

**Topic: Status of standards Road vehicles Test scenarios for automated driving systems ISO3450x series**

ADAS features in cars are increasing and fully automated vehicles are used in pilot areas. Strong public concerns about their safety have prompted the sector to further safety standards beyond the item-based functional safety standard ISO 26262 [1] to achieve safety compliance. The first SOTIF standard (PAS Public Available Standard) has been published in 2019 and is released as ISO 21448 standard in 2022. It contains many new inputs but the interpretation in safety related handling is still difficult.

Therefore, other working groups started to have a broad view into the overall safety guidance and requirements.

SOTIF's new safety standard approach was triggered by the ADAS and autonomous driving cars interaction with the road and their environment with several unknown and unsafe conditions and scenarios. Therefore, the working group for ISO standard "Road vehicles: Test scenarios for automated driving systems" with actual 5 parts has been started. The first 3 parts are already released.

Road vehicles: Test scenarios for automated driving systems

1. ISO 34501:2022 Vocabulary
2. ISO 34502:2022 Scenario based safety evaluation framework.
3. ISO 34503:2023 Specification for operational design domain
4. ISO 34504:2023 FDIS Scenario categorization
5. ISO 34505:2024 CD Scenario evaluation and test case generation

This standard compilation explains the working with test scenarios for automated driving systems as enhancement to the SOTIF standard ISO21448. The presentation summarizes the content and outlook of the actual standard in combination with the existing standards for safe automated driving for road vehicles.