

ETAS Connections 2014

All about AUTOSAR

Over 50 participants attended ETAS Connections 2014, which took place recently at the Robert Bosch Haus in Stuttgart. On the agenda at the management event were AUTOSAR, cooperation on software development, and the issues raised in this regard by current topics such as highly automated driving, Car-2-X communication, and safety.

Following the welcome address by Christopher White, Member of the ETAS Board of Management with responsibility for sales, Professor Dr. Erhard Plödereder from the Institute of Software Technology at Stuttgart University guided his listeners through the technical part of the program, which featured speakers from Daimler, BMW, Bosch, and ETAS.

In his presentation, Dr. Stefan Schmerler, Head of Networks and Standard Software at Daimler AG, emphasized the benefit of using the standard consistently throughout the development process. When used in tandem with a virtual display of systems, Schmerler explained, AUTOSAR makes it possible to integrate and validate vehicle functions before the target hardware is available.

Friedhelm Pickhard, Chairman of the ETAS Board of Management, concluded that quality is the decisive feature of software, given its size, its long usage period, and growing security requirements. ETAS sees AUTOSAR as a prerequisite for the use of advanced development tools.

Steffen Lupp, Vice President for Automotive Software at the Bosch Automotive Systems Integration Corporate Department, provided an outlook of new architectures and the continuation of the standard. He predicted a shift toward service-oriented software architectures.

For BMW, what is most important is the reuse of software, as this accelerates the pace of innovation. Consequently, BMW will start rolling out AUTOSAR 4.0 as soon as 2015, explained Simon Fürst, General Manager for Software Architecture and Platform Software at BMW AG. Fürst also singled out open source, agile process models, and continuous software integration in virtual environments as

important elements for cooperation between OEMs and Tier 1 suppliers. Dr. Mouham Tanimou, Senior Consultant for Model-based Software Development and Software Sharing at Bosch, discussed a project undertaken by MAN which involves prototyping an EDC17 engine control unit, the engine, and the exhaust gas treatment as a virtual system in INTECRIO. The simulation's high predictive power makes it possible to effectively move software testing and calibration upstream in the development process.

The highlight and conclusion of the technical part of Connections was the panel discussion between the speakers, which featured lively audience participation. One thing that everyone agreed on was that the "rolling standardization" made possible by the AUTOSAR development partnership was a prerequisite for the future development of vehicle systems.