## EN 50129 CENELEC standard

# Seminar-No. 01.03



Online-Seminar

#### **DATES & COSTS**

13.04.2023 Nuremberg 27.09.2023 Nurembera On-demand Valenciennes

Length: 1 Day 700,00 € Fee:

incl. lunch and certificate of participation plus VAT

\* On-demand

#### TARGET GROUP

- Software engineers
- · Safety engineers
- · Systems engineers
- Quality engineers
- Everyone involved in the realization of the system with a SIL objective (design, V&V, quality and RAMS)

### **LANGUAGES**











#### **DESCRIPTION**

During the training, the link between EN 50129 and the other railway standards will be presented, but the training will mainly, focus on the contents of the proof of safety, based on EN 50129, as well as on the description of all new requirements within the updated version of the norms:

- Security and cyber-security
- · Qualification of used tools
- FPGA-draft based
- · Reused contents

Based on the notion of the generic product, generic application and specific application, different proof of safety needs to be established. Another important part of the process is called Cross-Acceptance, all of the above mentioned will be covered in the training.

#### **SEMINAR CONTENTS**

DAY 1 09.30-17.00 Uhr

- Scope of EN 50129
- Reminder on safety analysis (PHA, FMEA, failure tree analysis)
- Generic product vs generic application vs Specific application
- · Declination of THR to SIL and SSIL
- · Structure of the safety case
- · Reused of pre-existing product
- · Safety a hardware architecture
- · Tools qualification
- · Demonstration of the safety of an equipment
- · Link with software and hardware
- Cross-Acceptance
- Identification of keys points of EN 50129
- · FPGA design
- Annexes