Release R18-10 of the AUTOSAR Adaptive Platform and Release R4.4.0 of the AUTOSAR Classic Platform were published offering improved interoperability between platforms

The AUTOSAR (AUTomotive Open System ARchitecture) development partnership constantly improves its standards. The latest release of its Classic Platform, Release R4.4.0, and Adaptive Platform, Release R18-10, integrates several new features into the open system architecture standard. The release documents were published on the AUTOSAR website, for the first time in a synchronized fashion, at the beginning of November according to its six-month publishing schedule.

The AUTOSAR Classic Platform release R4.4.0 includes, among others, an extended serialization for Data Structures in SOME/IP with tag, length and value encoding (TLV). It simplifies the communication and improves the compatibility between the AUTOSAR Classic and Adaptive Platform. Moreover, a Transport Layer Security (TLS) allows the use of well-established services in non-vehicle domains.

One of the major achievements featured in the AUTOSAR Adaptive Platform Release R18-10 is the support of the Internet Protocol Security (IPSec) to secure data communication. Cryptographic security services are used to protect communications over Internet Protocol (IP) networks. The encryption provided by these services allows a more secure communication between Adaptive platforms and their surrounding platforms.

Release R18-10 also contains better support for Diagnostics over Internet Protocol (DoIP) in accordance with ISO 13400-x. Basic DoIP services are implemented to support routing activities. Moreover, services are available for providing the vehicle identification number (VIN), PowerMode and Group identifier (GID).

In addition, release R18-10 includes the specification of the network binding to support the Data Distribution Service (DDS) protocol.
Most important, release R18-10 comprises the harmonization of Classic Platform and Adaptive Platform enabling the Network Management protocol to utilize network management across platforms. Moreover, a unique time base shared among all entities of both platforms has been introduced through the first step of the Time Sync harmonization.

“For AUTOSAR, this joint release of the Classic and Adaptive Platform is an important milestone, which was targeted for fall 2018”, said Thomas Scharnhorst, AUTOSAR spokesperson. “We are glad that our partners worked intensively together in our working groups and feature teams to achieve this milestone that was proudly presented during our AUTOSAR Open Conference in Shanghai, China.”

With the full set of extensions and innovations in this release, AUTOSAR greatly improves the applicability of the standard.

**About the Adaptive Platform**
AUTOSAR first released its Adaptive Platform on March 31st, 2017 as a standardized integration platform for electronic control units (ECU). The AUTOSAR Adaptive Platform is based on POSIX operating systems and is the ECU standard for new automotive megatrends. It combines the safety and security of microcontroller-based ECUs with the high performance provided by microprocessor-based multimedia ECUs. By doing so, the new standard avoids the costly alternative for OEMs and their suppliers of repeatedly developing the critical and complicated functionality of such a software platform with proprietary and individual approaches.

**About AUTOSAR (AUTomotive Open System ARchitecture)**
AUTOSAR (AUTomotive Open System ARchitecture) is a worldwide development partnership of car manufacturers, suppliers and other companies from the electronics, semiconductor and software industries. Since 2003, they have been working on the development and introduction of an open, standardized software architecture for the automotive industry. By simplifying replacement and the update options for software and hardware, the AUTOSAR approach forms the basis for reliably controlling the growing complexity of electrical and electronic systems in motor vehicles. In addition, AUTOSAR improves cost efficiency without compromising quality. The "core partners" of AUTOSAR are the BMW Group, Bosch, Continental, Daimler AG, Ford, General Motors, PSA Group, Toyota and the Volkswagen Group. In addition to these companies, more than 200 partners play an important role in the success of the partnership. Companies, which join the AUTOSAR Development Partnership, can use the specifications free of charge.

**Further information**
Web: [www.autosar.org](http://www.autosar.org)
Mail: [press@autosar.org](mailto:press@autosar.org)