

37th SafeTRANS Industrial Day

AI Breathing Life into Continuous Safety Processes

Call for Participation

Development processes for highly automated modern transportation systems are increasingly carried out within a continuous development process, in which "data from the field" is collected and continuously used for subsequent system improvements and updates. The latter include not only error correction; it also enables the roll-out of performance improvements as well as the addition of extended or even new functionality. At the same time, continuous development processes naturally make it more difficult to provide the required safety case evidence, since there is no fixed end product and safety processes are designed for the classic development methodology. In the various transportation domains, there has therefore long been discussion about corresponding extensions and changes to the scope and methodology of safety process – most recently, for example, in the railway sector within the safe.trAI project or in the automotive sector through the publication of a new global technical regulation of the United Nations for Automated Driving Systems (ADS) (ECE/TRANS/WP.29/2026/139), in which – alongside requirements on the system and its (safety-relevant) properties – requirements on the processes implemented at the manufacturer are also established. Compared to the classic safety case, the new focus of these approaches and regulations lies on:

- The definition of an Operational Design Domain (ODD) and techniques for its effective monitoring
- Scenario-based virtual and physical testing
- Combining virtual testing in simulations, physical testing on test grounds, trials in the real world, and continuous data collection
- Architectural requirements and principles for continuously evolving systems,

- Field monitoring after series launch, including monitoring of ODD compliance, monitoring of safety requirements, and (mechanisms for) safe fallback levels/functions

Building on the 36th Industrial Day on the topic of "AI-Supported Critical Systems Engineering", in this event we will discuss the advantages and disadvantages of AI support specifically in safety case evidence and in field monitoring for updatable, continuously developed systems. We particularly invite the submission of contributions addressing the following topics:

- Use of AI-based methods in the initial as well as in the continuously updated safety case for continuously developed systems
 - Use of AI-based methods in DevOps, CI/CD, agile and other recent engineering approaches
 - Use of AI-based methods for the development of safety architectures and architectural measures
 - Automated updating of safety cases in the event of changed system functionality
- Use of AI-based methods for monitoring and data collection in the field-
 - Data collection for training and learning methods for AI-supported systems engineering
 - AI-supported monitoring of ODD compliance
- AI-supported methods for preventing foreseeable misuse
- Development environments and engineering frameworks for AI-based continuous systems engineering-

There is explicit interest that the contributions present not only the current state of the corresponding work but also the further planned development or, alternatively, the challenges for further development.

Please submit speaker, title and abstract (ca. ½ -1 page) of your presentation by **15th October 2026** to katja.bonhagen@safetrans-de.org. Selection and notification of acceptance will be done by **21th October 2026**.

Workshop language

The workshop languages are English and German. Typically, slides will be in English, while speakers speak German or English, depending on the audience and their preferences.

Date and Venue

Date: 09.12.2026, 09:00 - 17:00 h

Venue: Leonardo The Posthouse Berlin Potsdamer Platz,
Hallesche Straße 10, 10963 Berlin