ZF Establishes Its Own Technology Center for Artificial Intelligence and Cybersecurity

- **Group expands company-wide AI activities in Saarbrücken and becomes shareholder of the German Research Center for Artificial Intelligence (DFKI)**
- **Strategic partnership with Helmholtz Center for Information Security (CISPA) rounds out the commitment**
- **ZF to strategically rely on a network of its own AI experts, cooperations with research institutes and specialists from IT enterprise partnerships**

Friedrichshafen/Saarbrücken. ZF is establishing a Technology Center for Artificial Intelligence (AI) and Cybersecurity in Saarbrücken. In a worldwide network, the technology group is already developing application possibilities with AI to make systems and components as well as production and services more intelligent, efficient and safer. With the new "ZF AI & Cybersecurity Center," ZF is now expanding its activities in the area of AI research in order to coordinate and control the company's AI activities from here in the future. Wolf-Henning Scheider, Chief Executive Officer of ZF Friedrichshafen AG, gave the go-ahead for the Technology Center today in the presence of Saarland Minister-President Tobias Hans. Scheider also announced that ZF, as shareholder of the German Research Center for Artificial Intelligence (DFKI) and strategic partner of the Helmholtz Center for Information Security (CISPA), will cooperate closely with these leading research institutions in the future.

"With the new Technology Center for Artificial Intelligence and Cybersecurity, we are taking our Group-wide expertise in these key digital technologies to a new level. We are also in direct proximity to the most respected practical research institutions in these disciplines and can thus intensify our cooperation," explained Wolf-Henning Scheider. "We will hire some 100 highly qualified new colleagues in Saarbrücken – and work with them to drive forward sophisticated

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

developments on our way to new, digitally connected and automated mobility solutions," continued Scheider. The company plans to establish about two-thirds of its AI specialists at the new location in Saarbrücken. Another third of the experts from the new Technology Center will focus on cybersecurity.
This complements the more than 300 colleagues who already develop and use solutions in products and services in the areas of artificial intelligence, Industry 4.0 and cybersecurity at the company's headquarters for research and development in Friedrichshafen and at other sites in Germany and abroad. In the future, all these activities will be consolidated in the joint "ZF AI & Cybersecurity Center" and made available to all ZF divisions worldwide, supplemented by the latest research and development results. The objective is a common global AI platform for optimization of existing or development of new applications, products, services and processes.

Minister-President Hans: ZF enriching Saarland

Minister-President Tobias Hans considers the establishment of this first industrial center for AI and cybersecurity in the Saarland region to be a confirmation of his digitalization policy: "The new ZF center strengthens the Saarland as industrial location with some thousands of jobs. With this, we build a bridge from Saarland's scientific-technological IT/AI competence to the technological excellence of a worldwide leading automotive supplier company," said Hans. "The expansion of CISPA to become a worldwide leading competence center for cybersecurity, the DFKI and the automotive-relevant competences of other non-university institutes are proof of the current breakthrough with the establishment of a real excellence cluster for digital automobility. The bundling of scientific-technological excellence and the connection to a world-class company like ZF are the prerequisites for the Saarland being able to directly participate in the supply chain of automotive industrial production also in the future. This is my approach of tackling the economic and technological structural change in the automotive industry that we will pursue further!"

DFKI and CISPA as new strong partners

Saarbrücken is a logical choice for ZF as the location for its new competence center: "Under the moniker 'Digital Saarland,' the region has become the hub for digitalization, artificial intelligence and cybersecurity. We are very pleased that, with DFKI and CISPA, we can now build on the high level of expertise of two of the world's leading research institutions in our partner network," said Wolf-Henning Scheider, who is simultaneously announcing that ZF is joining the circle of 27 current DFKI shareholders. The conclusion is expected for the second quarter of 2019 and is subject to formal approval of all current shareholders.

ZF is thus expanding its international research and development network, which consists of internal and external AI experts. For example, ZF also has access to AI expertise and specialized development resources through existing partnerships with NVIDIA, Microsoft, Intel Mobileye and its participation in development service provider ASAP.
Prof. Dr. Dr. h.c. Michael Backes, founding director of CISPA: "In autonomous systems, the issue of security is more important than ever before, requiring world-class cybersecurity research. That's because we need to do in-depth research on the security demands that this technology places on us in order to achieve truly trustworthy security guarantees. In the end, this is the only way we can protect the systems from attacks and tampering – and thus strengthen the business location and win people's confidence in this technology."

"For several years now, ZF has been an outstanding practical partner for DFKI in the field of Industry 4.0 – both in joint research in national reference projects and as a client for services. We are currently using a DFKI High-Performance Optimization System in a pilot project that supports online version control at the ZF plant in Saarbrücken. ZF provides us with deep, comprehensive insight into the production domain, allowing us to carry out tasks such as certifying the efficiency of AI systems for specific planning tasks. This early grounding in the real

world of production is crucial for successfully accelerating demand-oriented research transfer," said Prof. Dr. Jana Koehler, CEO of DFKI.

AI and cybersecurity belong together

The choice of these two research institutes – DFKI headed by Prof. Dr. Jana Koehler and CISPA with Prof. Dr. Dr. h.c. Michael Backes as Director – is based on another crucial reason: When making use of AI, especially in road traffic, ZF needs to not only ensure the safety of road users but also maximize data privacy and IT security. The company's own cybersecurity experts therefore work intensively with CISPA to safeguard new AI developments and algorithms against cyber attacks as they are readied for volume production. ZF is thus also systematically pursuing its "Vision Zero" of zero emissions and zero road traffic accidents digitally in this way.

AI solutions are indispensable technology for autonomous driving

Artificial intelligence is an essential driver for automated driving functions and is indispensable on the path to autonomous driving. Vehicle manufacturers and mobility providers are already benefiting from the scalable and modular product family of the AI-capable central computer ZF ProAI. RoboThink, which was presented at this year's CES, is the most powerful supercomputer currently available for automotive applications. As a complete system solution with sensors, actuators and AI, ZF offers automated functions for vehicles of all classes from a single source.

Product development and production benefit from AI

In the future, the new ZF location in Saarbrücken will be more than just the development driver for automated driving functions. Whether predictive maintenance for wind power and cable car transmissions, intelligent transmission controls in passenger cars and commercial vehicles or machine learning in product development and production – ZF already uses AI-based functions in a variety of applications.

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

Caption:
The "ZF AI & Cybersecurity Center" launches in Saarbrücken (from the left): Prof. Dr. Dr. h.c. Michael Backes, Founding Director of CISPA, Tobias Hans, Minister-President of Saarland, Wolf-Henning Scheider, Chief Executive Officer, ZF Friedrichshafen AG, Prof. Dr. Jana Koehler, Chief Executive Officer, DFKI and Prof. Dr. Wolfgang Wahlster, former Director and CEO, DFKI.

Photo: ZF

Press contact:
Christoph Horn, Head of Corporate Communications,
Phone: +49 7541 77 2705, E-Mail: christoph.horn@zf.com

Thomas Wenzel, Director Corporate Communications, ZF Group
Phone: +49 151 167 164 45, E-Mail: thomas.wenzel@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 information please visit: **www.zf.com**