# EuroSpecs A new approach to specifying rolling stock

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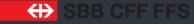












## Situation in Europe at EuroSpec's start

#### Market:

- Manufacturers are heading for standard adaptable platforms;
- TOCs tender their procurement;
- TOCs no longer design and specify RST.

## Legislative environment

- TSI framework almost complete;
- Decreasing amount of add on national regulation;
- Cross acceptance being implemented.





define a common base and eliminate differences in non-competitive domain



## **Potential:**

- Change to develop a real European platform;
- Promotion of interoperability and cross functional homologation;
- Economics of scale and standardisation reduce cost and improve quality and reliability.



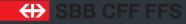




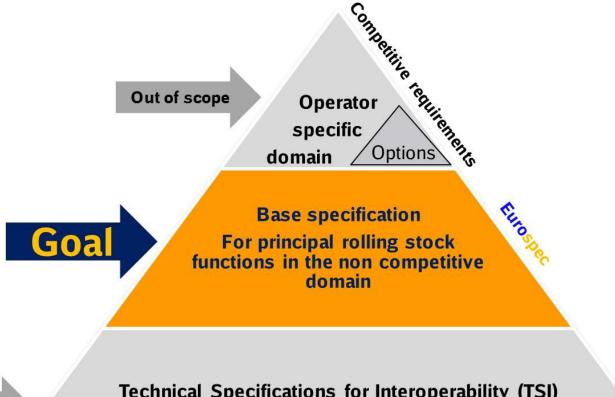








# EuroSpec's idea: to create a base specification for principle rolling stock functions among operators



Out of scope

Technical Specifications for Interoperability (TSI)
Notified National Technical Rules (NNTR)
CEN/CENELEC EN and TS
UIC/ UNIFE Technical Recommendations(TecRec)

Standards



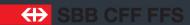




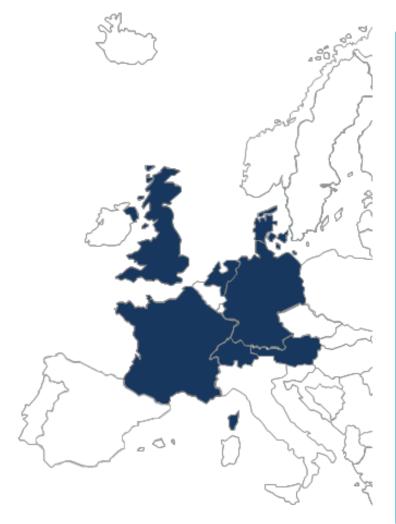








## EuroSpec's goal: to improve quality and reliability of trains



## EuroSpec

- ...Started in 2011 as a partnership of several European train operating companies (TOCs) acting as partners;
- ...provide common technical specifications based on the experience of all partners;
- ...can be used in train procurement instead of company specific requirements;
- ...are company, manufacturer and product neutral, describing functions of rolling stock and their verification.



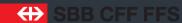












## Results already achieved by EuroSpec

## **Specified and published specification modules**

- Toilets;
- Air conditioning;
- Requirements management;
- Documentation.



## Application and dissemination of EuroSpec documents:

- Discussion with manufacturers;
- Already used in tenders;
- Publication at www.eurospec.eu.





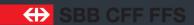










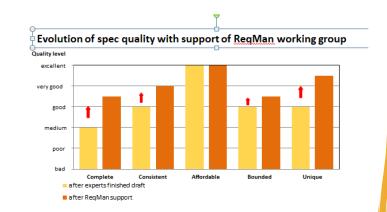


## **EuroSpec** "Requirement management"

- Eurospec "requirements management"
  has defined a common reference and
  method for the other working groups, to
  improve standardisation between all
  working groups;
- Eurospec "requirements management" trains and coaches the specialists in writing requirements;
- Eurospec "requirements management" reviews and improves the EuroSpecs on several quality aspects.

The document **EuroSpec** Requirements
Management provides a common focus on
"requirements management" for use by
companies in the rail sector. The document refers
to existing standards and best practices and has
the following chapters as content:

- Requirements Characteristics;
- Requirements Syntax;
- Requirements Attributes;
- Requirements Traceability;
- Requirements Validation and Verification;
- Requirements Interchange Format;
- Do we mean standards?





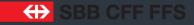












# EuroSpec "Documentation" begins with common reference for rolling stock analogous as in other sectors







## The **EuroSpec** on Documentation provides:

- A common reference to be used for tendering and verification;
- In future releases additional specifications on structure and standardisation of content, format and exchange of the documents;
- It is finally intended to facilitate the exchange of technical documentation within the railway sector in a harmonised way.



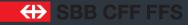












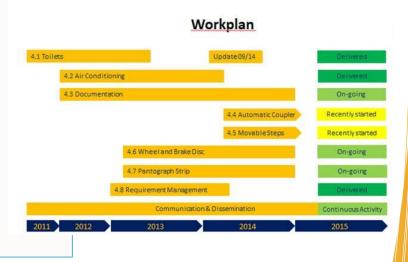
## **Current and future work**

## **Currently EuroSpec** experts are working on:

- Technical documentation for rolling stock (content, structure and format);
- Requirement management (verification methods and interchangability of req.)
- Mechanical parts of automatic couplers;
- Moveable step;
- Pantograph strip;
- Wheel and brake disc.

### **Future work:**

- Open discussion with manufacturers;
- Feedback loop from use in tenders;
- New identified topics.





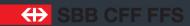












## **Outlook**

- TOC's have shown to be able to reduce their own specific requirements by making use of the first EuroSpec's;
- For powerful railway sector further standardisation is needed:
  - Increase of reliability by sharing good practice and experience;
  - Simplification of tender process in time and effort;
  - Standardised products and increase cost efficiency.
- EuroSpec fills a gap in current standardisation landscape;
- Eurospec is a mean to obtain mature products needed to offer excellent products to the end customers.





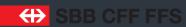












# Interested in joining, using, suggesting? Have a look at www.eurospec.eu



Welcome to *EuroSpec* – an initiative of several European train operating companies acting as partners. The partners aim at providing voluntary common technical specifications, as an explicit set of requirements, for rolling stock components such as toilets, heating, ventilation and airconditioning (HVAC) and sliding steps among others to be used as support for purchasing or refurbishing railway rolling stock. These topics do not touch the competitive domain between the train operators but support them in competing with other transport modes. A consequent application of EuroSpec methods and specifications should promote standardisation, quality, vehicle platforms and decrease costs. An additional specification, on requirement management was created and is used now to monitor that EuroSpec specifications fulfill requirement management rules and to increase the quality and consistency of the documents.















