

ENVITED Community Meeting

From SDV to AIDV: Enabling Smart Vehicles Through Data-Driven Engineering

3 November 2026 | Munich (House of Communication)

Pre-event to the ASAM International Conference

Software- and AI-defined mobility are reshaping how complex vehicle systems are designed, validated, and operated. Functionality is increasingly software- and AI-driven, continuously evolving over the lifecycle, shifting focus from hardware toward software, data, and continuous validation.

This shift spans multiple domains beyond ADAS and automated driving, including energy management, powertrain optimization, predictive maintenance, and user-facing digital systems.

A key challenge is validating end-to-end and hybrid architectures. Modern systems combine classical modular software with AI-based components, as well as end-to-end approaches where behavior is learned from data. These paradigms challenge traditional validation, as system behavior emerges from complex interactions rather than deterministic logic. New strategies are required, covering component-level verification, system integration, full-system behavior in dynamic scenarios, and continuous validation under OTA updates.

Data-driven Engineering and Simulation play a central role - not only for development and testing, but as a foundation for scalable validation and structured evidence generation across the lifecycle. This increases the importance of simulation credibility, including transparency, traceability, and reliability.

The ENVITED Community Meeting, organized by the Automotive Solution Center for Simulation, brings together industry and academic experts to address these challenges. As a pre-event to the ASAM International Conference, it connects methodological innovation, industrial application, and standardization across software-defined vehicle systems.



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Research Cluster
Environment for Virtual Test Drive

Call for Contributions

Deadline: 4 September 2026

The transition towards Software- and AI-defined mobility introduces fundamental challenges - while also creating new opportunities for simulation, data-driven development, and collaborative innovation.

The Automotive Solution Center for Simulation and the ENVITED community invite experts from industry and academia to share their perspectives, solutions, and experiences.

We are looking for contributions that go beyond the current state of the art - critically reflecting on existing approaches and providing concrete impulses for the future of simulation in the context of software-defined mobility.

Topics of Interest (non-exhaustive)

Submissions may address, but are not limited to, the following topics:

- Simulation for continuous validation and OTA-driven development
- Scalable system validation of hybrid and end-to-end system architectures
- Virtual homologation approaches and methodologies
- Integration of simulation into modern development workflows (CI/CD)
- AI-enabled simulation, learning-based validation, and data-driven testing approaches
- Interaction between user-facing systems and vehicle behavior

- Data space technologies and services ensuring data quality, and traceability as foundations for trustworthy simulation
- Interoperability and standardization (e.g. ASAM OpenX ecosystem)
- Pre-competitive cooperation on shared challenges

Please send us your proposed contribution title + abstract (max. 3000 characters) and presenter name(s) until September 4, 2026 to events@asc-s.de (template available).

Contribution Formats

We welcome a variety of formats, including:

- Industry challenges and emerging trends
- Technical presentations on latest solutions and approaches
- Industrial case studies and lessons learned
- Research contributions and methodological innovations
- Project Ideas
- Interactive or discussion-oriented sessions

We especially encourage contributions that address real-world challenges and foster exchange between industry and research.

Why participate?

- Engage with leading experts in simulation and software-defined systems
- Contribute to shaping future validation methodologies across domains
- Discuss practical challenges in hybrid and end-to-end architectures
- Connect with the ASCS and ASAM community