries. In 2017, ZF achieved sales of €36.4 billion and as such, is one of the largest automotive suppliers worldwide.

ZF enables vehicles to see, think and act. The company invests more than six percent of its sales in research and development annually – in particular for the development of efficient and electric drivelines and also in striving for a world without accidents. With its broad portfolio, ZF is advancing mobility and services for passenger cars, commercial vehicles and industrial technology applications.

For further press information and photos please visit: www.zf.com

ZF Friedrichshafen AG
Global Corporate &
Marketing Communications
88038 Friedrichshafen
Deutschland · Germany
press.zf.com