RAILWAY SAFETY AND INTEROPERABILITY
Overview of EU legislation

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INTEROPERABILITY
= the ability of a rail system to allow the safe and uninterrupted movement of trains which accomplish the required levels of performance for these lines. This ability depends on all the regulatory, technical and operational conditions which must be met in order to satisfy the essential requirements.

Railway Interoperability Directive 2008/57/EC

SINGLE EUROPEAN RAILWAY AREA

- opening of the rail transport market to competition
- developing rail transport infrastructure
- improving the INTEROPERABILITY and SAFETY of national networks

INTEROPERABILITY CONSTITUENT
= any elementary component, group of components, subassembly or complete assembly of equipment incorporated or intended to be incorporated into a subsystem, upon which the interoperability of the rail system depends directly or indirectly

- Overhead contact line
- Pantograph, wheels, lamps and horns, contact strips, main circuit breaker...

Repeal of:
- Directive 96/48/EC on the interoperability of the European high-speed rail system and
- Directive 2001/16/EC on the interoperability of the European conventional rail system

Amended by:
- Commission Directive 2011/18/EU
- Commission Directive 2013/9/EU

SUBSYSTEMS

STRUCTURAL AREAS:
- infrastructure
- energy
- trackside control-command and signalling
- on-board control-command and signalling
- rolling stock

FUNCTIONAL AREAS:
- operation and traffic management
- maintenance
- telematics applications for passenger and freight services
ESSENTIAL REQUIREMENTS

- Safety
- Reliability and availability
- Health
- Environmental protection
- Technical compatibility
- Accessibility

Safety generally applies to railway system (subsystems)

Technical specification for interoperability (TSI)

Interoperability constituents
- as complying with the essential requirements
- "EC" assessment of conformity or suitability for use - NOTIFIED BODY (certificate)
- "EC" declaration of conformity or suitability for use

Structural subsystems
- interoperable and meeting the essential requirements
- "EC" verification of a subsystem - NOTIFIED BODY (certificate)
- "EC" declaration of verification
- authorisation for placing in service - national safety authority

SAFETY

- generally maintained and continuously improved, giving priority to the prevention of serious accidents
- system-based approach
- responsibility for the safe operation of the railway system and the control of risks - infrastructure managers and railway undertakings
- safety management systems

Railway Safety Directive 2004/49/EC

Applies to railway system (subsystems)

Covers safety requirements on the system as a whole, safe management of infrastructure and of traffic operation, interaction between railway undertakings and infrastructure managers

Amended by:
- Commission Directive 2009/149/EZ
NATIONAL SAFETY AUTHORITY (NSA)

- authorising the placing in service of the structural subsystems
- supervising that the interoperability constituents are in compliance with the essential requirements
- safety certificates and safety authorisations
- the safety regulatory framework
- registration of vehicles in NVR

NATIONAL INVESTIGATING BODY (NIB)

- serious accidents
- other accidents and incidents

SAFETY CERTIFICATE for railway undertakings

- Part A – evidence for SMS
- Part B – network

SAFETY AUTHORISATION of infrastructure managers

- common safety targets (CSTs)
- common safety methods (CSMs)
- common safety indicators (CSIs)
- national safety rules (NSR)
- Safety Management Systems (SMS)
- Entity in charge of maintenance (ECM) – for freight wagons certified by NSA

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Regulation 1077/2012: Commission Regulation (EU) No 1077/2012 of 16 November 2012 on a common safety method for supervision by national safety authorities after issuing a safety certificate or safety authorisation

Regulation 1078/2012: Commission Regulation (EU) No 1078/2012 of 16 November 2012 on a common safety method for monitoring to be applied by railway undertakings, infrastructure managers after receiving a safety certificate or safety authorisation and by entities in charge of maintenance


Decision 2012/226/EU: Commission Decision of 23 April 2012 on the second set of common safety targets as regards the rail system

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Thank you

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