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	progress made towards achieving interoperability of the rail system		

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# REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

on the progress made towards achieving interoperability of the rail system

(Text with EEA relevance)

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# REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

## on the progress made towards achieving interoperability of the rail system

(Text with EEA relevance)

### 1. Introduction

This report describes the stage reached in achieving interoperability of the European rail system since the report adopted by the Commission in September 2009<sup>1</sup>. It responds to Article 39 of Directive 2008/57/EC<sup>2</sup>.

This report builds on the findings of the biennial report on progress with railway interoperability in the EU issued by the European Railway Agency on 1 March 2012<sup>3</sup>.

### 2. EVOLUTION OF THE INTEROPERABILITY INSTRUMENTS

## 2.1. The interoperability Directives

#### 2.1.1. *Overview*

Recast Directive 2008/57/EC entered into force on 19 July 2008. Directives 96/48/EC<sup>4</sup> and 2001/16/EC<sup>5</sup> were repealed with effect from 19 July 2010.

Directive 2008/57/EC was amended by the following acts:

- Commission Directive 2009/131/EC of 16 October 2009 amending Annex VII to Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community<sup>6</sup>;
- Commission Directive 2011/18/EU of 1 March 2011 amending Annexes II, V and VI to Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community<sup>7</sup>.

## 2.1.2. Transposition of the interoperability Directives

The deadline for transposing Directives 2008/57/EC and 2009/131/EC into national law was 19 July 2010. The deadline for transposing Directive 2011/18/EU into national law was 31 December 2011.

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Communication from the Commission to the Council and the European Parliament on a Progress Report on the implementation of the Railway Safety Directive and of the Railway Interoperability Directives. COM(2009) 464 final.

Directive 2008/57/EC of 17 June 2008 of the European Parliament and of the Council on the interoperability of the rail system within the Community, OJ L 191, 18.7.2008 p. 1.

http://www.era.europa.eu/Document-Register/Pages/Interoperabilitybiennialreport-2011.aspx.

Council Directive 96/48/EC of 23 July 1996 on the interoperability of the trans-European high-speed rail system, OJ L 235, 17.9.1996, pp. 6–24.

Directive 2001/16/EC of the European Parliament and of the Council of 19 March 2001 on the interoperability of the trans-European conventional rail system, OJ L 110, 20.4.2001, pp. 1–27.

<sup>&</sup>lt;sup>6</sup> OJ L 273, 17.10.2009, pp. 12–13.

<sup>&</sup>lt;sup>7</sup> OJ L 57, 2.3.2011, pp. 21–28.

By 20 November 2012, all Member States except Germany had notified national measures implementing Directives 2008/57/EC; however, measures notified by United Kingdom and France are considered partial because they are not yet applicable to the Channel Tunnel. By the same date, all Member States except Germany had notified national measures implementing Directive 2009/131/EC, and all Member States except Poland and Slovenia had notified national measures implementing Directive 2011/18/EU.

The Commission is closely monitoring the transposition of these interoperability Directives in Member States. If Member States fail to communicate national implementing measures, the Commission formally requests the Member States at fault to transpose the Directives concerned. By 31 August 2012, the Commission had launched infringement procedures against five Member States for failure to communicate national implementing measures.

The Commission departments, with the support of the European Railway Agency, are currently checking the conformity of the national implementing acts with these Directives. In the event of any non-conformity, the Member States are asked to produce further clarifications. If, after further analysis, the non-conformity is confirmed, a formal infringement procedure is launched against the Member State concerned.

The railway interoperability Directives involve a large amount of secondary legislation. In addition to the technical specifications for interoperability (TSIs, see 2.3), the Commission adopted the following acts:

- Commission Decision 2007/756/EC of 9 November 2007 adopting a common specification of the national vehicle register provided for under Article 14(4) and (5) of Directives 96/48/EC and 2001/16/EC8
- Commission Decision 2010/713/EU of 9 November 2010 on modules for the procedures for assessment of conformity, suitability for use and EC verification to be used in the technical specifications for interoperability adopted under Directive 2008/57/EC of the European Parliament and of the Council<sup>9</sup>;
- Commission Decision 2011/107/EU of 10 February 2011 amending Decision 2007/756/EC adopting a common specification of the national vehicle register<sup>10</sup>;
- Commission Regulation (EU) No 201/2011 of 1 March 2011 on the model of declaration of conformity to an authorised type of railway vehicle<sup>11</sup>;
- Commission Decision 2011/155/EU of 9 March 2011 on the publication and management of the reference document referred to in Article 27(4) of Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community<sup>12</sup>;
- Commission Recommendation 2011/217/EU of 29 March 2011 on the authorisation for the placing in service of structural subsystems and vehicles under Directive 2008/57/EC of the European Parliament and of the Council<sup>13</sup>:
- Commission Implementing Decision 2011/633/EU of 15 September 2011 on the common specifications of the register of railway infrastructure<sup>14</sup>;

<sup>8</sup> OJ L 305, 23.11.2007, pp. 30-51.

OJ L 319, 4.12.2010, pp. 1-52. 10

OJ L 43, 17.2.2011, pp. 33-54.

<sup>11</sup> OJ L 57, 2.3.2011, pp. 8–9.

<sup>12</sup> OJ L 63, 10.3.2011, pp. 22-25.

<sup>13</sup> OJ L 95, 8.4.2011, pp. 1–29.

<sup>14</sup> OJ L 256, 1.10.2011, pp. 1-25.

 Commission Implementing Decision 2011/665/EU of 4 October 2011 on the European register of authorised types of railway vehicles<sup>15</sup>

## 2.2. Technical Specifications for Interoperability

## 2.2.1. State of play

TSIs are the technical specifications for interoperability drafted by the European Railway Agency under a mandate by the Commission. Subsystems and interoperability constituents should comply with the relevant TSIs in order to meet the essential requirements set out in Directive 2008/57/EC and ensure interoperability of the rail system.

The first series of TSIs on trans-European high-speed rail (HS TSIs) was issued in 2002. Most of them were subsequently revised in 2008.

The second series of TSIs, mainly covering trans-European conventional rail (CR TSIs) and transversal issues such as safety in railway tunnels and accessibility to persons with reduced mobility, was published between 2006 and 2011.

A list of all TSIs adopted by the Commission as at 31 December 2012 is given in Annex I.

As already foreseen in the interoperability Directives currently in force, this legal framework is being further developed by correcting errors and close open points in TSIs, and extending the geographical scope of the TSIs to the whole European Union's rail system.

On this basis, the Agency is currently revising the following TSIs: operation and traffic management (OPE), freight wagons (WAG), locomotives and passenger rolling stock (LOC&PAS), control-command and signalling (CCS), telematics applications for passenger services (TAP) and for freight services (TAF), accessibility for persons with reduced mobility (PRM), safety in railway tunnels (SRT), infrastructure (INF) and energy (ENE).

Regarding the CCS TSI, the signature of the Memorandum of Understanding on 16 April 2012 records the agreement of all stakeholders to implement ERTMS (European Rail Traffic Management System) on the basis of the specifications 'Baseline 3' recommended by the Agency on the same date. In other words, all stakeholders recognise that the essential elements are now in the specifications. The related revision of the CCS TSI was adopted on 6 November 2012.

Regarding telematics applications, and following the example of the CCS TSI, the Agency has set up and manages the Change Control Management (CCM) for technical documents annexed to both telematics application TSIs, and monitors their implementation. Moreover, the implementation of both TSIs is supported by a steering committee and sector experts, and followed up according to a Master Plan.

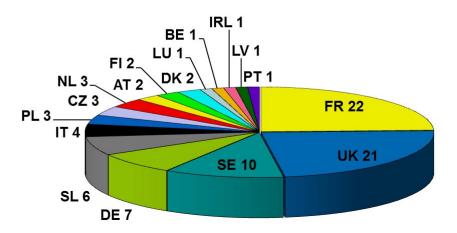
## 2.2.2. Analysis of TSI derogations

Derogations allow for exceptions from the application of TSIs under certain conditions laid down by the interoperability Directives currently in force. Between the year 2007 and 31 August 2012, the Commission received 90 derogation notifications from 17 Member States, as summarised in the following diagram:

OJ L 264, 8.10.2011, pp. 32–54.

## Derogations requested since 2007 under the Interoperability Directives 96/48/EC, 2001/16/EC and 2008/57/EC

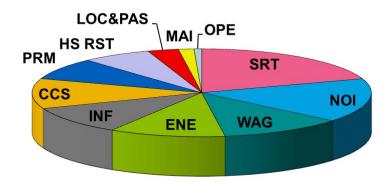
## Repartition by Member State (Situation on 03/09/2012)



These derogations relate to almost all TSIs in force, as the following diagram shows. The highest numbers of derogations were received for the TSIs on safety in railway tunnels (27 derogations), noise (22) and freight wagons (16).

## Derogations requested since 2007 under the Interoperability Directives 96/48/EC, 2001/16/EC and 2008/57/EC

## Repartition by TSI (Situation on 03/09/2012)



The derogations submitted by Member States to the Commission have revealed that the concept of 'advanced stage of development' (Article 9(1)(a) of the iInteroperability

Directive), which is a ground for possible TSI derogation, is sometimes applied too widely<sup>16</sup>. This could lead to broader derogation requests than those strictly intended in the sense of the EU legislation.

An analysis of the content of these derogations shows that Article 9 of Directive 2008/57/EC might be simplified and improved by clarifying the cases where it is possible to apply for a TSI derogation, streamlining the application procedure, and, in some cases, simplifying the content of the application file.

## 2.3. The registers

## 2.3.1. National vehicle register (NVR — Article 33 of the interoperability Directive)

The NVR specification was adopted by Commission Decision 2007/756/EC and amended by Commission Decision 2011/107/EU. NVRs are hosted by registration entities (RE) nominated by the Member States and are required to be connected to the virtual vehicle register (VVR), which is a central search engine.

ERA has developed the software used in a standard application for the NVR (sNVR) and the VVR. This software is made available to the REs free of charge. The sNVR and the VVR have been updated so as to take into account the changes introduced into Commission Decision 2011/107/EU. ERA is currently supporting the RE in establishing connections between their NVRs and the VVR.

2.3.2. European register of authorised types of vehicles (ERATV — Article 34 of the interoperability Directive)

The ERATV specification was adopted by Commission Decision 2011/665/EU. ERATV will be hosted by ERA and ERA will publish information provided by the NSAs.

ERA is developing a software application for this register. This application is planned to be in service by the end of 2012.

## 2.3.3. Register of infrastructure (RINF- Article 35 of the interoperability Directive)

The RINF specification was adopted by Commission Decision 2011/633/EU. The RINF will be hosted by entities nominated by the Member States and will be required to be connected to the common user interface (CUI).

ERA is carrying out a feasibility study with a view to defining the appropriate technical solution for the CUI.

### 2.4. Standardisation

On 28 January 2011, the Commission issued mandate M 483 for programming and standardisation addressed to the European standardisation bodies under Directive 2008/57/EC in the field of interoperability of the rail system within the European Union. This mandate replaces mandate M 275 of 13 November 1998 in the field of railway equipment on the interoperability of the trans-European high-speed rail system and mandate M 334 of 22 May 2003 in the field of the interoperability of the trans-European conventional rail system.

The list of harmonised standards under Directive 2008/57/EC was published in the Official Journal on 20 July 2011.

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For example, when it should have been possible to make the project TSI-compliant with little or no impact on the project schedule and cost.

### 3. PROGRESS TOWARDS INTEROPERABILITY

## 3.1. Implementation of interoperability

The biennial report on the progress of railway interoperability in the EU, issued by the European Railway Agency on 1 March 2012, provides detailed information on progress in railway interoperability. To measure the progress the Agency established three main groups of indicators: institutional (mainly for NSAs and NoBos (notified bodies)); legal (for the development of TSIs and the closure of the open points); and sub-system related (EC certificates, authorisations for rolling stock and fixed installations, etc.).

## 3.2. Remaining obstacles to interoperability

## 3.2.1. TSIs coverage and application

Residual open points in TSIs and the limited geographical scope of TSIs may hamper the future integration of the European rail system, as they constitute obstacles to interoperability. It will be essential, therefore, to close the open points and to extend the scope of TSIs to the entire EU rail system within a reasonably short period of time.

In 2011, the Agency, with the help of external consultants, conducted an ex-post analysis on the implementation of the PRM TSI in seven Member States. The evaluation revealed several major decision points for the application (or not) of the PRM TSI. In the case of existing infrastructure and rolling stock, a project is classified as a renewal or an upgrade (under the Interoperability Directive) depending on whether a change is 'major' or not. A broad range of interpretations of the term 'major' have been observed, resulting in wide variations in the application of the PRM TSI. This has contributed to limited application of the TSI and has held up progress in achieving a more accessible rail system.

Since the PRM TSI came into force in July 2008, Article 20 of the Interoperability Directive has often been invoked by Member States in the event of upgrade or renewal in order to decide arbitrarily whether a TSI is applied in full or not. Thus, whereas the PRM TSI should be applicable in cases of renewal or upgrade subject to provisions in Chapter 7 on implementation, and the only possibilities for non-application should be by way of derogation (Article 9 of the Directive) or specific case (Section 7.4 of the PRM TSI), this is undermined by the broader application of Article 20 of the interoperability Directive. To remedy this situation, the Commission addresses this issue in its fourth railway package proposals also with a better definition of the elements which shall be included in the TSIs regarding the cases of upgrade or renewal.

## 3.2.2. Placing in service of railway vehicles

Directive 2008/57/EC provides for authorisation for the placing in service of railway vehicles for each Member State, except when a full cross-acceptance of the first authorisation can be established in other Member States. Under this scheme, manufacturers and railway undertakings have suffered from the excessive duration and cost of the authorisation process.

The work carried out by the Commission departments and the European Railway Agency in 2010 allowed all players to come to an agreed understanding of the provisions of this Directive relating to the placing into service of rail vehicles. This led to the Commission Recommendation of 29 March 2011 on the authorisation for the placing in service of structural subsystems and vehicles under Directive 2008/57/EC of the European Parliament and of the Council.

However, in the course of that work new issues have emerged, such as difficulties with the implementation of Common Safety Methods on risk assessment and the mapping of safety hazards in TSIs in order to allow for the systematic use of TSIs rather than national rules.

For this reason, in September 2011 the Commission departments set up a Task Force bringing together all those concerned in order to analyse the problems encountered by the stakeholders during the authorisation process and identify areas for further improvement. The Task Force met five times and concluded its work in June 2012<sup>17</sup>.

The Task Force identified three types of problems:

- EU rail legislation is not always properly applied.
- EU rail legislation is not always correctly understood.
- EU rail legislation can be improved.

Therefore, in addition to closer monitoring of the implementation of EU rail legislation and wider dissemination and training activities, a revision of the EU process for the placing in service of vehicles is needed. This issue is addressed by the Commission in its fourth package proposals.

### 3.2.3. National rules

Other obstacles are the lack of transparency of national legal frameworks for vehicle authorisation and the lack of public availability of national rules. Both these aspects are being addressed by the European Railway Agency's current work on the classification and cross-referencing of national rules.

Finally, the continuing existence of national rules which are redundant or in conflict with the TSIs should also be further addressed, by the Member States in the first instance, and then by the European Railway Agency. In fact, until the TSIs are not fully extended to the entire Union rail system, a large number of national rules is still being notified by Member States. Following the extension of the TSIs to the entire Union's rail system and the closure of open points in the TSIs, Member States should remove national rules which are in conflict or redundant with the TSIs. The Commission's fourth package clarifies this. Furthermore, the Agency should be given more power vis-à-vis Member States with a view to removing inconsistent/discriminatory/disproportionate national rules. Therefore, the fourth package will enable the Agency to adopt opinions addressed to a Member State and stating the reasons why a national rule which is redundant or in conflict with the TSIs or any other EU legislation should not entry into force or be applied.

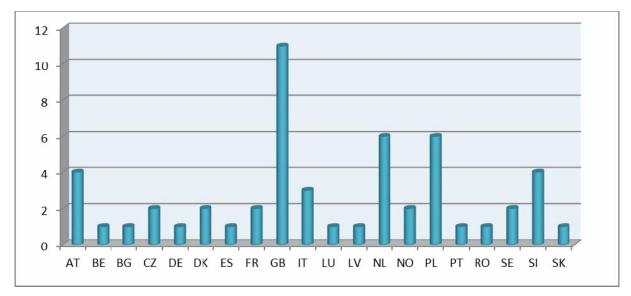
### 3.2.4. Notified bodies

On 20 November 2012, there were 53 Notified Bodies operating under Directive 2008/57/EC in the EU and Norway, distributed according to the following diagram<sup>18</sup>:

Source: NANDO

The final report of the Task Force is available at:

http://www.era.europa.eu/Document-Register/Pages/Report\_TF\_Railway\_Vehicles\_Auth.aspx



The main barrier to EU-wide competition between Notified Bodies is the applicant's language. In fact, applicants from countries using languages other than the working languages of the Notified Body are less likely to spend extra money on translation. Hence, genuine competition between Notified Bodies is within linguistic regions rather than at EU level.

From the experience gained in recent years, showing inter alia a heterogeneous level of competences of Notified Bodies, there appears to be a need to improve the monitoring and coordination of Notified Bodies' activities. The revision of Directive 2008/57/EC will provide an opportunity to apply the new legislative framework for the marketing of products, in particular the provisions of Decision 768/2008/EC concerning Notified Bodies.

### 4. CONCLUSIONS

The progress made thanks to the EU regulatory framework for railway interoperability will encourage the further development of the internal rail market, helping new businesses to emerge, cutting entry costs and, ultimately, improving the competitiveness of rail compared with other modes of transport.

The analyses carried out in this report show the following:

Secondary legislation on interoperability (TSIs and other legal measures) is now complete as far as the trans-European rail system is concerned. As already foreseen by the current legal framework, the large majority of TSIs are expected to be extended to the whole rail system in the European Union by 2015. Beyond this date, TSIs will be subject to regular revision to keep up with technical progress, market trends and social requirements.

Future revisions of TSIs should also simplify the regulatory environment, ensuring the relevance, effectiveness and proportionality of railway legislation. For example, greater use of voluntary European standards will be considered.

Furthermore, the extension of TSIs and the closure of their open points will enable the Agency and Member States to identify and repeal national rules which are redundant or incompatible with the TSIs. This simplification process, already possible under the current legislative framework, is enhanced and further clarified by the Commission in its fourth package proposals.

Similarly, in the fourth package the Commission proposes clarifications regarding the application of TSIs when existing subsystems are renewed or upgraded.

In the same package, the Commission emphasises the importance of the role and correct functioning of Notified Bodies by aligning the interoperability legislation with the new legislative framework for the marketing of products.

Finally, the fourth package also addresses the difficulties experienced in the current vehicle authorisation process, by introducing the notion of a single vehicle authorisation for placing on the market which will be valid throughout the European Union. This will entail a reinforced role for the Agency and an increased focus by national safety authorities on supervision tasks.

## Annex I

TSI	Document No	Publication OJ	Applicable since			
TSIs on Structural Subsystems (*): Infrastructure (INF), Energy (ENE), Control-Command and Signalling (CCS), Rolling Stock (RST, WAG, NOI)						
HS INF	Commission Decision 2002/732/EC	L 245/143 (2002)	01/12/2002			
HS INF Revision	Commission Decision 2008/217/EC	L 77/1 (2008)	01/07/2008			
HS ENE	Commission Decision 2002/733/EC	L 245/280 (2002)	01/12/2002			
HS ENE Revision	Commission Decision 2008/284/EC	L 104/1 (2008)	01/10/2008			
HS CCS	Commission Decision 2002/731/EC	L 245/37 (2002)	01/12/2002			
HS CCS Corrig.	-	L275/3 (2002)	01/12/2002			
HS CCS Revision	Commission Decision 2004/447/EC	L 155/67 (2004)	31/04/2004			
HS CCS Revision	Commission Decision 2006/860/EC	L 342/1 (2006)	07/11/2006			
HS CCS Revision	Commission Decision 2007/153/EC	L 67/13 (2007)	06/03/2007			
HS CCS Revision	Commission Decision 2008/386/EC	L 136/11 (2008)	01/06/2008			
HS RST	Commission Decision 2002/735/EC	L 245/402 (2002)	01/12/2002			
HS RST Revision	Commission Decision 2008/232/EC	L 84/132 (2008)	01/09/2008			
HS RST Corrig.	-	L 104/80 (2008)	01/09/2008			
CR RST LOC&PAS	Commission Decision 2011/291/EU	L 139/1 (2011)	01/06/2011			
CR CCS	Commission Decision 2006/679/EC	L 284/1 (2006)	28/09/2006			
CR CCS Revision	Commission Decision 2006/860/EC	L 342/1 (2006)	07/11/2006			
CR CCS Revision	Commission Decision 2007/153/EC	L 67/13 (2007)	06/03/2007			
CR CCS Revision	Commission Decision 2008/386/EC	L 136/11 (2008)	01/06/2008			
CR CCS Revision	Commission Decision 2010/79/EC	L37/74 (2010)	01/04/2010			
CR CCS	Commission Decision 2009/561/EC	L 194/60 (2009)	22/07/2009			
CR NOI	Commission Decision 2006/66/EC	L 37/1 (2006)	23/06/2006			
CR NOI Revision	Commission Decision 2011/229/EU	L 99/1 (2011)	05/04/2011			

TSI	Document No	Publication OJ	Applicable since		
CR WAG	Commission Decision 2006/861/EC	L 344/1 (2006)	31/01/2007		
CR WAG Revision	Commission Decision 2009/107/EC	L 45/1 (2009)	01/07/2009		
CR INF	Commission Decision 2011/275/EU	L 126 (2011)	01/06/2011		
CR ENE	Commission Decision 2011/274/EU	L 126 (2011)	01/06/2011		
HS & CR CCS Revision	Commission Decision 2012/88/EU	L 51 (2012)	26/07/2012		
HS & CR CCS Revision	Commission Decision 2012/696/EU	L 311 (2012)	01/01/2013		
TSIs on Functional Subsystems: Traffic Operation and Management (OPE), Telematics Applications for Passenger and Freight Services (TAP, TAF), Maintenance (MAI)					
HS OPE	Commission Decision 2002/734/EC	L 245/370 (2002)	01/12/2002		
HS OPE Revision	Commission Decision 2008/231/EC	L 84/1 (2008)	01/09/2008		
CR&HS OPE Revision	Commission Decision 2010/640/EC	L280/29 (2010)	25/10/2010		
CR OPE Revision	Commission Decision 2011/314/EU	L 144/1 (2011)	01/01/2012		
HS MAI	Commission Decision 2002/730/EC	L245/1 (2002)	01/12/2002		
HS MAI Corrig	-	L 275/5 (2002)	01/12/2002		
CR OPE	Commission Decision 2006/920/EC	L 359/1 (2006)	11/02/2007		
CR OPE Revision	Commission Decision 2008/231/EC	L 84/1 (2008)	01/09/2008		
CR OPE Revision	Commission Decision 2009/107/EC	L 45/1 (2009)	01/07/2009		
CR&HS OPE Revision	Commission Decision 2012/757/EU	L 345/1 (2012)	01/01/2014		
CR TAF	Commission Regulation 62/2006/EC	L 13/1 (2006)	19/01/2006		
CR TAF Revision	Commission Regulation (EU) 328/2012	L 106/14 (2012)	20/05/2012		
HS&CR TAP	Commission Regulation (EU) 454/2011	L 123/11 (2012)	13/05/2011		

TSI	Document No	Publication OJ	Applicable since	
HS&CR TAP Revision	Commission Regulation (EU) 665/2012	L 194/1 (2012)	22/07/2012	
Transversal TSIs: Accessibility for Persons with Reduced Mobility (PRM), Safety in Railway Tunnels (SRT), amendments to several TSIs (Omnibus)				
SRT	Commission Decision 2008/163/EC	L 64/1 (2008)	01/07/2008	
PRM	Commission Decision 2008/164/EC	L 64/72 (2008)	01/07/2008	
Omnibus 1	Commission Decision 2012/462/EU	L 217/1 (2012)	24/01/2013	
Omnibus 2	Commission Decision 2012/463/EU	L 217/11 (2012)	24/01/2013	
Omnibus 3	Commission Decision 2012/464/EU	L 217/20 (2012)	24/01/2013	

<sup>(\*)</sup> TSIs on Structural Subsystems (e.g. Wagons, Infrastructure) may also include functional requirements (e.g. on maintenance).