

## ANNEX I

### SCOPE

#### 1. Trans-European conventional rail system

##### 1.1. Network

The network of the trans-European conventional rail system will be that on the conventional lines of the trans-European transport network identified in Decision No 1692/96/EC.

For the purposes of this Directive, this network may be subdivided into the following categories:

- lines intended for passenger services,
- lines intended for mixed traffic (passengers and freight),
- lines specially designed or upgraded for freight services,
- passenger hubs,
- freight hubs, including intermodal terminals,
- lines connecting the abovementioned elements.

This network includes traffic management, tracking and navigation systems, technical installations for data processing and telecommunications intended for long-distance passenger services and freight services on the network in order to guarantee the safe and harmonious operation of the network and efficient traffic management.

##### 1.2. Vehicles

The trans-European conventional rail system shall comprise all the vehicles likely to travel on all or part of the trans-European conventional rail network, including:

- self-propelling thermal or electric trains,
- thermal or electric traction units,
- passenger carriages,
- freight wagons, including vehicles designed to carry lorries.

Mobile railway infrastructure construction and maintenance equipment may be included.

Each of the above categories may be subdivided into:

- vehicles for international use,
- vehicles for national use.

#### 2. Trans-European high-speed rail system

##### 2.1. Network

The network of the trans-European high-speed rail system shall be that of the high-speed lines of the trans-European transport network identified in Decision No 1692/96/EC.

The high-speed lines shall comprise:

- specially built high-speed lines equipped for speeds generally equal to or greater than 250 km/h,
- specially upgraded high-speed lines equipped for speeds of the order of 200 km/h,
- specially upgraded high-speed lines which have special features as a result of topographical, relief or town-planning constraints, on which the speed must be adapted to each case. This category also includes interconnecting lines between the high-speed and conventional networks, lines through stations, accesses to terminals, depots, etc. travelled at conventional speed by 'high-speed' rolling stock.

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This network includes traffic management, tracking and navigation systems, technical installations for data processing and telecommunications intended for services on these lines in order to guarantee the safe and harmonious operation of the network and efficient traffic management.

## 2.2. Vehicles

The trans-European high-speed rail system shall comprise vehicles designed to operate:

- either at speeds of at least 250 km/h on lines specially built for high speeds, while enabling operation at speeds exceeding 300 km/h in appropriate circumstances,
- or at speeds of the order of 200 km/h on the lines of section 2.1, where compatible with the performance levels of these lines.

In addition, vehicles designed to operate with a maximum speed lower than 200 km/h which are likely to travel on all or part of the trans-European high-speed network, where compatible with the performance levels of this network, shall fulfil the requirements ensuring safe operation on this network. To this end, the TSIs for conventional vehicles shall also specify requirements for safe operation of conventional vehicles on high-speed networks.

## 3. Compatibility of the railway system

The quality of rail services in Europe depends, *inter alia*, on excellent compatibility between the characteristics of the network (in the broadest sense, i.e. the fixed parts of all the subsystems concerned) and those of the vehicles (including the onboard components of all the subsystems concerned). Performance levels, safety, quality of service and cost depend upon that compatibility.

## 4. Extension of the scope

### 4.1. Subcategories of network and vehicles

The scope of the TSIs shall be progressively extended to the whole rail system as referred to in Article 1(4). In order to deliver interoperability cost-effectively further subcategories of all categories of network and vehicles mentioned in this Annex will, where necessary, be developed. If necessary, the functional and technical specifications mentioned in Article 5(3) may vary according to the subcategory.

### 4.2. Cost safeguards

The cost-benefit analysis of the proposed measures will take into consideration, among others, the following:

- cost of the proposed measure,
- benefits to interoperability of an extension of the scope to particular subcategories of networks and vehicles,
- reduction of capital costs and charges due to economies of scale and better utilisation of vehicles,
- reduction of investment and maintenance/operating costs due to increased competition between manufacturers and maintenance companies,
- environmental benefits, due to technical improvements of the rail system,
- increase of safety in operation.

In addition, this assessment will indicate the likely impact for all the operators and economic agents involved.

## [<sup>F1</sup>ANNEX II

### SUBSYSTEMS

#### Textual Amendments

- F1** Substituted by [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 \(Text with EEA relevance\)](#).

#### 1. List of subsystems

For the purposes of this Directive, the system constituting the rail system may be broken down into the following subsystems, either:

- (a) structural areas:
- infrastructure,
  - energy,
  - trackside control-command and signalling,
  - on-board control-command and signalling,
  - rolling stock,
- (b) functional areas:
- operation and traffic management,
  - maintenance,
  - telematics applications for passenger and freight services.

#### 2. Description of the subsystems

For each subsystem or part of a subsystem, the list of constituents and aspects relating to interoperability is proposed by the Agency at the time of drawing up the relevant draft TSI. Without prejudging the choice of aspects and constituents relating to interoperability or the order in which they will be made subject to TSIs, the subsystems include the following:

##### 2.1. *Infrastructure*

The track, points, engineering structures (bridges, tunnels, etc.), associated station infrastructure (platforms, zones of access, including the needs of persons with reduced mobility, etc.), safety and protective equipment.

##### 2.2. *Energy*

The electrification system, including overhead lines and the trackside of the electricity consumption measuring system.

##### 2.3. *Trackside control-command and signalling*

All the trackside equipment required to ensure safety and to command and control movements of trains authorised to travel on the network.

##### 2.4. *On-board control-command and signalling*

All the on-board equipment required to ensure safety and to command and control movements of trains authorised to travel on the network.

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## 2.5. *Operation and traffic management*

The procedures and related equipment enabling coherent operation of the various structural subsystems, during both normal and degraded operation, including in particular train composition and train driving, traffic planning and management.

The professional qualifications which may be required for carrying out cross-border services.

## 2.6. *Telematics applications*

In accordance with Annex I, this subsystem comprises two elements:

- (a) applications for passenger services, including systems which provide passengers with information before and during the journey, reservation and payment systems, luggage management and management of connections between trains and with other modes of transport;
- (b) applications for freight services, including information systems (realtime monitoring of freight and trains), marshalling and allocation systems, reservation, payment and invoicing systems, management of connections with other modes of transport and production of electronic accompanying documents.

## 2.7. *Rolling stock*

Structure, command and control system for all train equipment, electric current collection devices, traction and energy conversion units, on-board equipment for electricity consumption measuring, braking, coupling and running gear (bogies, axles, etc.) and suspension, doors, man/machine interfaces (driver, on-board staff and passengers, including the needs of persons with reduced mobility), passive or active safety devices and requisites for the health of passengers and on-board staff.

## 2.8. *Maintenance*

The procedures, associated equipment, logistics centres for maintenance work and reserves providing the mandatory corrective and preventive maintenance to ensure the interoperability of the rail system and guarantee the performance required.]

# ANNEX III

## ESSENTIAL REQUIREMENTS

### 1. General requirements

#### 1.1. Safety

- 1.1.1. The design, construction or assembly, maintenance and monitoring of safety-critical components, and more particularly of the components involved in train movements must be such as to guarantee safety at the level corresponding to the aims laid down for the network, including those for specific degraded situations.
- 1.1.2. The parameters involved in the wheel/rail contact must meet the stability requirements needed in order to guarantee safe movement at the maximum authorised speed. The parameters of brake equipment must guarantee that it is possible to stop within a given brake distance at the maximum authorised speed.

- 1.1.3. The components used must withstand any normal or exceptional stresses that have been specified during their period in service. The safety repercussions of any accidental failures must be limited by appropriate means.
- 1.1.4. The design of fixed installations and rolling stock and the choice of the materials used must be aimed at limiting the generation, propagation and effects of fire and smoke in the event of a fire.
- 1.1.5. Any devices intended to be handled by users must be so designed as not to impair the safe operation of the devices or the health and safety of users if used in a foreseeable manner, albeit not in accordance with the posted instructions.
- 1.2. Reliability and availability

The monitoring and maintenance of fixed or movable components that are involved in train movements must be organised, carried out and quantified in such a manner as to maintain their operation under the intended conditions.

### 1.3. Health

- 1.3.1. Materials likely, by virtue of the way they are used, to constitute a health hazard to those having access to them must not be used in trains and railway infrastructures.
- 1.3.2. Those materials must be selected, deployed and used in such a way as to restrict the emission of harmful and dangerous fumes or gases, particularly in the event of fire.

### 1.4. Environmental protection

- 1.4.1. The environmental impact of establishment and operation of the rail system must be assessed and taken into account at the design stage of the system in accordance with the Community provisions in force.
- 1.4.2. The materials used in the trains and infrastructures must prevent the emission of fumes or gases which are harmful and dangerous to the environment, particularly in the event of fire.
- 1.4.3. The rolling stock and energy-supply systems must be designed and manufactured in such a way as to be electromagnetically compatible with the installations, equipment and public or private networks with which they might interfere.
- [<sup>F2</sup>1.4.4. The design and operation of the rail system must not lead to an inadmissible level of noise generated by it:
  - in areas close to railway infrastructure, as defined in Article 3 of Directive 2012/34/EU, and
  - in the driver's cab.]

#### Textual Amendments

- F2** Substituted by [Commission Directive 2014/38/EU of 10 March 2014 amending Annex III to Directive 2008/57/EC of the European Parliament and of the Council as far as noise pollution is concerned \(Text with EEA relevance\)](#).

- 1.4.5. Operation of the rail system must not give rise to an inadmissible level of ground vibrations for the activities and areas close to the infrastructure and in a normal state of maintenance.

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## 1.5. Technical compatibility

The technical characteristics of the infrastructure and fixed installations must be compatible with each other and with those of the trains to be used on the rail system.

If compliance with these characteristics proves difficult on certain sections of the network, temporary solutions, which ensure compatibility in the future, may be implemented.

### [<sup>F3</sup>1.6. *Accessibility*

1.6.1. The ‘infrastructure’ and ‘rolling stock’ subsystems must be accessible to persons with disabilities and persons with reduced mobility in order to ensure access on an equal basis with others by way of the prevention or removal of barriers, and by way of other appropriate measures. This shall include the design, construction, renewal, upgrade, maintenance and operation of the relevant parts of the subsystems to which the public has access.

1.6.2. The ‘operations’ and ‘telematics applications for passengers’ subsystems must provide for the necessary functionality required to facilitate access to persons with disabilities and persons with reduced mobility on an equal basis with others by way of the prevention or removal of barriers, and by way of other appropriate measures.]

#### **Textual Amendments**

**F3** Inserted by [Commission Directive 2013/9/EU of 11 March 2013 amending Annex III to Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community \(Text with EEA relevance\).](#)

## 2. Requirements specific to each subsystem

### 2.1. Infrastructure

#### 2.1.1. Safety

Appropriate steps must be taken to prevent access to or undesirable intrusions into installations.

Steps must be taken to limit the dangers to which persons are exposed, particularly when trains pass through stations.

Infrastructure to which the public has access must be designed and made in such a way as to limit any human safety hazards (stability, fire, access, evacuation, platforms, etc.).

Appropriate provisions must be laid down to take account of the particular safety conditions in very long tunnels and viaducts.

#### [<sup>F3</sup>2.1.2. *Accessibility*

2.1.2.1. Infrastructure subsystems to which the public has access must be accessible to persons with disabilities and persons with reduced mobility in accordance with 1.6.]

### 2.2. Energy

#### 2.2.1. Safety

Operation of the energy-supply systems must not impair the safety either of trains or of persons (users, operating staff, trackside dwellers and third parties).

### 2.2.2. Environmental protection

The functioning of the electrical or thermal energy-supply systems must not interfere with the environment beyond the specified limits.

### 2.2.3. Technical compatibility

The electricity/thermal energy supply systems used must:

- enable trains to achieve the specified performance levels,
- in the case of electricity energy supply systems, be compatible with the collection devices fitted to the trains.

## 2.3. Control-command and signalling

### 2.3.1. Safety

The control-command and signalling installations and procedures used must enable trains to travel with a level of safety which corresponds to the objectives set for the network. The control-command and signalling systems should continue to provide for safe passage of trains permitted to run under degraded conditions.

### 2.3.2. Technical compatibility

All new infrastructure and all new rolling stock manufactured or developed after adoption of compatible control-command and signalling systems must be tailored to the use of those systems.

The control-command and signalling equipment installed in the train drivers' cabs must permit normal operation, under the specified conditions, throughout the rail system.

## 2.4. Rolling stock

### 2.4.1. Safety

The rolling-stock structures and those of the links between vehicles must be designed in such a way as to protect the passenger and driving compartments in the event of collision or derailment.

The electrical equipment must not impair the safety and functioning of the control-command and signalling installations.

The braking techniques and the stresses exerted must be compatible with the design of the tracks, engineering structures and signalling systems.

Steps must be taken to prevent access to electrically-live constituents in order not to endanger the safety of persons.

In the event of danger devices must enable passengers to inform the driver and accompanying staff to contact him.

The access doors must incorporate an opening and closing system which guarantees passenger safety.

Emergency exits must be provided and indicated.

Appropriate provisions must be laid down to take account of the particular safety conditions in very long tunnels.

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An emergency lighting system having a sufficient intensity and duration is an absolute requirement on board trains.

Trains must be equipped with a public address system which provides a means of communication to the public from on-board staff.

#### 2.4.2. Reliability and availability

The design of the vital equipment and the running, traction and braking equipment and also the control and command system must, in a specific degraded situation, be such as to enable the train to continue without adverse consequences for the equipment remaining in service.

#### 2.4.3. Technical compatibility

The electrical equipment must be compatible with the operation of the control-command and signalling installations.

In the case of electric traction, the characteristics of the current-collection devices must be such as to enable trains to travel under the energy-supply systems for the rail system.

The characteristics of the rolling stock must be such as to allow it to travel on any line on which it is expected to operate, taking account of relevant climatic conditions.

#### 2.4.4. Controls

Trains must be equipped with a recording device. The data collected by this device and the processing of the information must be harmonised.

#### [<sup>F</sup>2.4.5. Accessibility

2.4.5.1. Rolling stock subsystems to which the public has access must be accessible to persons with disabilities and persons with reduced mobility in accordance with 1.6.]

### 2.5. Maintenance

#### 2.5.1. Health and safety

The technical installations and the procedures used in the centres must ensure the safe operation of the subsystem and not constitute a danger to health and safety.

#### 2.5.2. Environmental protection

The technical installations and the procedures used in the maintenance centres must not exceed the permissible levels of nuisance with regard to the surrounding environment.

#### 2.5.3. Technical compatibility

The maintenance installations for rolling stock must be such as to enable safety, health and comfort operations to be carried out on all stock for which they have been designed.

### 2.6. Operation and traffic management

#### 2.6.1. Safety

Alignment of the network operating rules and the qualifications of drivers and on-board staff and of the staff in the control centres must be such as to ensure safe operation, bearing in mind the different requirements of cross-border and domestic services.



The maintenance operations and intervals, the training and qualifications of the maintenance and control centre staff and the quality assurance system set up by the operators concerned in the control and maintenance centres must be such as to ensure a high level of safety.

#### 2.6.2. Reliability and availability

The maintenance operations and periods, the training and qualifications of the maintenance and control centre staff and the quality assurance system set up by the operators concerned in the control and maintenance centres must be such as to ensure a high level of system reliability and availability.

#### 2.6.3. Technical compatibility

Alignment of the network operating rules and the qualifications of drivers, on-board staff and traffic managers must be such as to ensure operating efficiency on the rail system, bearing in mind the different requirements of cross-border and domestic services.

#### [<sup>F3</sup>2.6.4. Accessibility

2.6.4.1. Appropriate steps must be taken to ensure that operating rules provide for the necessary functionality required to ensure accessibility for persons with disabilities and persons with reduced mobility.]

#### 2.7. Telematics applications for freight and passengers

##### 2.7.1. Technical compatibility

The essential requirements for telematics applications guarantee a minimum quality of service for passengers and carriers of goods, particularly in terms of technical compatibility.

Steps must be taken to ensure:

- that the databases, software and data communication protocols are developed in a manner allowing maximum data interchange between different applications and operators, excluding confidential commercial data,
- easy access to the information for users.

##### 2.7.2. Reliability and availability

The methods of use, management, updating and maintenance of these databases, software and data communication protocols must guarantee the efficiency of these systems and the quality of the service.

##### 2.7.3. Health

The interfaces between these systems and users must comply with the minimum rules on ergonomics and health protection.

##### 2.7.4. Safety

Suitable levels of integrity and dependability must be provided for the storage or transmission of safety-related information.

#### [<sup>F3</sup>2.7.5. Accessibility

2.7.5.1. Appropriate steps must be taken to ensure that telematics applications for passengers subsystems provide for the necessary functionality required to ensure accessibility for persons with disabilities and persons with reduced mobility.]

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## ANNEX IV

### 'EC' DECLARATION OF CONFORMITY AND SUITABILITY FOR USE OF INTEROPERABILITY CONSTITUENTS

#### 1. Interoperability constituents

The 'EC' declaration applies to the interoperability constituents involved in the interoperability of the rail system, as referred to in Article 3. These interoperability constituents may be:

##### 1.1. Multiple-use constituents

These are constituents that are not specific to the railway system and which may be used as such in other areas.

##### 1.2. Multiple-use constituents having specific characteristics

These are constituents which are not, as such, specific to the railway system, but which must display specific performance levels when used for railway purposes.

##### 1.3. Specific constituents

These are constituents that are specific to railway applications.

#### 2. Scope

The 'EC' declaration covers:

- either the assessment by a notified body or bodies of the intrinsic conformity of an interoperability constituent, considered in isolation, to the technical specifications to be met,
- or the assessment/judgement by a notified body or bodies of the suitability for use of an interoperability constituent, considered within its railway environment and, in particular in cases where the interfaces are involved, in relation to the technical specifications, particularly those of a functional nature, which are to be checked.

The assessment procedures implemented by the notified bodies at the design and production stages will draw upon the modules defined in Decision 93/465/EEC, in accordance with the conditions referred to in the TSIs.

#### 3. Contents of the 'EC' declaration

The 'EC' declaration of conformity or of suitability for use and the accompanying documents must be dated and signed.

That declaration must be written in the same language as the instructions and must contain the following:

- the Directive references,
- name and address of the manufacturer or its authorised representative established within the Community (give trade name and full address; in the case of the authorised representative, also give the trade name of the manufacturer),
- description of interoperability constituent (make, type, etc.),
- description of the procedure followed in order to declare conformity or suitability for use (Article 13),
- all the relevant descriptions met by the interoperability constituent and, in particular, its conditions of use,

- name and address of the notified body or bodies involved in the procedure followed in respect of conformity or suitability for use and date of examination certificate together with, where appropriate, the duration and conditions of validity of the certificate,
- where appropriate, reference to the European specifications,
- identification of the signatory empowered to enter into commitments on behalf of the manufacturer or of the manufacturer's authorised representative established within the Community.

## [<sup>F4</sup>ANNEX V

### ‘EC’ DECLARATION OF VERIFICATION OF SUBSYSTEMS

#### Textual Amendments

- F4** Substituted by [Commission Directive 2014/106/EU of 5 December 2014 amending Annexes 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 \(Text with EEA relevance\)](#).

#### 1. ‘EC’ DECLARATION OF VERIFICATION OF SUBSYSTEMS

The ‘EC’ declaration of verification of a subsystem is a declaration established by the ‘applicant’ within the meaning of Article 18 in which he declares on his sole responsibility that the subsystem concerned, which has been subject to the relevant verifications procedures, satisfies the requirements of the relevant Union legislation, including any relevant national rules.

The ‘EC’ declaration of verification and the accompanying documents must be dated and signed.

The ‘EC’ declaration of verification must be based on the information resulting from the ‘EC’ verification procedure for subsystems set out in Annex VI. It must be written in the same language as the technical file accompanying the ‘EC’ declaration of verification and must contain at least the following:

- (a) the reference to this Directive, TSIs and applicable national rules,
- (b) the reference to the TSI(s) or their parts to which conformity has not been examined during EC verification procedure and to the national rules which have been applied in case of a derogation, partial application of TSIs for upgrade or renewal, transitional period in a TSI or specific case,
- (c) name and address of the ‘applicant’ within the meaning of Article 18 (specifying the trade name and full address; in the case of the authorised representative, specifying also the trade name of the contracting entity or the manufacturer),
- (d) a brief description of the subsystem,
- (e) name(s) and address(es) and the identification number(s) of the notified body(ies) which conducted the ‘EC’ verification(s) referred to in Article 18,
- (f) name(s) and address(es) and the identification number(s) of the notified body(ies) which conducted the assessment of conformity with other regulations deriving from the Treaty,

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- (g) name(s) and address(es) of the designated body(ies) which conducted the verification(s) of conformity with national rules referred to in Article 17(3),
- (h) name and address of the assessment body(ies) which established the safety assessment reports related to the use of the CSM on risk assessment where required by this Directive,
- (i) the references of the documents contained in the technical file accompanying the ‘EC’ declaration of verification,
- (j) all the relevant temporary or final provisions to be complied with by the subsystems and in particular, where appropriate, any operating restrictions or conditions,
- (k) the identity of the signatory (i.e. the physical person or persons authorised to sign the declaration)

Where reference is made in Annex VI to the ‘intermediate statement of verification’ (ISV), the provisions of this Section shall apply to that declaration.

## 2. ‘EC’ DECLARATION OF VERIFICATION OF SUBSYSTEMS IN THE CASE OF MODIFICATIONS

In a case of a modification, which is not a substitution in the framework of maintenance, of a subsystem covered by an ‘EC’ declaration of verification, without prejudice to Article 20, the following provisions apply.

- 2.1. If the entity introducing the modification demonstrates that the modification does not affect the basic design characteristics of the subsystem which are relevant for the compliance with the requirements concerning the basic parameters:
    - (a) the entity introducing the modification shall update the references of the documents contained in the technical file accompanying the ‘EC’ declaration of verification;
    - (b) no new ‘EC’ declaration of verification needs to be established.
  - 2.2. If the entity introducing the modification demonstrates that the modification affects the basic design characteristics of the subsystem which are relevant for the compliance with the requirements concerning some basic parameters:
    - (a) the entity introducing the modification shall establish a complementary ‘EC’ declaration of verification with reference to the basic parameters concerned;
    - (b) the complementary ‘EC’ declaration of verification shall be accompanied by a list of documents of the original technical file accompanying the original ‘EC’ declaration of verification that are no more valid;
    - (c) the technical file accompanying the ‘EC’ declaration of verification shall include a demonstration that the impact of modifications is limited to the basic parameters referred to in point (a);
    - (d) provisions of Section 1 of this Annex shall apply mutatis mutandis to this complementary ‘EC’ declaration of verification;
    - (e) the original ‘EC’ declaration of verification shall be considered valid for the basic parameters not concerned by the modification.
- ## 3. ‘EC’ DECLARATION OF VERIFICATION OF SUBSYSTEMS IN THE CASE OF ADDITIONAL VERIFICATIONS

An ‘EC’ declaration of verification of a subsystem may be complemented in the case of additional verifications carried out, in particular when such additional verifications are necessary for an additional authorisation for placing in service. In this case the scope of the complementary declaration shall be limited to the scope of the additional verifications.]

## [<sup>F4</sup>ANNEX VI

### ‘EC’ VERIFICATION PROCEDURE FOR SUBSYSTEMS

#### 1. GENERAL PRINCIPLES

“‘EC’ verification’ means a procedure carried out by the applicant within the meaning of Article 18 to demonstrate that the requirements of the relevant Union legislation including any relevant national rules relating to a subsystem have been fulfilled and the subsystem may be authorised to be placed in service.

#### 2. CERTIFICATE OF VERIFICATION ISSUED BY A NOTIFIED BODY

##### 2.1. Introduction

For the purpose of this Directive, the verification by reference to TSIs is the procedure whereby a notified body checks and certifies that the subsystem complies with the relevant technical specifications for interoperability (TSI).

This is without prejudice of the obligations of the contracting entity or manufacturer (i.e. the applicant in the meaning of Article 18) to comply with the other applicable legislation deriving from the Treaty, including any verifications by the assessment bodies required by the other legislation.

##### 2.2. Intermediate statement of verification (ISV)

###### 2.2.1. Principles

At the request of the contracting entity or manufacturer (i.e. the applicant in the meaning of Article 18), the verifications may be done for parts of a subsystem or may be limited to certain stages of the verification procedure. In these cases, the results of verification may be documented in an ‘intermediate statement of verification’ (ISV) issued by the notified body chosen by the contracting entity or manufacturer (i.e. the applicant in the meaning of Article 18).

The ISV must provide reference to the TSIs with which the conformity has been assessed.

###### 2.2.2. Parts of the subsystem

The applicant within the meaning of Article 18 may apply for an ISV for any part into which he decides to split the subsystem. Each part shall be checked at each stage as set out in point 2.2.3.

###### 2.2.3. Stages of the verification procedure

The subsystem, or certain parts of the subsystem, shall be checked at each of the following stages:

- (a) overall design,
- (b) production: construction, including, in particular, civil-engineering activities, manufacturing, constituent assembly and overall adjustment,

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- (c) final testing.

The applicant (within the meaning of Article 18) may apply for an ISV for the design stage (including the type tests) and for the production stage for the whole subsystem or for any part into which the applicant decided to split it (see paragraph 2.2.2).

### 2.3. Certificate of verification

- 2.3.1. The notified bodies responsible for the verification assesses the design, production and final testing of the subsystem and draw up the certificate of verification intended for the contracting entity or manufacturer (i.e. the applicant in the meaning of Article 18), who in turn draws up the 'EC' declaration of verification. The certificate of verification must provide reference to the TSIs with which the conformity has been assessed.

Where a subsystem has not been assessed for its conformity with all relevant TSI(s) (e.g. in the case of a derogation, partial application of TSIs for upgrade or renewal, transitional period in a TSI or specific case), the certificate of verification shall give the precise reference to the TSI(s) or their parts whose conformity has not been examined by the notified body during the verification procedure.

- 2.3.2. Where ISV have been issued, the notified body responsible for the verification of the subsystem takes these ISV into account, and, before issuing its certificate of verification:

- (a) verifies that the ISV cover correctly the relevant requirements of the TSI(s),
- (b) checks all aspects that are not covered by the ISV, and
- (c) checks the final testing of the subsystem as a whole.

- 2.3.3. In the case of a modification to a subsystem already covered by a certificate of verification, the notified body shall perform only those examinations and tests that are relevant and necessary, i.e. assessment shall relate only to the parts of the subsystem that are changed and their interfaces to the unchanged parts of the subsystem.

- 2.3.4. Each notified body involved in the verification of a subsystem shall draw up a technical file in accordance with Article 18(3) covering the scope of its activities.

### 2.4. Technical file accompanying the EC declaration of verification

The technical file accompanying the EC declaration of verification shall be assembled by the applicant (in the meaning of Article 18) and must contain the following:

- (a) technical characteristics linked to the design including general and detailed drawings with respect to execution, electrical and hydraulic diagrams, control-circuit diagrams, description of data-processing and automatic systems to the level of detail sufficient for documenting the verification of conformity carried out, documentation on operation and maintenance, etc., relevant for the subsystem concerned;
- (b) a list of interoperability constituents, referred to in Article 5(3)(d), incorporated into the subsystem;
- (c) the technical files referred to in Article 18(3), compiled by each of the notified bodies involved in the verification of the sub-system, which shall include:
  - copies of the 'EC' declarations of conformity and, where applicable, 'EC' declarations of suitability for use established for interoperability constituents referred to in Article 5(3)(d) and accompanied, where appropriate, by the corresponding calculation notes and a copy of the records of the tests and

- examinations carried out by the notified bodies on the basis of the common technical specifications,
- where available, the ISV that accompany the certificate of verification, including the result of verification by the notified body of the ISV validity,
  - the certificate of verification, accompanied by corresponding calculation notes and signed by the notified body responsible for the verification, stating that the subsystem complies with the requirements of the relevant TSI(s) and mentioning any reservations recorded during performance of the activities and not withdrawn; the certificate of verification should also be accompanied by the inspection and audit reports drawn up by the same body in connection with its task, as specified in points 2.5.2 and 2.5.3;
- (d) certificates of verification issued in accordance with other legislation deriving from the Treaty;
- (e) when verification of safe integration is required pursuant to Article 15, the relevant technical file shall include the assessors' report(s) on the common safety methods (CSM) on risk assessment referred to in Article 6(3) of Directive 2004/49/EC.

## 2.5. Surveillance by notified bodies

- 2.5.1. The notified body responsible for checking production must have permanent access to building sites, production workshops, storage areas and, where appropriate, prefabrication or testing facilities and, more generally, to all premises which it considers necessary for its task. The notified body must receive from the contracting entity or manufacturers (i.e. the applicant in the meaning of Article 18) all the documents needed for that purpose and, in particular, the implementation plans and technical documentation concerning the subsystem.
- 2.5.2. The notified body responsible for checking implementation must periodically carry out audits in order to confirm compliance with the relevant TSI(s). It must provide those responsible for implementation with an audit report. Its presence may be required at certain stages of the building operations.
- 2.5.3. In addition, the notified body may pay unexpected visits to the worksite or to the production workshops. At the time of such visits the notified body may conduct complete or partial audits. It must provide those responsible for implementation with an inspection report and, if appropriate, an audit report.
- 2.5.4. The notified body shall be able to monitor a subsystem on which an interoperability constituent is mounted in order to assess, where required by the corresponding TSI, its suitability for use in its intended railway environment.

## 2.6. Submission

A copy of the technical file accompanying the EC declaration of verification must be kept by the manufacturer or contracting entity (i.e. by the applicant in the meaning of Article 18) throughout the service life of the subsystem. It must be sent to any Member State which so requests.

The documentation submitted for an application for an authorisation for placing in service shall be submitted to the national safety authority of the Member State where the authorisation is sought. The national safety authority may request that part(s) of the documents submitted together with the authorisation is/are translated into its own language.

## 2.7. Publication

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Each notified body must periodically publish relevant information concerning:

- (a) requests for verification and ISV received,
- (b) request for assessment of conformity and suitability for use of ICs,
- (c) ISV issued or refused,
- (d) certificates of conformity and 'EC' certificates for suitability for use issued or refused,
- (e) certificates of verification issued or refused.

## 2.8. Language

The files and correspondence relating to the 'EC' verification procedure must be written in a Union official language of the Member State in which the contracting entity or manufacturers (i.e. the applicant in the meaning of Article 18) is established or in a Union official language accepted by the contracting entity or manufacturers (i.e. the applicant in the meaning of Article 18).

## 3. CERTIFICATE OF VERIFICATION ISSUED BY A DESIGNATED BODY

### 3.1. Introduction

In the case where national rules apply, the verification shall include a procedure whereby the body designated pursuant to Article 17(3), third subparagraph, (the designated body) checks and certifies that the subsystem complies with the national rules notified in accordance with Article 17(3) for each Member State in which the subsystem is intended to be authorised to be placed in service.

### 3.2. Certificate of verification

The designated body draws up the certificate of verification intended for the contracting entity or manufacturers (i.e. the applicant in the meaning of Article 18).

The certificate shall contain a precise reference to the national rule(s) whose conformity has been examined by the designated body in the verification process.

In the case of national rules related to the subsystems composing a vehicle, the designated body shall divide the certificate into two parts, one part including the references to those national rules strictly related to the technical compatibility between the vehicle and the network concerned, and the other part for all other national rules.

### 3.3. Technical file

The technical file compiled by the designated body and accompanying the certificate of verification in the case of national rules must be included in the technical file accompanying the 'EC' declaration of verification referred to in point 2.4 and shall contain the technical data relevant for the assessment of the conformity of the subsystem with those national rules.

### 3.4. Language

The files and correspondence relating to the 'EC' verification procedure must be written in a Union official language of the Member State in which the contracting entity or manufacturers (i.e. the applicant in the meaning of Article 18) is established or in a Union official language accepted by the contracting entity or manufacturers (i.e. the applicant in the meaning of Article 18).



#### 4. VERIFICATION OF PARTS OF SUBSYSTEMS IN ACCORDANCE WITH ARTICLE 18(5)

If a certificate of verification is to be issued for certain parts of a subsystem, provisions for this Annex shall apply *mutatis mutandis* for those parts.]

### ANNEX VII

#### PARAMETERS TO BE CHECKED IN CONJUNCTION WITH THE PLACING IN SERVICE OF NON-TSI CONFORM VEHICLES AND THE CLASSIFICATION OF THE NATIONAL RULES

- [<sup>F5</sup>1. List of parameters
- 1.1. General documentation  
*General documentation (including description of new, renewed or upgraded vehicle and its intended use, design, repair, operation and maintenance information, technical file, etc.)*
- 1.2. Structure and mechanical parts  
*Mechanical integrity and interface between vehicles (including draw and buffer gear, gangways), strength of vehicle structure and fittings (e.g. seats), loading capability, passive safety (including interior and exterior crashworthiness)*
- 1.3. Track interaction and gauging  
*Mechanical interfaces to the infrastructure (including static and dynamic behaviour, clearances and fits, gauge, running gear, etc.)*
- 1.4. Braking equipment  
*Braking-related items (including wheel-slide protection, braking control, and braking performance in service, emergency and parking modes)*
- 1.5. Passenger-related items  
*Passenger facilities and passenger environment (including passenger windows and doors, requirements for persons with reduced mobility, etc.)*
- 1.6. Environmental conditions and aerodynamic effects  
*Impact of the environment on the vehicle and impact of the vehicle on the environment (including aerodynamic conditions and both the interface between the vehicle and the trackside part of the railway system and the interface with the external environment)*
- 1.7. External warning, marking, functions and software integrity requirements  
*External warnings, markings, functions and integrity of software, e.g. safety-related functions with an impact on train behaviour including train bus*
- 1.8. Onboard power supply and control systems  
*Onboard propulsion, power and control systems, plus the interface of the vehicle with the power supply infrastructure and all aspects of electromagnetic compatibility*

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1.9. Staff facilities, interfaces and environment

*Onboard facilities, interfaces, working conditions and environment for staff (including drivers cabs, driver machine interface)*

1.10. Fire safety and evacuation

1.11. Servicing

*Onboard facilities and interfaces for servicing*

1.12. Onboard control, command and signalling

*All the onboard equipment necessary to ensure safety and to command and control movements of trains authorised to travel on the network and its effects on the trackside part of the railway system*

1.13. Specific operational requirements

*Specific operational requirements for vehicles (including degraded mode, vehicle recovery etc.)*

1.14. Freight related items

*Freight-specific requirements and environment (including facilities specifically required for dangerous goods)*

Explanations and examples *in italics* above are for information only and are not definitions of the parameters.]

**Textual Amendments**

**F5** Substituted by [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 \(Text with EEA relevance\).](#)

2. Classification of the rules

The national rules relating to the parameters identified in section 1 shall be attributed to one of the following three groups. Rules and restrictions of a strictly local nature are not involved; their verification involves checks to be put in place by mutual agreement between the railway undertakings and the infrastructure managers.

Group A

Group A covers:

- international standards,
- national rules deemed to be equivalent, in railway safety terms, to national rules of other Member States.

Group B

Group B covers all rules that do not fall within the scope of Group A or Group C, or that it has not yet been possible to classify in one of these groups.

Group C

Group C covers rules that are strictly necessary and are associated with technical infrastructure characteristics, in order to ensure safe and interoperable use in the network concerned (e.g. the loading gauge).

## ANNEX VIII

MINIMUM CRITERIA WHICH MUST BE TAKEN INTO ACCOUNT  
BY THE MEMBER STATES WHEN NOTIFYING BODIES

1. The body, its Director and the staff responsible for carrying out the checking operations may not become involved either directly or as authorised representatives in the design, manufacture, construction, marketing or maintenance of the interoperability constituents or subsystems or in their use. This does not exclude the possibility of an exchange of technical information between the manufacturer and that body.
2. The body and the staff responsible for the checks must carry out the checks with the greatest possible professional integrity and the greatest possible technical competence and must be free of any pressure and incentive, in particular of a financial type, which could affect their judgement or the results of their inspection, in particular from persons or groups of persons affected by the results of the checks.

In particular, the body and the staff responsible for the checks must be functionally independent of the authorities designated to issue authorisations for placing in service in the framework of this Directive, licences in the framework of Directive 95/18/EC and safety certificates in the framework of Directive 2004/49/EC, and of the bodies in charge of investigations in the event of accidents.

3. The body must employ staff and possess the means required to perform adequately the technical and administrative tasks linked with the checks; it should also have access to the equipment needed for exceptional checks.
4. The staff responsible for the checks must possess:
  - proper technical and vocational training,
  - a satisfactory knowledge of the requirements relating to the checks that they carry out and sufficient practice in those checks,
  - the ability to draw up the certificates, records and reports which constitute the formal record of the inspections conducted.
5. The independence of the staff responsible for inspections must be guaranteed. No official must be remunerated either on the basis of the number of inspections performed or of the results of those inspections.
6. The body must take out civil liability insurance unless that liability is covered by the State under national law or unless the checks are carried out directly by that Member State.
7. The staff of the body are bound by professional secrecy with regard to everything they learn in the performance of their duties (with the exception of the competent administrative authorities and accident investigation bodies in the State where they perform those activities as well as accident investigation bodies responsible for the investigation of accidents caused by the failure of the interoperability constituents or subsystems checked) in pursuance of this Directive or any provision of national law implementing the Directive.

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## ANNEX IX

### FILE FOR SUBMITTING A DEROGATION

When submitting a request for a derogation, Member States must supply the following documents:

- (a) A formal letter communicating the proposed derogation to the Commission.
- (b) A file, annexed to the letter, comprising at least:
  - a description of the work, goods and services subject to the derogation, specifying the key dates, the geographical location and the operational and technical area,
  - a precise reference to the TSIs (or their parts) for which a derogation is requested,
  - a precise reference to and details of the alternative provisions which will be applied,
  - for requests made under Article 7(1)(a), justification of the advanced stage of development of the project,
  - justification of the derogation, including the main reasons of a technical, economic, commercial, operational and/or administrative nature,
  - any other information justifying the request for a derogation,
  - a description of the measures that the Member State proposes to take in order to promote the final interoperability of the project. In the case of a minor derogation, this description is not required.

Documentation must be supplied in paper form and as electronic files, so that it can be distributed among the members of the Committee.

## ANNEX X

### PART A

#### Directives repealed

**(referred to in Article 40)**

Directive 96/48/EC	
Directive 2001/16/EC	
Directive 2004/49/EC	Only Article 14

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## PART B

**Time limits for transposition into national law****(referred to in Article 40)**

<b>Directive</b>	<b>Deadline for transposition</b>
96/48/EC	9 April 1999
2001/16/EC	20 April 2003
2004/49/EC	30 April 2006

## ANNEX XI

## CORRELATION TABLE

<b>Directive 96/48/EC</b>	<b>Directive 2001/16/EC</b>	<b>This Directive</b>
Article 1(1)	Article 1(1)	Article 1(1)
Article 1(2)	Article 1(2)	Article 1(2)
—	—	Article 1(3)
—	Article 1(3)	Article 1(4)
Article 2, introductory wording	Article 2, introductory wording	Article 2, introductory wording
Article 2(a) to (l)	Article 2(a) to (l)	Article 2(a) to (b) and (e) to (m)
—	—	Article 2(c) and (d)
Article 2(n)	Article 2(m)	Article 2(n)
Article 2(o)	Article 2(n)	Article 2(o)
Article 2(m)	Article 2(o)	Article 2(p)
Article 2(p)	Article 2(p)	Article 2(q)
—	—	Article 2(r) to (z)
Articles 3, 4 and 5	Articles 3, 4 and 5	Articles 3, 4 and 5(1) to (5)
Article 5(6)	Article 5(7)	Article 5(7)
—	—	Article 5(6)
—	—	Article 5(8)
Article 6(1) to (8)	Article 6(1) to (8)	Article 6(1) to (8)
—	—	Article 6(9) to (10)
—	—	Articles 7 and 8
Article 7	Article 7	Article 9

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Article 8	Article 8	Article 10(1)
Article 9	Article 9	Article 10(2)
Article 10(1) to (3)	Article 10(1) to (3)	Article 11(1) to (3)
—	Article 10(6)	Article 11(4)
—	—	Article 11(5)
Articles 11 to 13	Articles 11 to 13	Articles 12 to 14
Article 14(1) and (2)	Article 14(1) and (2)	Article 15(1) and (2)
Article 14(3)	Article 14(3)	Article 20
Article 14(4) and (5)	Article 14(4) and (5)	Article 33
—	—	Article 15(2) and (3)
Articles 15 and 16	Articles 15 and 16	Articles 16 and 17
Article 16(3)	Article 16(3)	Article 17(3)
—	—	—
Article 18(1) to (3)	Article 18(1) to (3)	Article 18(1) to (3)
—	—	Article 18(4) and (5)
Article 19	Article 19	Article 19
Article 20	Article 20	Article 28
—	—	Articles 21 to 27
Article 21(1) to (3)	Article 21(1) to (3)	Article 29(1) to (3)
—	—	Article 29(4) and (5)
—	—	—
Article 21a(1)	Article 22	Article 30(2)
Article 21(4)	21(4)	Article 30(4)
Article 21a(2)	Article 21a	Article 30(1)
Article 21b	—	—
Article 21c	Article 21b	Article 30(3)
Article 22	Article 26	Article 37
Article 22a	Article 24	Articles 34 and 35
—	—	Article 32
—	Article 23	Article 31
—	Article 25	Article 36
Article 23	Article 27	Article 38
Article 24	Article 28	Article 39
—	—	Article 40

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Article 25	Article 29	Article 41
Article 26	Article 30	Article 42
Annexes I to VI	Annexes I to VI	Annexes I to VI
—	—	Annex VII
Annex VII	Annex VII	Annex VIII
—	—	Annexes IX to XI