

Training in Budapest, Hungary

Day 2: ERTMS and infrastructure

General Introduction

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Purpose of the presentation

Present the principles for the different roles associated to authorisation and safe integration of infrastructure and ERTMS

Key points of the presentation

The different tasks leading to the authorisation and safe integration of new or modified infrastructure.

- **3 Principles of the EU ‘NEW APPROACH’**
 - The manufacturer or its representative in the EU is **responsible** for the **conformity of product** to applicable legislation. It includes legislation related to safety.
 - The user is **responsible** to **use** the product in conformity with the applicable legislation. The user has to use the product safely.
 - The authorities have a **duty of control** on the **conformity of products** and their **use** to the applicable legislation including safety.
 - Two types of **control**:
 - Control **before** the product is placed on the market = ‘A priori’
 - Control **after** the product is placed on the market = ‘A posteriori’
- **In many domain (industrial or consumer), the authorities are only making controls ‘a posteriori’**

- **Railway: Specific rules for the control**
 - Control a priori by ‘conformity assessment bodies’ and authorities
 - Control a posteriori by ‘conformity assessment bodies’ and authorities
 - Conformity assessment bodies =
 - Notified Bodies (**NoBo**), a priori only;
 - Designated Bodies (**DeBo**), a priori only;
 - Assessment Bodies (**ASBO or RAsBo** - Common safety Method on risk evaluation and assessment 402/2013), a priori
 - Authorities
 - National Safety Authorities
 - National Investigation Bodies (only control a posteriori)

- **Design and manufacturing**
 - Are involved the **applicant**, the designer/manufacturer
- **Verification by conformity assessment bodies**
 - Procedures for verification of conformity.
 - Procedure for establishing the **'EC' declaration of verification** (2016/797 art 15)
- **Authorisation for placing in service**
 - From 2019, application to the Agency prior to the 'Call for Tender' for fixed ERTMS.
- **Safe integration and operation**
 - Role of **Infrastructure Manager** (IM)
 - Role of user of infrastructure: **Railway undertaking** (RU)

- Verification procedures: Verification of conformity by conformity assessment bodies :NoBo, DeBo and AsBo
 - The ‘applicant’ **designates** the NoBo, the DeBo and the AsBo (contracts)
 - The NoBo, DeBo and AsBo proceeds to the verifications imposed by the applicable legal base.
- Procedure for establishing the ‘EC’ declaration of verification (2016/797 art 15)
 - The ‘applicant’ under its **sole responsibility** establish, date and sign the ‘EC’ declaration of verification
 - This declaration means that the vehicle concerned has been **verified by NoBo, DeBo and AsBo** and that **it satisfies the requirements** of the applicable legal base.
 - The ‘applicant’ compile the ‘technical file’ that **must** accompany the ‘EC’ declaration of verification. Attention: it is a change from 2019!

- The infrastructure including the ERTMS fixed parts must be authorized.
- Infrastructure Manager ensures the safe integration and operation within its operations
- RUs making trains on infrastructure ensure safe integration and operation within their operations.
- Safe integration between vehicles and network includes technical compatibility based on TSIs requirements.
- IM and RUs should collaborate for the safe integration and operation.
- The applicant, designer/manufacturer should collaborate with the IM and the RUs for the safe integration and operation
 - Provision of documents from the ‘technical file’
 - Technical support

- 3 parts in today training day
 - ERTMS
 - Case of ETCS in Gotthard tunnel,
 - Experiences in the deployment of GSM-R
 - Responsibilities of actors including NoBos and DeBos
 - Authorisation of new infrastructure
 - Case of Passenger station in Hungary
 - Field tests
 - Case of safety concept/emergency plan in a tunnel
 - Safe integration and operation
 - Safe integration in the Gotthard tunnel
 - Safe integration ETCS/infrastructure

Annex: Definitions: Directive 2016/797

- **‘applicant’** means a natural or legal person requesting an authorisation, be it a railway undertaking, an infrastructure manager or any other person or legal entity, such as a manufacturer, an owner or a **keeper**;
for the purpose of Article 15, the ‘applicant’ means a **contracting entity** or a manufacturer, or its authorised representatives
- **‘contracting entity’** means a public or private entity which orders the design and/or construction or the renewal or upgrading of a subsystem.
- **‘area of use of a vehicle’** means a network or networks within a Member State or a group of Member States in which a vehicle is intended to be used;
- **‘technical file’** contains all the necessary documents relating to the characteristics of the subsystem (i.e. the wagon) and, where appropriate, all the documents certifying conformity of the interoperability constituents. It shall also contain all the elements relating to the conditions and limits of use and to the instructions concerning servicing, constant or routine monitoring, adjustment and maintenance (art 15§4).



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