

Why this training course?

In modern rail vehicles and signalling systems, software serves as the central control unit. The new EN 50716:2023 standard has harmonized and clarified the requirements for software development. This training course provides the necessary expertise to manage software projects—from initial requirements through to assessment—in a manner that is compliant with standards, safe, and efficient, in accordance with the latest CENELEC standards.

Benefits

After this 2-day intensive training course, you will be able to:

- **Apply the new standard with confidence:** Understand EN 50716:2023 and how it relates to and integrates with EN 50126 and EN 50129.
- **Manage software integrity (SIL):** Correctly assign and implement requirements from basic integrity up to SIL 4.
- **Master the lifecycle:** Structured implementation of the phases of the V-model.
- **Designing V&V activities efficiently:** Application of standards-compliant techniques for software verification and validation.
- **Documentation:** Preparation of the evidence required for the safety case (software safety case).

**Get your software development ready for certification.
Schedule your spot in our expert training session today
and minimize risks throughout the software lifecycle.**



Overview of the Basic

Content:

- **Introduction & Fundamentals of EN 50716:** Purpose and Motivation, Scope, SIL Concept, Overview of Changes in the 2023 Revision
- **Software Lifecycle Processes:** Organization and Roles, Demonstration of Competence, Configuration and Change Management, Traceability and Versioning Across All Phases, Requirements and Architecture, Development of Specifications
- **Implementation, Verification, and Validation:** Overview of the respective activities, role requirements, defect management – systematic handling of nonconformities.
- **Software Deployment, Maintenance, and Overview:** Deployment, maintenance, documentary evidence, outlook & trends



Key Details & Organisation

Duration: 2 days (in-person or hybrid options available)

Language: German or English

Methodology: Theoretical modules combined with practical exercises and interactive knowledge tests

Prerequisites: Participation in “Introduction to CENELEC” or existing foundational knowledge

Target audience: All roles involved in safety-related or non-safety-related projects

Trainer: Dr. Hansjörg Manz, Expert in railway safety & RAMS management

