Aligning Two Leading Automotive Standards for the Future

January 2023 – In October 2022, automotive industry leaders AUTOSAR and COVESA announced an intent to align on several software-defined vehicle topics. COVESA will focus on vehicle data and cloud interaction while AUTOSAR will offer an open interface for the overall system architecture and the in-vehicle network.

Since then, the two organizations have discussed in more detail an AUTOSAR concept called Vehicle API, which is intended to enable an interface between an AUTOSAR Adaptive Platform and vehicle data described by COVESA’s Vehicle Signal Specification (VSS).

Initial discussions of the organizations have envisioned two activities going forward. The first activity establishes a legal operating model for the technical work, including intellectual property rights management and licensing. The intent of both organizations is to preserve the longstanding legal framework of the AUTOSAR organization, while developing and releasing new specifications and code to the industry as openly as possible.

Based on the resulting legal working model, the second activity is focused on technical specifications, reference implementations and proofs of concept code including and surrounding the Vehicle API concept. Early discussions of this technical work have resulted in the below preliminary diagram, showing the intended scope of the activity:

During the COVESA CES Showcase and Reception, an exploratory proof-of-concept demonstrator was shown. The AUTOSAR PiCar demo, representing base functionality of the AUTOSAR standard, was extended to leverage vehicle data described by COVESA’s VSS.

Future conversations will finalize the legal working model and advance the technical discussions around agreed outputs and timelines. Both organizations expect to have additional results by their respective community events in April and May 2023. Parties interested in learning more or contributing to this activity can contact admin@autosar.org or scrumb@covesa.global. Please visit the COVESA and AUTOSAR websites for more information on both organizations.