COVESA Forms Data Expert Group Refining Technical Focus

COVESA was formed with one goal in mind: to develop common approaches and open technologies that accelerate innovation for connected vehicles and over the last year, our members, along with industry partners, have made significant contributions toward this goal.

COVESA members have worked together to publish version 3 of the Vehicle Signal Specification (VSS), the foundational data backbone for the Software Defined Vehicle. VSS is the most widely adopted, common approach for describing vehicle data that is created by, and exchanged between in-vehicle systems, mobile devices, and various touchpoints outside the vehicle including back-end cloud and EV charging points.

While we are proud and excited about this strong momentum, we continue to look for new ways to enhance our focus and recently implemented a refined technical structure that will allow us to further expand and grow our technology projects and engagements.

Refined Technical Focus: Data Expert Group

We’ve enhanced our technical focus with the launch of the Data Expert Group (DEG) providing COVESA a single entity in which best practices and common approaches for connected vehicle data and interfaces are discussed, documented, and where appropriate, proved.

The DEG will work under the oversight of the COVESA Technical Steering Team and will explore interactions with multiple touchpoints (integration points) on its own as well as horizontally in support of other Expert Groups such as the Electric Vehicle Charging Expert Group. Touchpoints out-of-scope will be tracked by the Technical Steering Team and may, from time-to-time, require analysis based on work done in other regulatory or standardization bodies.

The Data Expert Group is organized around four key pillars with existing activities (e.g., groups, projects and initiatives):

- **Best Practices & Guidelines**: How to handle privacy/identity, security, data model definition, API first approach in automotive, and governance.
- **Data Modeling/Ontologies**: VSS for vehicle domain data; PDM for personal data; Knowledge layer Ontologies and Graphs; Concept and tooling; and Interactions with other domain models.
- **Data Architecture/Infrastructure**: Data Base Layer - Storage, serialization and synchronization; and Technical implementations and proofs of concept.
- **Interface Definition**: API (Vehicle Services Catalog (VSC)) definition with strong link to the VSS concept; How to handle deployment specific mapping; and Realization with existing tooling.

Technical implementations and proofs of concept.

Discover more about the Data Expert Group and how to participate and contribute on the COVESA Wiki.

Remapping COVESA Projects

With the introduction of the DEG, COVESA technology engagements such as the Common Vehicle Interface Initiative (CVII) and the Connected & Cloud Services (CCS) project have been integrated into the new structure.

The discussions held formerly in the CVII Tech Stack will be distributed into the relevant pillars of the DEG. CCS discussions, including usage of the W3C Vehicle Interface Service Specification (VISS), have also moved into the DEG. And finally, the work of the VSC project will provide the foundation of the Interface Definition pillar of the DEG.

Ways to Learn More

The upcoming COVESA All Member Meeting on 18-20 October in Dearborn, Michigan, is the perfect opportunity to learn more about the enhancements resulting from the DEG launch. Several introductory sessions will be held as well as deeper dive technical breakouts of DEG topics. Non-members are welcome to attend the event which features a full-day, business-focused track on the 18th, exploring some of the most important challenges facing the connected vehicle industry. Senior leaders from Ford Motor Company, GM, Stellantis, Hyundai Motor, Bosch, Wind River, LGE, Ricardo, and many others will present. The day will end with a reception and showcase where member companies will demonstrate their latest products and services.

Many technical working sessions are also planned for all three days advancing existing and emerging activities of COVESA including Vehicle Signal Specification, EV charging, in-vehicle payment, in-vehicle experience, and many other topics.

Registration for the full event or a one-day pass is available here.

If you are unable to attend the COVESA All Member meeting, please visit the COVESA Wiki for information about technical participation in COVESA projects.