

BMW GROUP Corporate Communications

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Telecommunications and automotive players form global cross-industry 5G Automotive Association

- AUDI AG, BMW Group, Daimler AG, Ericsson, Huawei, Intel, Nokia and Qualcomm Incorporated team up to evolve, test and promote communications solutions for connected mobility.
- Next generation mobile networks will help to address society's mobility and road safety needs with applications like connected infotainment features and connected automated driving.
- The association is open to further partners.

Munich. Today AUDI AG, BMW Group, Daimler AG, Ericsson, Huawei, Intel, Nokia and Qualcomm Incorporated, announce the formation of the "5G Automotive Association". The association will develop, test and promote communications solutions, support standardization and accelerate commercial availability and global market penetration. The goal is to address society's connected mobility and road safety needs with applications such as connected automated driving, ubiquitous access to services and integration into smart cities and intelligent transportation.

With next generation 5G mobile networks and continued strong LTE evolution, which includes Cellular Vehicle-to-everything (C-V2X) communication, the focus of information and communication technologies (ICT) shifts towards the Internet of Things and the digitalization of industries.

As an evolution to today's networks, next generation mobile networks are expected to handle much more data volume, connect many more devices, significantly reduce latency and bring new levels of reliability. For example, 5G can better support mission-critical communications for safer driving and will further support enhanced vehicle-to-everything communications and connected mobility solutions. These new solutions bring new technological and business opportunities for both the automotive and ICT industries, and the members of the association will closely collaborate to realize the full potential together. The association will address key technical and regulatory issues, leveraging next generation mobile networks and integrating vehicle platforms with connectivity, networking and computing solutions.

The main activities of the association include:

• Defining and harmonizing use cases, technical requirements and implementation strategies.

Firma Bayerische Motoren Werke Aktiengesellschaft

Postanschrift BMW AG 80788 München

Telefon +49 89 382 14908

Internet www.bmwgroup.com





Media Information 27 September 2016 Date 5G Automotive Alliance Subject 2

- Page
- Supporting standardization and regulatory bodies, certification and approval ٠ processes.
- Addressing vehicle-to-everything technology requirements, such as wireless connectivity, security, privacy, authentication, distributed cloud architectures and more.
- Running joint innovation and development projects leading to integrated solutions, interoperability testing, large scale pilots and trial deployments.

The 5G Automotive Association is a global association and welcomes more partners who are engaged in the automotive industry, the ICT industry or the broader eco-system and value chain for vehicle and road transportation systems. Several companies have already expressed strong support for the 5GAA and declared their intent to join the Association in the near future.

Christoph Voigt is appointed Chairperson of the Board and Dino Flore is appointed Director General of the Association.

The Association will support and work in close cooperation with national and regional initiatives, such as the European Connected & Automated Driving Pre-Deployment Project.

Quotes:

Alfons Pfaller, Head of Infotainment Development, AUDI AG

"Connected cars will shape the future of individual mobility, and next generation mobile networks will take car to x connectivity to a new level. The key to success is in cross-industry collaboration. This is why we set up the 5G Automotive Association where experts from all relevant fields are teaming up."

Dr. Christoph Grote, Senior Vice President Electronics, BMW Group

"We expect 5G to become the worldwide dominating mobile communications" standard of the next decade. For the automotive industry it is essential that 5G fulfills the challenges of the era of digitalization and autonomous driving. With the 5G Automotive Association we founded a cross-industry forum that allows us to shape the future 5G technology with leading ICT companies. As a co-founder of the 5G Automotive Association we would be excited to welcome further partners





Media Information Date 27 September 2016 Subject 5G Automotive Alliance Page 3

engaged in the automotive industry, the information and communication technologies or mobile network operators in the association."

Sajjad Khan, Director Digital Vehicle & Mobility, Daimler AG

"The connected car enables us to offer our customers services, both inside and outside the vehicle, which make their daily routine tasks easier, increase comfort and safety and thus create considerable added value. The fundamental basis for this is a reliable and fast connectivity technology whose standards have global validity. Together with the other founding members of the "5G Automotive Association", we as Daimler AG are working on precisely that – with the aim of raising car connectivity as well to a new level with the advent of the next generation of mobile phone technology."

Ulf Ewaldsson, Chief Technology Officer, Ericsson

"The success of 5G is dependent on cross-industry work in new eco systems to digitalize industries. With the creation of this Association we will leverage our latest technology, 5G, and work closely together with the car industry to jointly develop solutions as well as provide input to regulation, certification and standardization. We are excited to be co-founder and to work with leading automotive companies shaping the connected car solutions for the future."

Dr. Li Yingtao, President, 2012 Labs, Huawei

"The creation of this Association demonstrates the clear need for a cross-sectorcollaboration between mobile industry and car industry for joint innovation, and to establish a platform to align on timeline and priorities and solution roadmaps. It will facilitate global regulation, certification and standardization efforts for autonomous driving and future car services based on 5G technologies."

Doug Davis, Senior Vice President and General Manager of the Internet of Things Group, Intel

"Intel's leadership work in 5G technology development, long-term commitment to open standards, and collaboration with leaders in the automotive industry will drive an accelerated path to adoption of 5G in automotive and transportation. Partnering together with other industry leaders will ensure 5G can support the use cases that will deliver on breakthroughs in safety and services for automated driving, smart city and intelligent transportation solutions around the world."





Media Information Date 27 September 2016 Subject 5G Automotive Alliance Page 4

Dr. Marc Rouanne, Chief Innovation & Operating Officer, Nokia

"The 5G Automotive Association is the latest example of Nokia's close relationship with the automotive industry to make the driverless car a reality and unleash a whole new era in automotive innovation. Cloud, communications and networking technologies and innovations have the potential to transform the car into a fully connected device to revolutionize the driver experience and address society's mobility needs. Nokia is excited to be playing a leading role in this effort that will help save lives, improve our environment and make our transportation systems more efficient."

Patrick Little, Senior Vice President and General Manager, Automotive, Qualcomm Technologies, Inc.

"As a co-founder of the 5GAA Alliance, Qualcomm Incorporated looks forward to continuing our work with world leading stakeholders to foster further collaborations between the automotive and communications industries and help ensure the optimization of new technologies for transportation. For more than a decade, Qualcomm Incorporated has been committed to the development of connectivity and compute solutions that enhance the safety, mobility and convenience of the traveling public. Our LTE Advanced, Cellular Vehicle-to-Everything (C-V2X) and 5G-NR technologies will play a key role in improving safety and enabling automated driving."



Corporate Communications

Media Information Date 27 September 2016 Subject 5G Automotive Alliance Page 5

If you have any questions, please contract:

AUDI AG, Corporate Communications Oliver Scharfenberg, Spokesman Finance and IT Phone: +49 841 89-35430 Email: oliver.scharfenberg@audi.de www.audi-mediacenter.com/en

BMW Group, Corporate Communications

Sylvia Heydt, Business and Finance Communications Phone: +49 89 382-23522, Fax: + 49 89 382-24418 Email: sylvia.heydt@bmwgroup.com

Dr. Maik Boeres, Government and External Affairs Management, Sustainability Communications Phone: +49-89-382-30469, Fax: +49-89-382-26765 Email: <u>Maik.Boeres@bmwgroup.com</u>

Internet: www.press.bmwgroup.com, E-Mail: presse@bmw.de

Daimler AG

Global Communications Mercedes-Benz Cars Benjamin Oberkersch, Product & Technology Communications Phone: +49 711 17-93307 E-Mail: benjamin.oberkersch@daimler.com http://mercedes-benz.com | http://daimler.com

Ericsson Media Relations

Phone: +46 10 719 69 92 Email: media.relations@ericsson.com https://www.ericsson.com/thecompany/press/contacts Jan Ellsberger, Director Industry and Technology strategy Phone: +49 173 7216 209 Email: jan.ellsberger@ericsson.com www.ericsson.com

Huawei

Walter Weigel, VP of the European Research Institute Phone: +49 172 174 07 38 Email: <u>walter.weigel@huawei.com</u> www.huawei.com













BMW GROUP

Corporate Communications

Media Information Date 27 September 2016 Subject 5G Automotive Alliance Page 6

Intel

Jennifer Baumgartner Phone: +1 503 696 2340 Email: jennifer.e.baumgartner@intel.com www.intel.com

Nokia

Bernhard Fuckert, Communications Phone: +49 162 283 69 67 Email: bernhard.fuckert@nokia.com

Kurt Steinert, Communications Phone: +1 908 285 1641 Email: kurt.steinert@nokia.com www.nokia.com

Qualcomm

Pete Lancia, Corporate Communications Phone: +1 858 845 5959 Email: corpcomm@qualcomm.com John Sinnott, Investor Relations_ Phone: +1 858 658 4813 Email: ir@qualcomm.com www.qualcomm.com



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