Welcome to the newsletter of FEDERATE!

11/2025, Issue No. 8

European Commission opens applications for an industrial alliance to facilitate collaboration on digital vehicles

Applications to the European Connected and Autonomous Vehicle Alliance (**ECAVA**) opened in August 2025, with the alliance set to advance digitalisation and innovation in the automotive industry. Announced under the **Automotive Action Plan**, ECAVA is an industrial discussion and advisory forum that will bring together key stakeholders from across the automotive value chain.

The alliance will position itself as an industry-driven forum to coordinate EU-driven collaborations in software-defined vehicles (SDV), hardware computing architectures and automotive electronics, AI models and the development, piloting and testing of autonomous driving. By participating, members –including vehicle manufacturers, suppliers, innovative tech companies, start-ups, as well as the Union and Member State representatives – will contribute to the competitiveness of the European automotive industry.

The Alliance Secretariat will be coordinated by DG CNECT, under close cooperation with DGs RTD, GROW, and MOVE.

This collaboration has deep potential to boost the competitiveness of the European automotive industry.

Quick Links:

- European Connected and Autonomous Vehicle Alliance (ECAVA)
- ECAVA - Terms of Reference
- ECAVA - Declaration

Contact: cnect-ECAVA@ec.europa.eu

EUROPEAN PARTNERSHIP

The Project has been accepted for funding within the CHIPS Joint Undertaking (CHIPS JU) under Call HORIZON-KDT-JU-2023-3-CSA-IA / Grant Agreement No. 101139749

FEDERATE joins forces with new EU projects to shape the future of the Software-Defined Vehicles

FEDERATE is now teaming up with several exciting new European research projects tosupport the definition of the SDVoF building block roadmap. These collaborations bring freshexpertise and energy to our mission of driving the next generation of automotive innovation.
Here's a look at the projects we're now connected with:

- **CCAM Projects:** EEA4CCAM and UP2DATE4SDV are advancing cooperative,connected, and automated mobility.
- **2ZERO Projects:** CODE4EV and TWINLOOP are focused on zero-emission vehicletechnologies and digital twin solutions.
- **Chip-JU Initiative:** RIGOLETTO is developing RISC-V–based high-performancecomputing hardware for tomorrow's vehicles.
- **Foundation:** S-CORE is building an open-source integration software stackfor high-performance computing.
- **AUTOSAR-CAPI:** Enabling standardized software architectures through the CommonAdaptive Platform Implementation.

By connecting with these initiatives, FEDERATE is ensuring that our strategic deliverable D4.5 – Strategic Roadmap is built on the latest European innovation. This roadmap willserve as a guide for future developments in software-defined vehicles and their integrationwith high-performance computing.

These partnerships are more than just collaborations - they are a shared step toward a greener, smarter, and more connected mobility future across the Europe!

Eclipse S-CORE in focus: an open core stack for high-performance computing platforms

On October 2, 2025, Lars Bauhofer (Qorix) presented in the **4th FEDERATE webinar** how **the open-source project** ECLIPSE S-CORE is building a *secure, collaborative core stack* for software-defined vehicles (SDV) on high - performance computing platforms and how both community and industry can contribute.

Why Eclipse S-CORE, and why now?

The industry is accelerating SDV platforms and increasingly rallying around open, co-developed components. Eclipse S-CORE positions itself as a *safety-conscious, modular middleware core* between OS/BSP and applications - aimed at reducing integration effort, speeding up development, and systematically addressing safety and quality from the start.

New European alliances are also giving momentum to open-source collaboration in automotive, providing a broader foundation where Eclipse S-CORE is envisioned as a shared building block.

Architecture & scope - key points

- **Target platform:** *Embedded high-performance computing platforms*, including scenarios with multiple processors (heterogeneity/interoperability).
- **Layering:** Eclipse S-CORE sits below the application and above the board support package as standardized middleware, bridging the OS-App gap.
- **Design principles:** *Open, modular, service-oriented, safety-aligned*, with a focus on quality, efficiency, and extensibility.
- **Governance & community:** The project operates under the Eclipse SDV umbrella and is open to OEMs, suppliers, tech providers, and research, with clear contribution paths.

What the webinar delivered:

1. Problem/goal framing: SDV needs a shared, open core so manufacturers can focus on differentiating features instead of rebuilding foundational functionality over and over.

2. **Roadmap:** A short overview of the current activities and what's next.

3. How Eclipse S-CORE works: Project set up with committees and a clear division of responsibilities and how to get in contact with the different groups.

4. Architecture insight: Overview about the features in the architecture presented in a high-level block diagram and an explanation of the lifecycle concept - from feature request to the implementation.

5. Contribution paths: From architecture/design discussions to code contributions, the community explicitly invites participation; call for contributions 1.0

Why this webinar matters for FEDERATE and the SDVoF Community?

FEDERATE aims to strengthen the European SDV community and open-source building blocks. **Eclipse S-CORE** fits as a core foundational element in this agenda - an open core, clean interfaces and APIs, and shared quality standards and processes.

A recording of the session will be available on the **FEDERATE YouTube** channel soon for anyone who missed it or would like to revisit the presentation.

Have we sparked your interest? For more information visit: **Eclipse S-CORE**

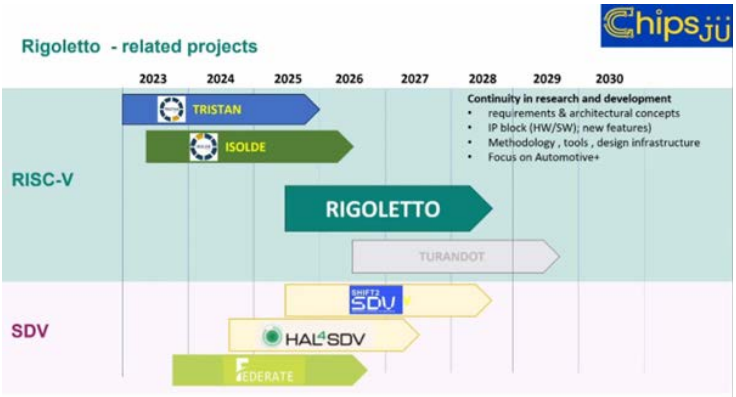
Eclipse Foundation hosts successful OCX 2026 Webinar Week

The Webinar Week – OCX 2026, hosted by the Eclipse Foundation, a FEDERATE project partner, brought together experts and practitioners for a dynamic week of discussions on open collaboration, data interoperability, digital engineering, model-based systems, and open-source innovation. The event not only deepened understanding of the evolving OCX framework but also had a positive impact on the Software Defined Vehicle (SDV) community, fostering stronger collaboration, knowledge sharing, and alignment on open standards shaping the future of connected mobility!

FEDERATE webinar spotlight: RIGOLETTO & SDV Innovation

On 24 October 2025, the FEDERATE webinar - *RIGOLETTO (RISC-V/Infineon)* - brought together key experts to explore the project's goals and its synergies with the Software Defined Vehicle (SDV) ecosystem. Knut Hufeld (Infineon Technologies AG) was interviewed by FEDERATE team - Michael Paulweber (AVL List GmbH), with moderation by Peter Priller (AVL List GmbH), providing engaging insights into the project's innovations and impact! Webinar topics include automotive requirements, the role of the FEDERATE project for RIGOLETTO, as well as the project and task structure and the expected results of the RIGOLETTO project.

Stay tuned and wait for the webinar recording which soon will be available on the FEDERATE YouTube channel: https://www.youtube.com/@FEDERATECSAProject



Upcoming events 2025

We’re excited to announce that FEDERATE will be exhibiting at EFECS 2025 – the European Forum for Electronic Components & Systems, taking place 3–4 December 2025 at the Hilton Hotel in St. Julian’s, Malta.

EFECS 2025!

Join us at our booth to learn how FEDERATE is shaping the future of the Software-Defined Vehicle (SDV) ecosystem — explore our roadmap, building-block vision, and open collaboration approach. Meet project partners face-to-face, ask questions, and engage directly with those driving this initiative.

We look forward to seeing you there!