AVL and MSC Software to Collaborate on Autonomous Vehicle Projects

NEWPORT BEACH, CA (March 19th, 2019) - MSC Software, a Hexagon company, and AVL List GmbH in Austria announced today a collaborative partnership for research, development and customer projects in the field of simulation and testing of Autonomous Driving (AD) and Advanced Driver Assistance Systems (ADAS) systems. This is a consequence of a common agreement across the automotive industry that validation of SAE Level 4 and 5 (highly automated) vehicle systems based on miles driven is neither feasible nor economical. Moreover, testing on public roads has severe limitations and hazards. A comprehensive scenario-based development and validation methodology is therefore needed to ensure safety in the entire operational design domain.

As the leading test system provider, AVL is developing a scenario-based open verification and validation toolchain to generate operational scenarios, create the relevant test cases, and execute testing and homologation of automated driving functions in combined virtual and real road environments based on an open and integrated tool environment.

Hexagon’s VIRES VTD (Virtual Test Drive) is a tool-suite for the creation, configuration, presentation and evaluation of virtual environments in the scope of road and rail based ADAS/AD simulations. It covers a full range from the generation of 3D content to the simulation of complex traffic scenarios and, finally, to the simulation of either simplified or physically driven sensors. Due to its open and modular nature, VTD can easily be interfaced and integrated into other AD applications.

"AVL and MSC have discussed their respective technological and industry backgrounds and have come to the conclusion that a collaboration will create additional value to our customers in the field of testing and validation of automated driving, driver assistance, and active safety systems," said Kai Voigt, EVP of AVL Instrumentation, Software and Technology. "AVL’s tool chain strategy is based on an open and integrated tool environment. This approach allows the integration of different tools and content such as VIRES VTD and Adams from MSC, an important aspect of the virtual and real validation of autonomous vehicles."

Commenting on this partnership, Paolo Guglielmini, CEO of MSC Software said: “VIRES has worked with AVL in EU projects such as Enable-S³ for many years now, as well as together with us at MSC on joint projects at European OEMs. As part of this ongoing collaboration, AVL's toolchains will interface with VIRES VTD and MSC’s Adams product lines, and our toolchains will interface with AVL's Model.CONNECT product. We believe this gives customers access to some of the best-in-class autonomous simulation and testing technologies available in the world.”
About AVL
AVL is the world's largest independent company for development, simulation and testing technology of powertrains (hybrid, combustion engines, transmission, electric drive, batteries and software) for passenger cars, trucks and large engines. The company has over 9,500 employees worldwide and achieved a turnover of 1,55 billion Euro in 2017. AVL’s Model.CONNECT™ interlinks simulation models into a consistent virtual prototype, regardless of the tool they were created with. Simulation and hardware components can be easily integrated into a complete virtual/real Hardware-in-the-Loop and Software-in-the-Loop system. This facilitates continuous, model-based development in a wide range of powertrain and vehicle applications (e.g. vehicle dynamics, energy management, real driving emissions, driver assistance systems).

https://www.avl.com/web/guest/~model-connect-

About MSC Software
MSC Software is one of the ten original software companies and a global leader in helping product manufacturers to advance their engineering methods with simulation software and services. As a trusted partner, MSC Software helps companies improve quality, save time, and reduce costs associated with design and test of manufactured products. Academic institutions, researchers, and students employ MSC’s technology to expand individual knowledge as well as expand the horizon of simulation. MSC Software employs 1,400 professionals in 23 countries. For more information about MSC Software’s products and services, please visit: www.mscsoftware.com.

MSC Software is part of Hexagon (hexagon.com), a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes.
AVL ADAS/AD Testing Cars

VIRES VTD photorealistic AD rendering of a German street scene on a rainy day