



# Interoperability legal framework and TSI drafting

Jean-Charles Pichant  
Andrzej Harassek  
Interoperability Unit



- **European legal framework**
- **Principles of interoperability**
- **Assessing conformity**
- **TSIs in force & in drafting**

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- **Directive**
- **Regulation**
- **Decision**

They can be adopted by:

- the Council of the European Union,
- the European Parliament and the Council of the EU jointly,
- the European Commission

- **Directive** is a legal act binding on the Member States as regards the objectives to be achieved but leaves it to the national authorities to decide on how the agreed objective is to be incorporated into the national legal systems

The Member States are under an obligation to adapt their national law in line with Community rules as described in the directives

– **Regulation** is a legal act with

- a) **general character**, which means that it lays down the same law throughout the Community and applies in full in all member states
  
- b) **direct applicability**, which means that it does not have to be transposed into national law

**Regulations confer rights or impose duties on the EU citizens in the same way as national law**

– **Decision** is a legal act

- a) of individual application: **the persons** (legal or natural) **must be named in it** and **are the only ones bound by it**
- b) is binding in its entirety
- c) is directly applicable to those to whom it is addressed

## From the Rome Treaty to the last Railway Package

The common transport policy was provided in the Treaty of Rome, 50 years ago

In 1992, the Commission published the White Paper calling for the opening of transports throughout Europe, to revitalize the railway sector

→ Develop community legislations for improving competitiveness of railway sector and, consequently, **to shift the balance between transport modes**, with the ultimate objective of **reducing congestion on Europe's roads**

## 1991 / 1995: Early Directives

### Directive 91/440

**fixes basic principles for opening the traffic and clarification on role of actors, splitting operation from infrastructure**

### Plus two daughter directives

#### Directive 95/18

**establishing principles of licensing railway undertaking**

#### Directive 95/19

**fixing rules for allocation of capacity and charging**

### And a Technical Directive 96/48

**on interoperability of the high speed trans-European rail system**

## 2001: First Railway Package

### **Directive 2001/12**

**amending Directive 91/440 on the development of the Community's railways**

### **Directive 2001/13**

**amending Directive 95/18 on licensing of railway undertaking**

### **Directive 2001/14 replacing Directive 95/19**

**on allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification**

### **Directive 2001/16 on interoperability of the conventional trans-European rail system**

## 2004: Second Railway Package

### **Directive 2004/49 on Safety**

establishing a national authority, giving safety certificate and authorization of putting into service, and an investigating body

### **Directive 2004/50 on Interoperability**

modifying HS and CR interoperability directives

### **Directive 2004/51**

establishing new dates for opening Freight market: international services from 1/01/2006 and all types of traffic from 1/01/2007

### **Regulation 881/2004**

Establishing a European Railway Agency in charge of proposing recommendation for safety and interoperability

## 2007: Third Railway Package

### **Directive 2007/58 on Allocation of Capacity**

**for opening up international passenger services including cabotage  
(1/2010)**

### **Directive 2007/59 on the Certification of Drivers**

**defining process for licences and certificate and for agreement of  
training centres**

### **Regulation 1371/2007 on rail passengers' rights and obligations**

**Fixes rights, obligations and compensation in cases of non-  
compliance with contractual quality requirements for rail services**

## 2008:

### **Directive 2008/57 on the interoperability of the Community rail system**

**Replaces the previous HS and CR Interoperability directives (96/48 and 2001/16, both amended by 2004/50)**

### **Directive 2008/110 amending the Safety directive (2004/49)**

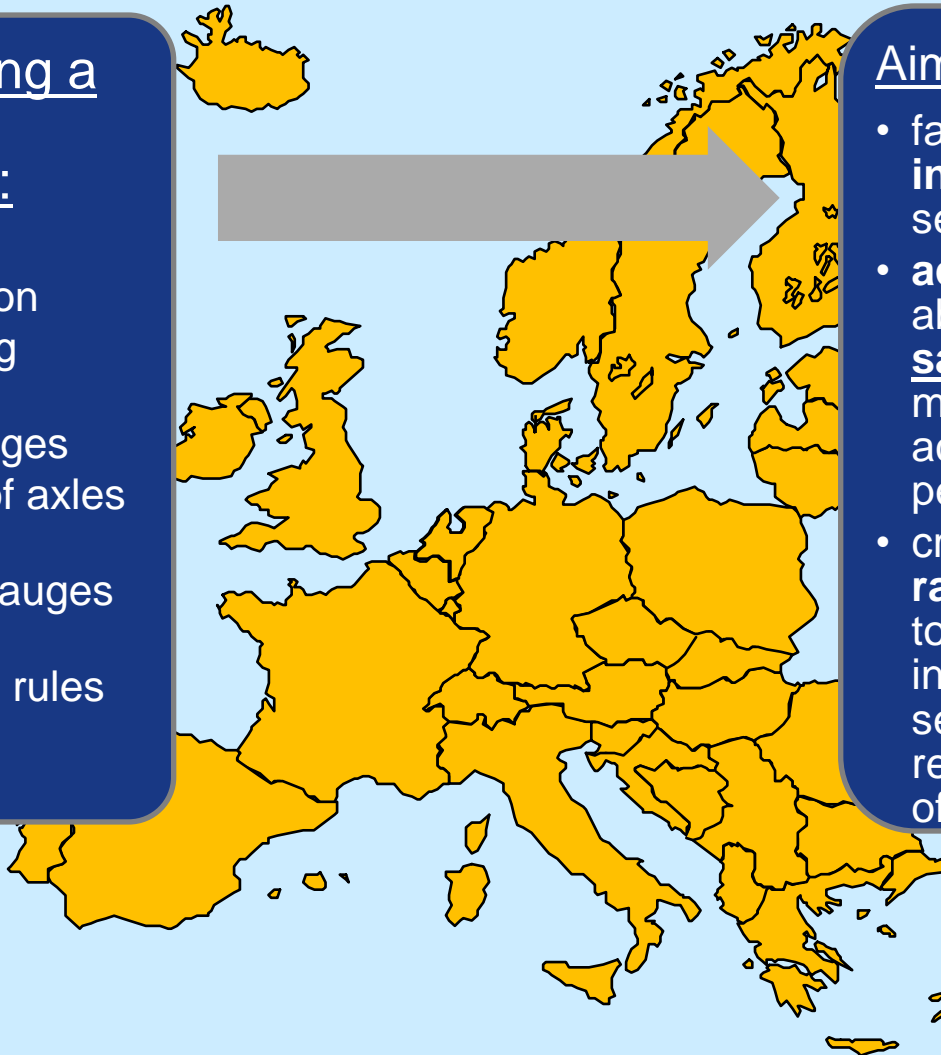
### **Regulation 1334/2008 amending the Regulation 881/2004 establishing a European Railway Agency**

# Questions?

- European legal framework
- **Principles of interoperability**
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## Today facing a technical patchwork:

- 5 types of electrification
- 21 signaling system
- 5 track gauges
- 5 classes of axles load
- 6 loading gauges
- national operational rules



## Aim of EU:

- facilitate, improve and develop **international rail transport services**
- **achieve 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
- create “**Common market for railways supplies**” = contribute to the progressive creation of the internal market in equipment and services for the construction, renewal, upgrading and operation of rail system in the Community

**To achieve the main goal – interoperability – the Directive 2008/57 requires the definition of an optimal level of technical harmonisation**

**Directive does not ask directly for standards but intermediate mandatory rules:**

**Technical Specifications for Interoperability – **TSIs****

**Due to its extent and complexity, for practical reasons, the rail system is broken down into the following subsystems (Dir. 2008/57, Annex II):**

- **structural areas:**
  - **infrastructure,**
  - **energy,**
  - **control-command and signalling,**
  - **rolling stock,**
- **functional areas:**
  - **traffic operation and management,**
  - **maintenance**
  - **telematics applications for passenger and freight services.**

**Directive fixes general essential requirements related to:**

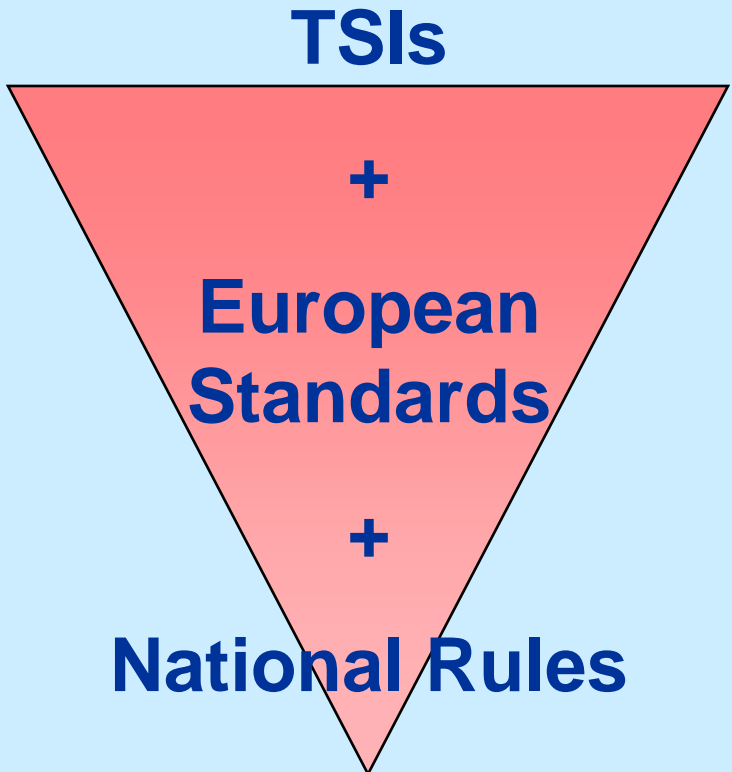
- **Safety,**
- **Reliability and availability,**
- **Health**
- **Environmental protection**
- **Technical compatibility**

**Plus requirements specific to each subsystem, related, when appropriate, to one or more of the above areas**

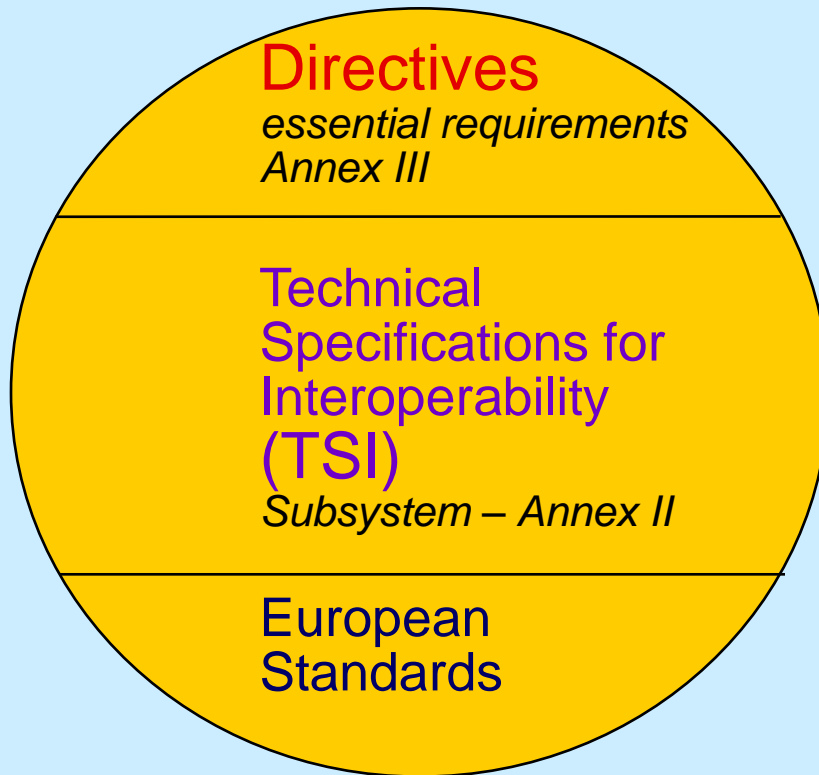
## YESTERDAY



## TODAY



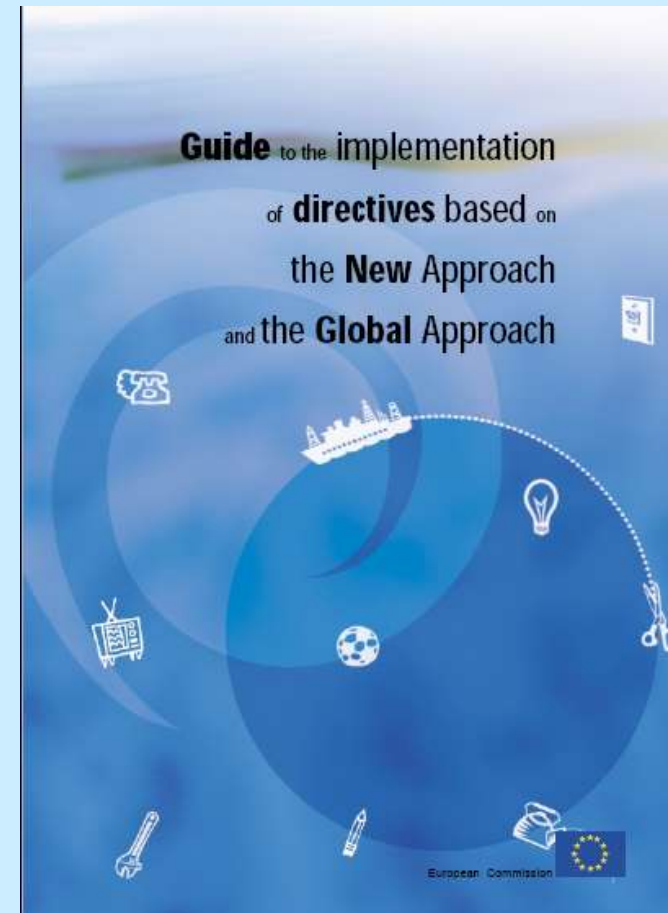
## Legal framework for interoperability (based on the „new approach” procedures)



Clear separation between the EEC legislation and European standardisation  
EEC legislative harmonisation (Directives) limited to the essential requirements  
Task of drawing up technical specifications (harmonised European Standards) entrusted to European Standardisation Bodies  
Standards remain voluntary

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- **Notified bodies** are in charge to apply the procedures of evaluation of the conformity
- **Members States** are responsible for their notification
- The series of standards EN 45000 and the accreditation are important instruments





# 38 HS + 44 CR Notified Bodies



- Delta Rail NoBol Ltd 1127\*
- Praxis Systems Ltd 1157\*
- Bombardier Transportation Notified Body 1156
- Correl Rail Ltd 1144\*
- Railway Approvals 1125\*
- Interfleet Technology Ltd 1133\*
- Lloyd's Register 0038\*
- Mott MacDonald Ltd 1124\*
- Atkins NoBo 1143
- Halcrow Rail Approvals 1675\*
- Network Rail Infrastructure



- KEMA RTC 0930\*
- Luxcontrol Netherland B.V. 1010\*
- NedTrain Consulting B.V. 0967\*
- Railcert B.V. 0941\*
- Lloyd's Register 0676\*



- SINTEF 1278\*
- Scandpower 2058



- Det Norske Veritas 1347\*
- TUV 1638 \*



- LLC Baltic centre 1696



- Vanaheim 1807\*

\* HS & CR



- VUD As 1358\*



- SNCH 0499



- CNTK 1467\*
- Trans Dozor Tech 1468\*
- Movares 1736 \*
- IPST 1940 \*



- Belgorail 1615\*



- TECHNA 2106
- VERITAS 2129
- SIQM 1304
- ZAG 1404



- APNCF 2101



- ADAF 0986\*



- RINA SPA 0474\*
- SCIRO 1782\*
- TUV 1936\*
- ITALCERTIFER 1960\*
- Consorzio SciroTuv 1287



- EBC 0893\*



- PQRS 2126



- CERTIFER 0942\*
- VERITAS 0062



- Arsenal Research 0894\*
- Bahn Consult 1602\*



- AFER 1867\*



- VUZ Institute 1714\*
- Technicky AZ 1020\*

***The task of the notified body responsible for the EC verification of a subsystem shall begin at the design stage and cover the entire manufacturing period through to the acceptance stage before the subsystem is placed in service***



EC DIR  
2008/57

Art. 18-2

- **The Manufacturer**
  - chooses the NoBo and the modules of assessment
- **The NoBo (if required by the modules)**
  - assess the IC
  - issues a certificate of conformity
- **The Manufacturer**
  - issues the EC declaration of conformity
  - places the IC on the EU market

- **The Contracting Entity (R.U., I.M. or manufacturer)**
  - choose the NoBo and the modules of assessment
- **The NoBo**
  - carries out the EC Verification
  - compiles the technical file
  - issues a certificate of conformity
- **The Contracting Entity**
  - issues the EC declaration of verification
- **The Member State**
  - authorises the putting into service (placing in service)

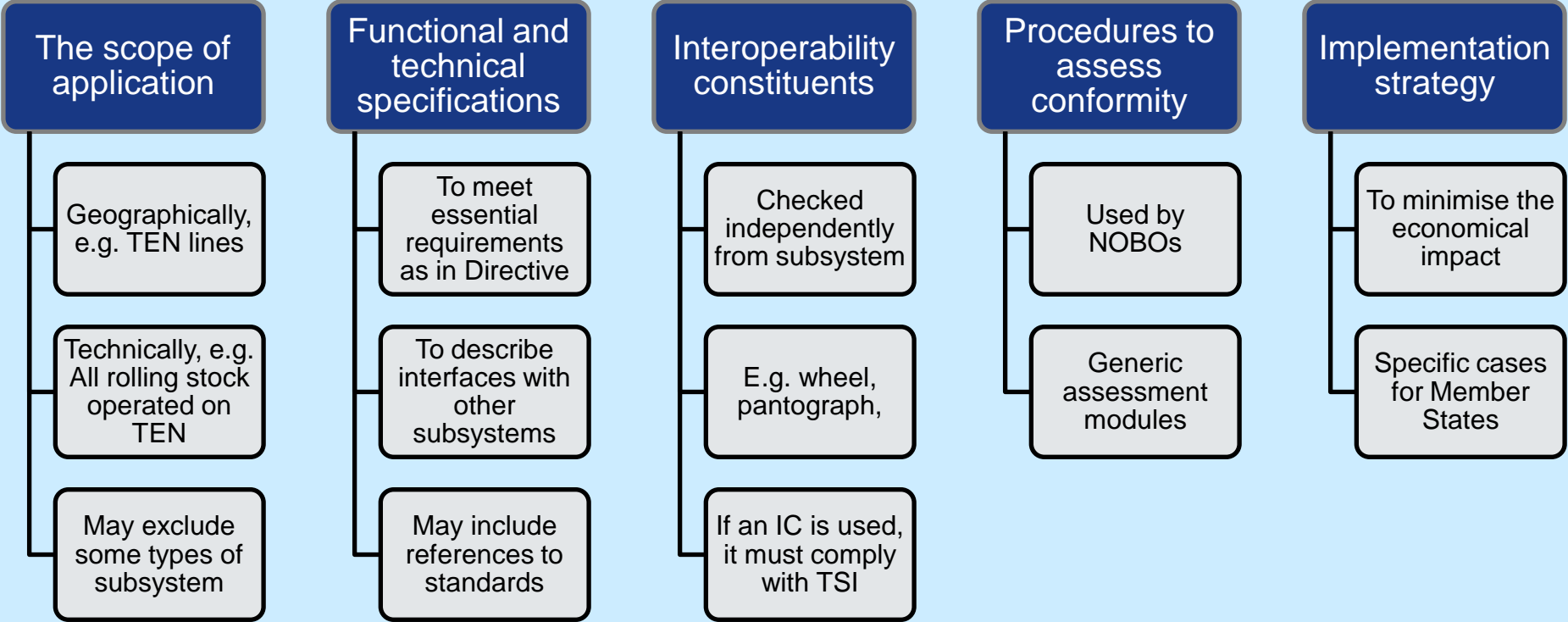
- **This is a task of Member State and is performed by National Safety Authority (NSA). The subsystems may be placed in service only if they meet the relevant essential requirements. In particular, MSs shall check:**
  - the technical compatibility of these subsystems with the system into which they are being integrated,
  - the safe integration of these subsystems in accordance with articles 4(3) and 6(3) of Safety Directive (2004/49).
- **When applicable, the assessment and verification procedures laid down in the relevant structural and functional TSIs shall be used**

# Questions?

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Technical Specifications for Interoperability (TSIs) set out the functional and technical requirements, necessary to achieve the objectives of the Directive. TSIs also define the assessment procedures and implementation strategy. **TSIs are not the design specifications !**

TSIs are applicable to the **new, upgraded and renewed** subsystems. TSIs are **not** applicable to the **existing** subsystems



**Both the requirements AND the assessment procedures are mandatory**

## **Mandatory aspects:**

**TSIs contain mandatory functionalities, specifications, testing procedures**

## **Voluntary aspects:**

**Standards extend definition of functionality, specifications and procedures of tests in recommending solutions used by the sector**

**When a standard/normative document is quoted in the TSI, it becomes mandatory**

**During drafting TSI, roadmap for new standard is established, mandate to draft accordingly new harmonised standards is given by Commission to the European Standardisation Bodies (CEN, CENELEC, ETSI)**

**Chapter 1: Technical and geographical scope**

**Chapter 2: Definition of sub-system**

**Chapter 3: How essential requirements are taken into account**

**Chapter 4: Characterisation of sub-system (basic parameters)**

**Chapter 5: Interoperability Constituents**

**Chapter 6: Assessment of conformity**

**Chapter 7: Implementation and specific cases**

## TSIs applicable for **high speed rail system**

<b>Updates of TSIs from 2002</b>	<b>Decision</b>	<b>Publication</b>	<b>In force</b>
<b>Maintenance</b>	30.05.2002 Decision 2002/730		To be withdrawn
<b>Control/Command &amp; Signalling - CCS</b>	7.11.2006 Decision 2008/860	7.12.2006 & 24.5.2008 (A)	7.11.2006 & 1.06.2008 (A)
<b>Infrastructure</b>	20.12.2007 Decision 2008/217	19.03.2008	1.07.2008
<b>Energy</b>	6.03.2008 Decision 2008/284	14.04.2008	1.10.2008
<b>Rolling Stock</b>	21.02.2008 Decision 2008/232	26.03.2008	1.09.2008
<b>Operation</b>	1.02.2008 Decision 2008/231	26.03.2008	1.09.2008

# TSIs applicable for **conventional rail system**

	<b>Decision</b>	<b>Publication</b>	<b>In force</b>
<b>Telematic Applications for Freight services - TAF</b>	<b>23.12.2005 Regulation 62/2006</b>	<b>18.01.2006</b>	<b>19.01.2006</b>
<b>Rolling Stock – Noise</b>	<b>23.12.2005 Decision 2006/66</b>	<b>8.02.2006</b>	<b>24.06.2006</b>
<b>Control/Command &amp; Signalling – CCS</b>	<b>28.03.2006 Decision 2006/679</b>	<b>16.10.2006</b>	<b>29.08.2006</b>
<b>Rolling Stock – Freight Wagons</b>	<b>28.07.2006 Decision 2006/861</b>	<b>8.12.2006</b>	<b>29.01.2007</b>
<b>Traffic Operation &amp; Management</b>	<b>11.08.2006 Decision 2006/920</b>	<b>18.12.2006</b>	<b>12.02.2007</b>
<b>Amendment to RST – Freight Wagons and Operation</b>	<b>23.01.2009 Decision 2009/107/EC</b>	<b>14.02.2009</b>	<b>01.07.02009</b>

# TSIs applicable for both conventional and high speed rail systems

	<b>Decision</b>	<b>Publication</b>	<b>In force</b>
<b>Safety in Railway Tunnels</b>	<b>20.12.2007 Decision 2008/163</b>	<b>7.03.2008</b>	<b>1.07.2008</b>
<b>Persons with reduced Mobility</b>	<b>21.12.007 Decision 2008/164</b>	<b>7.03.2008</b>	<b>1.07.2008</b>

- **Within the mandate from the Commission, ERA was charged with the task of drafting the TSIs for European conventional rail system**
- **The Agency is in charge of developing the draft documents that are later on subject of legal procedure („Commitology”) in order to be adopted by the Commission’s decision**
- **The Agency way of working is set up according to the Regulation 881/2004 establishing ERA, as amended by Regulation 1334/2008**

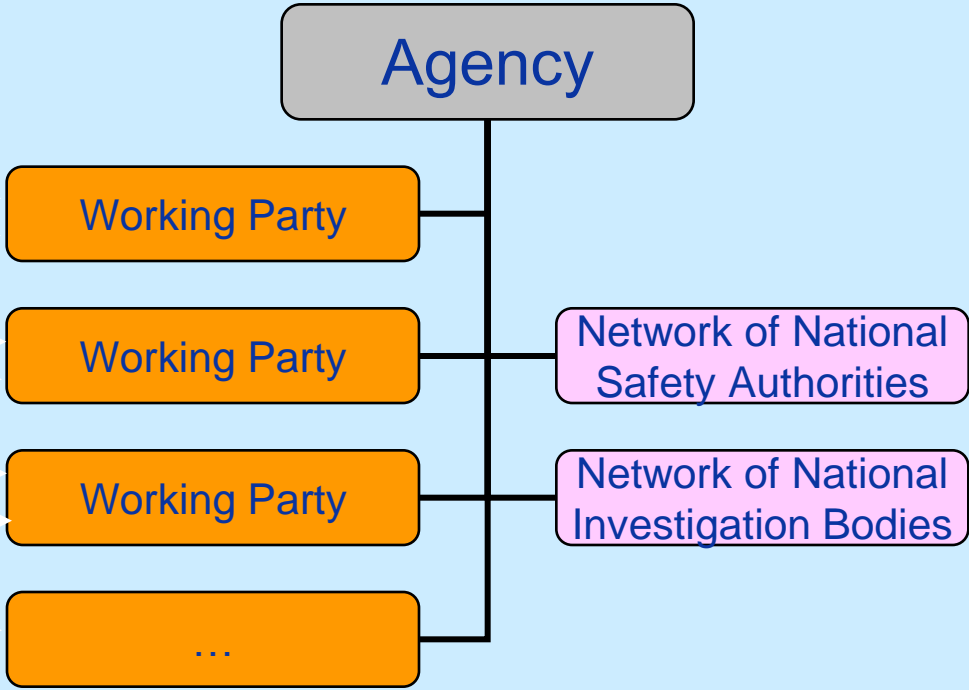
# Working Parties and Networks

Working Parties are set up according to the Agency Regulation and their tasks and organisation are adapted to the activities of the Work Programme

Sector organisations acting at European level\*:  
 UNIFE, CER, EIM, UITP, UIP, UIRR, ERFA, ETF, ALE

National Safety Authorities' experts

experts



\* List established by Article 21 Committee on 22 February 2005:

- Association of European Railway Industries (UNIFE)
- Community of European Railway and Infrastructure Companies (CER)
- European Rail Infrastructure Managers (EIM)
- International Association of Public Transport (UITP)

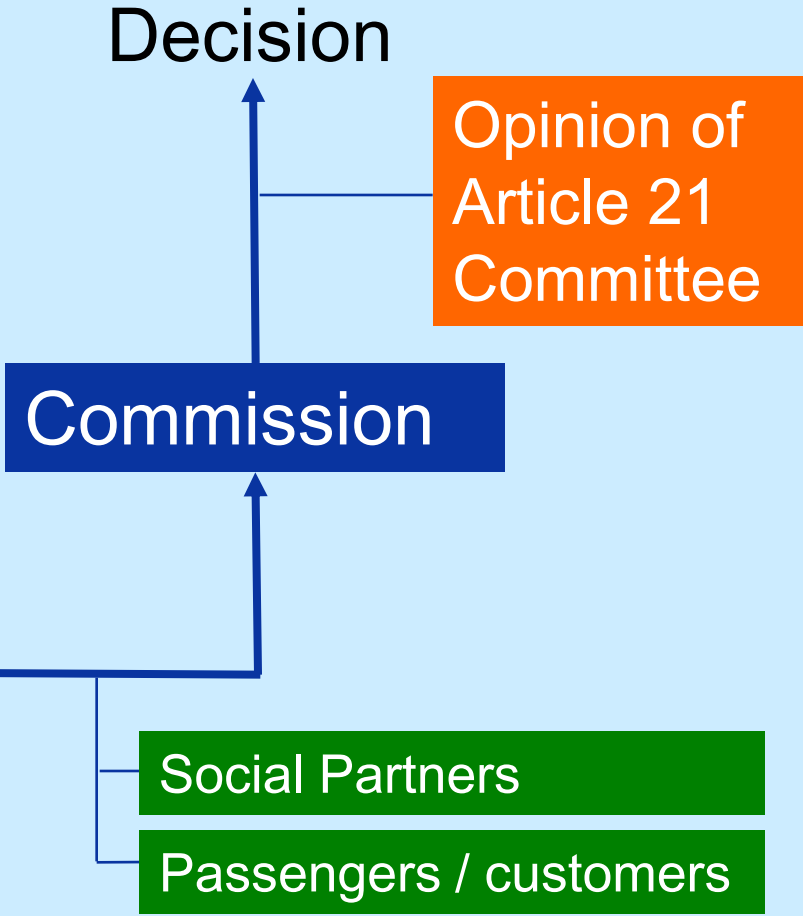
- International Union of Private Wagons (UIP)
- International Union of Combined Road-Rail Transport Companies (UIRR)
- European Rail Freight Association (ERFA)
- European Transport Workers' Federation (ETF)
- Autonome Lokomotivführer-Gewerkschaften Europas (ALE)

# The process to decisions

No decision power for the Agency, the Agency gives recommendations to the Commission and technical opinions upon specific request

**Agency**

- Working party ...
- NSA Network ...
- Internal reconciliation ...



## **TSI Infrastructure and TSI Energy**

- Workshop on 11 June 2009 (RISC meeting)
- Vote foreseen at the RISC meeting on 6-7 October 2009 (?)

## **TSI Locomotives and Passenger Rolling Stock**

- Workshop on 6 October 2009 (RISC meeting)
- Vote foreseen at the RISC meeting on 2-3 December 2009 (?)

# Questions?

