October 14, 2022 -- The automotive industry is undergoing a major transformation towards the software-defined vehicle (SDV) whereby cloud and interface technologies play an important role. Given the variety of technologies and topics required to realize the software-defined vehicle, several collaborating organizations are positioning themselves to contribute to the software-defined vehicle, and these contributions must be coordinated.

With this coordination in mind, COVESA and AUTOSAR will leverage their respective strengths to align on a common collaboration towards several software-defined vehicle topics. COVESA will focus on vehicle data and services as well as cloud interaction while AUTOSAR will offer an open interface for the overall system architecture and the in-vehicle network. The collaboration will start with a vehicle API concept being discussed by both organizations.

This approach emphasizes an exchange of vehicle data, described by COVESA’s Vehicle Signal Specification, between the cloud and AUTOSAR’s platforms for in-vehicle communication. A joint proof of concept demonstration will show a seamless integration of communication, exchange of data and access of services between cloud and in-vehicle ECUs. In its initial phase the collaboration will focus on passenger cars, two-wheelers and commercial vehicles with an optional extension to other land-based transportation applications. As vehicle data and services become increasingly relevant to functional safety and cybersecurity, the collaboration will consider appropriate enhancements to vehicle data and services, including real-time behavior.

COVESA and AUTOSAR plan to extend the collaboration to other organizations contributing to the software-defined vehicle area.

Please visit the COVESA and AUTOSAR websites for more information on both organizations.