



The necessary evolution of railway safety regulations in Europe A challenge – Risks to be controlled

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General

- ✦ Regulations are an integral part of the railway system as well as rolling stock and infrastructure
- ✦ **Regulations are absolutely essential:** there can be no railway operation without them
- ✦ Regulations are closely linked with technical equipments, in particular the signalling system
- ✦ Regulations are closely linked with the culture and practices of each country and each national railway company

History

Railway safety regulations were generally written decades ago:

- ✦ By the railway companies
- ✦ For their own purposes
- ✦ Mixing high level safety principles, technical descriptions and operational instructions

State governments have taken little part in this, even if they usually did approve those texts.

Recent evolutions in Europe (1/2)

Two fundamental evolutions were introduced 20 years ago by European legislation :

- ✦ Developing competition by:
 - separating infrastructure from railway operation
 - opening up the network to several operators

- ✦ Ensuring interoperability by:
 - developing technical compatibility between rolling stock and infrastructures (and thus common standards)
 - harmonising operational rules

In addition, the level of safety on the TEN has to be maintained and – where reasonably practicable – improved.

Recent evolutions in Europe (2/2)

Those evolutions are guided and sustained by European rules and standards :

- *directives (safety, interoperability, drivers licences); in particular, the interoperability directive establishes the essential requirements;*
- *technical specifications for interoperability, (including TSI “operations”) which specify the rules to reach those requirements;*
- *CEN and CENELEC standards (if a TSI refers to).*

Nota: The TSIs are reviewed and completed on a regular basis.

Consequences

Those evolutions make it necessary :

- ✦ to identify all the actors in the sector :
infrastructure managers, railway undertakings,
entities in charge of the maintenance of rolling
stock, training centres, workshops, independent
safety assessors (...), in order to :
 - specify their tasks, missions &
responsibilities
 - deliver safety certificates or safety
authorisations whenever necessary
- ✦ for Member States (24 are more or less
concerned) to review and update their national
safety rules and standards.

Main difficulties

- 1) This is a huge task with an insufficient number of experts to carry out it : for France, only in the field of operational safety, about 100 documents must be rewritten.
- 2) The publication of each new European rule calls for a check of the relevant national rules in order to amend them if necessary.
- 3) Anyway, the remaining old « home made » safety rules from the historical companies must be rewritten by each Member State in order to
 - make them understandable for each new (and foreign) company
 - split the « what to do » and the « how to do it ».



Traps to avoid

A good safety regulation must be complete, clear and unambiguous.

So it is necessary to:

- ✦ identify precisely the tasks of each entity in charge of safety duties and make it fully responsible for implementation and compliance
- ✦ avoid omissions
- ✦ avoid redundancies
- ✦ deal with the various and numerous interfaces within the system.

A well structured regulation

The regulations should be divided in 3 levels:

- ✦ level 1 – EU and Member States (MS) : tasks and powers of the entities (NSA, investigating bodies, IM, RU, ...), high level safety principles (GAME, ALARP, ...), safety targets, safety methods, safety indicators, ...
- ✦ level 2 – MS and IM (can be partially or totally delegated to infrastructure managers): operational rule books (braking, signalling, trains spacing, works, incidents, ...)
- ✦ level 3 - operators : operational instructions for the staff on the ground

Appropriate working methods

The amount of the task and the lack of experts require a European-wide cooperation between the European railway agency, the Member States, the NSAs and the industry.

- ✦ ERA organises a meeting on this subject with Member States and NSAs once a year.
- ✦ A working group (ERA + NSAs + railway sector) has been established in order to elaborate the technical specifications for interoperability « operation ».
- ✦ At national level – in France – a mirror group (State +NSA + railway sector) has been established in order to elaborate common positions.

Conclusion

This evolution is irreversible.

- ✦ There will be an increasing need for common safety rules (companies will use less and less resources on elaborating rules).
- ✦ In the future, most safety rules will come from the European Commission.
- ✦ Remaining safety rules will be national ones, elaborated by MS / NSAs.

It's an ongoing and endless process which should be carried out at 95% in the next 5 years.

**Thank you for your
attention**