Commission Decision of 14 November 2012 concerning the technical specification for interoperability relating to the 'operation and traffic management' subsystem of the rail system in the European Union and amending Decision 2007/756/EC (notified under document C(2012) 8075) (Text with EEA relevance) (2012/757/EU)

Article 1	Subject matter
Article 2	Scope
Article 3	Open points
Article 3a	Specific cases
Article 3b	Notification of bilateral agreements
Article 3c	Notification of rules related to the type of rear end signal
Article 3d	Implementation
Article 4	Decisions 2008/231/EC and 2011/314/EU are hereby repealed with effect from
Article 5	Decision 2007/756/EC is hereby amended as follows: The following Article
Article 6	(1) The Agency shall publish on its website the lists
Article 7	This Decision shall apply from 1 January 2014.
Article 8	This Decision is addressed to the Member States.

# ANNEX I

# 1. INTRODUCTION

- 1.1. Technical scope
- 1.2. Geographical scope
- 1.3. Content of this TSI

### 2. DESCRIPTION OF SUBSYSTEM/SCOPE

- 2.1. Subsystem
- 2.2. Scope
  - 2.2.1. Staff and trains
  - 2.2.2. Principles
  - 2.2.3. Applicability to existing vehicles and infrastructure

### 3. ESSENTIAL REQUIREMENTS

- 3.1. Compliance with the essential requirements
- 3.2. Essential requirements overview

# 4. CHARACTERISTICS OF THE SUBSYSTEM

- 4.1. Introduction
- 4.2. Functional and technical specifications of the subsystem
  - 4.2.1. Specifications relating to staff
    - 4.2.1.1. General requirements
    - 4.2.1.2. Documentation for drivers
      - 4.2.1.2. Driver's Rule Book

- 4.2.1.2.2Description of the line and the relevant line-side equipment associated...
  - 4.2.1.2.2 Pteparation of the Route Book
  - 4.2.1.2.2 Modifications to information contained within the Route Book
  - 4.2.1.2.2.16 forming the driver in real time
- 4.2.1.2.3Timetables
- 4.2.1.2.4 Rolling stock
- 4.2.1.3. Documentation for railway undertaking staff other than drivers
- 4.2.1.4. Documentation for infrastructure manager's staff authorising train movements
- 4.2.1.5. Safety-related communications between train crew, other railway undertaking staff and...
- 4.2.2. Specifications relating to trains
  - 4.2.2.1. Train visibility
    - 4.2.2.1. IGeneral requirement
    - 4.2.2.1.2Front end
    - 4.2.2.1.3 Rear end
      - 4.2.2.1.3 Plassenger trains
        - 4.2.2.1.3EPeight trains in international traffic
        - 4.2.2.1. EBeight trains not crossing a border between
          - Member States
  - 4.2.2.2. Train audibility
    - 4.2.2.2. IGeneral requirement
    - 4.2.2.2.2. Control
  - 4.2.2.3. Vehicle identification
  - 4.2.2.4. Safety of passengers and load
    - 4.2.2.4. Safety of load
      - 4.2.2.4.28 afety of passengers
  - 4.2.2.5. Train composition
  - 4.2.2.6. Train braking
    - 4.2.2.6. Minimum requirements of the braking system
    - 4.2.2.6.2 Braking performance and maximum speed allowed
  - 4.2.2.7. Ensuring that the train is in running order
    - 4.2.2.7. General requirement
    - 4.2.2.7.2 Data required
  - 4.2.2.8. Requirements for signal and line-side marker sighting
  - 4.2.2.9. Driver vigilance
- 4.2.3. Specifications relating to train operations
  - 4.2.3.1. Train planning
    - 4.2.3.2. Identification of trains
      - 4.2.3.2. Format of train running number
    - 4.2.3.3. Train departure
      - 4.2.3.3. Checks and tests before departure
      - 4.2.3.3.2nforming the infrastructure manager of the train's operational status
  - 4.2.3.4. Traffic management
    - 4.2.3.4. General requirements
    - 4.2.3.4.2 Train reporting
      - 4.2.3.4.2Data required for train position reporting
      - 4.2.3.4.2P2edicted handover time
    - 4.2.3.4.3 Dangerous goods
    - 4.2.3.4.4 Operational quality

- 4.2.3.5. Data recording
  - 4.2.3.5. Recording of supervision data outside the train
  - 4.2.3.5. Recording of supervision data on board the train
- 4.2.3.6. Degraded operation
  - 4.2.3.6. Advice to other users
  - 4.2.3.6.2Advice to train drivers
  - 4.2.3.6. Contingency arrangements
- 4.2.3.7. Managing an emergency situation
- 4.2.3.8. Aid to train crew in the event of an incident...
- 4.3. Functional and technical specifications of the interfaces
  - 4.3.1. Interfaces with the infrastructure TSI
    - 4.3.2. Interfaces with the control-command and signalling TSI
    - 4.3.3. Interfaces with the rolling stock TSIs
      - 4.3.3.1. Interfaces with TSI on locomotives and passenger rolling stock
      - 4.3.3.2. Interfaces with TSI on freight wagons
  - 4.3.4. Interfaces with the Energy TSI
  - 4.3.5. Interfaces with TSI on Safety in Railway Tunnels
- 4.4. Operating rules

4.7.

- 4.5. Maintenance rules
- 4.6. Professional competences
  - 4.6.1. Professional competence
  - 4.6.2. Language competence
    - 4.6.2.1. Principles
    - 4.6.2.2. Level of knowledge
  - 4.6.3. Initial and ongoing assessment of staff
    - 4.6.3.1. Basic elements
    - 4.6.3.2. Analysis and update of training needs
  - 4.6.4. Auxiliary staff
  - Health and safety conditions
  - 4.7.1. Introduction
    - 4.7.2. Medical examinations and psychological assessments
      - 4.7.2.1. Before appointment
        - 4.7.2.1. Minimum content of the medical examination
        - 4.7.2.1.2 Psychological assessment
      - 4.7.2.2. After appointment
        - 4.7.2.2. Frequency of periodic medical examinations
        - 4.7.2.2.2 Minimum content of the periodic medical examination
        - 4.7.2.2.3Additional medical examinations and/or
          - psychological assessments
    - 4.7.3. Medical requirements
      - 4.7.3.1. General requirements
      - 4.7.3.2. Vision requirements
      - 4.7.3.3. Hearing requirements
- 4.8. Registers of infrastructure and vehicles
  - 4.8.1. Infrastructure
  - 4.8.2. Rolling stock
- 5. INTEROPERABILITY CONSTITUENTS
  - 5.1. Definition
  - 5.2. List of constituents
- 6. ASSESSMENT OF CONFORMITY AND/OR SUITABILITY FOR USE OF THE CONSTITUENTS...

- 6.1. Interoperability constituents
- 6.2. Operation and traffic management subsystem 6.2.1. Principles

### 7. IMPLEMENTATION

- 7.1. Principles
- 7.2. Implementation guidelines
- 7.3. Specific cases
  - 7.3.1. Introduction
  - 7.3.2. List of specific cases
    - 7.3.2.1. Temporary specific case (T1) Estonia, Latvia and Lithuania
    - 7.3.2.2. Temporary specific case (T2) Ireland and United Kingdom
      - 7.3.2.3. Temporary specific case (T3) Finland
      - 7.3.2.4. Permanent specific case (P1) Finland

### Appendix A

ERTMS/ETCS operating rules

## Appendix B

Common operational principles and rules

- 1. SANDING
- 2. DEPARTURE OF THE TRAIN
- 3. NO AUTHORISATION FOR TRAIN MOVEMENT AT THE EXPECTED TIME
- 4. COMPLETE FAILURE OF FRONT-END LIGHTS
  - 4.1. During good visibility
  - 4.2. During darkness or poor visibility
- 5. COMPLETE FAILURE OF A REAR-END SIGNAL
  - (1) If the signaller becomes aware of the complete failure of...
  - (2) The driver shall then check the completeness of the train...
  - (3) The driver shall report to the signaller that the train...
- 6. FAILURE OF THE AUDIBLE WARNING DEVICE OF A TRAIN
- 7. FAILURE OF LEVEL CROSSING
  - 7.1. Stopping trains passing over a defective level crossing
  - 7.2. Passing trains over the defective level crossing (if authorised)
    - (1) Where the nature of the failure permits train movements to...
    - (2) After being instructed to pass over the level crossing with...
    - (3) When approaching the level crossing, the driver shall use the...
- 8. FAILURE OF VOICE RADIO COMMUNICATION
  - 8.1. Failure of train radio detected during train preparation
    - 8.2. Failure of train radio when the train has entered service...
- 9. RUNNING ON SIGHT
- 10. ASSISTANCE TO A FAILED TRAIN
  - (1) If a train is stopped by failure, the driver must...
  - (2) When an assisting train is needed, the driver and signaller...
  - (3) The signaller must not allow the assisting train to enter...
  - (4) The driver of the combined train must make sure that:...
  - (5) When the combined train is ready to continue, the driver...

- 11. AUTHORISATION TO PASS A SIGNAL SHOWING A STOP ASPECT/ INDICATION
- 12. ANOMALIES IN LINE-SIDE SIGNALLING
- 13. EMERGENCY CALL
- 14. IMMEDIATE ACTIONS TO PREVENT DANGER TO TRAINS
  - (1) Any RU/IM staff who become aware of a danger to...
  - (2) Any driver made aware of a danger to their train...

### Appendix C

Safety-related communications methodology

- 1. SCOPE AND PURPOSE
  - 1.1 This Appendix sets out the rules for safety-related communications, between...
- 2. COMMUNICATIONS STRUCTURE
  - 2.1 The voice transmission of safety-related messages shall be short and...
  - 2.2 Emergency messages are intended to give urgent operational instructions that...
- 3. COMMUNICATION METHODOLOGY
  - 3.1 Drivers shall identify themselves by the train running number and...
  - 3.2 For communication between signallers and drivers it is the signallers'...
  - 3.3 The following messages shall be used for this purpose by...
- 4. COMMUNICATION RULES
  - 4.1 In order that safety-related communication is correctly understood, whatever the...
  - 4.2 The International Phonetic Alphabet shall be used:
  - 4.3 The numbers shall be spoken digit by digit:
- 5. TERMS (GENERAL)
  - 5.1 Speech transmission procedure
    - 5.1.1 Term transferring the opportunity to speak to the opposite party:...
  - 5.2 Message receiving procedure
    - 5.2.1 Upon receiving a direct message
    - 5.2.2 Term used to have the message repeated in the event...
    - 5.2.3 Upon receipt of a message that has been read back...
    - 5.2.4 or not:
  - 5.3 Communications breaking procedure
    - 5.3.1 If the message has ended:
    - 5.3.2 If break is temporary and the connection is not broken...
    - 5.3.3 Term used to tell the other party that the communication...
- 6. WRITTEN ORDERS
  - 6.1 A written order must only be issued when the train...
  - 6.2 A written order takes precedence over the related indications provided...
  - 6.3 A written order should be issued as close as practicable...
  - 6.4 A written order must only be issued when the driver...
  - 6.5 A written order must state the following as a minimum:...
  - 6.6 A written order may be transmitted:
  - 6.7 When the driver receives a written order the driver shall...
  - 6.8 A written order that has been issued can only be...
- 7. TERMS (WRITTEN ORDERS)

Cancelling a written order

- 7.1 Term used to cancel the written order procedure underway:
- 7.2 If the message is then subsequently to be resumed, the...
- Error during transmission

7.3 When a transmission error is discovered by the sender, the... Error during read-back

7.4 When the sender discovers an error whilst the message is... Misunderstanding

- 7.5 If one of the parties does not fully understand a...
- 8. BOOK OF FORMS
  - 8.1 The infrastructure manager is responsible for drawing up the Book...
  - 8.2 All the forms to be used shall be assembled in...
  - 8.3 In order to identify the forms, a unique code word...
  - 8.4 This Book of Forms shall be used by both the...
  - 8.5 The Book of Forms shall comprise two parts.
  - 8.5.1 The first part contains at least the following items:
  - 8.5.2 The second part contains the forms themselves. These must be...
- 9. GLOSSARY OF RAILWAY TERMINOLOGY
  - 9.1 The railway undertaking shall produce a glossary of railway terminology...
  - 9.2 The glossary shall be composed of two parts:

### Appendix D

Elements the infrastructure manager has to provide to the railway...

#### Appendix E

Language and communication level

### Appendix F

Minimum elements relevant to professional qualification for the tasks associated...

- 1. GENERAL REQUIREMENTS
  - (a) This Appendix, which must be read in conjunction with points...
  - (b) The expression ' professional qualification ', when taken within...
  - (c) Rules and procedures apply to the tasks being performed and...
- 2. PROFESSIONAL KNOWLEDGE
  - 2.1. General professional knowledge
    - (a) Principles of organisation's safety management system, relevant to the tasks....
    - (b) Roles and responsibilities of the key players involved in operations....
    - (c) General conditions relevant to the safety of passengers or cargo...
    - (d) Conditions of health and safety at work.
    - (e) General principles of security of the railway system.

- (f) Personal safety including when leaving the train on the running...
- 2.2. Knowledge of operational procedures and safety systems relevant to the...
  - (a) Operational procedures and safety rules.
  - (b) Relevant aspects of control command and signalling system.
  - (c) Formalised messaging procedure including use of communication equipment.
- 2.3. Knowledge of rolling stock
  - (a) Passenger vehicle interior equipment.
  - (b) Appropriate knowledge of safety-critical tasks in respect to procedures and...
- 2.4. Knowledge of the route
  - (a) Relevant operational arrangements (such as the method of train despatch)...
  - (b) Stations at which passengers may alight or board the train....
  - (c) Local operating and emergency arrangements specific to the line(s) of...
- 2.5. Knowledge on passenger safety
- 3. ABILITY TO PUT THE KNOWLEDGE INTO PRACTICE

### Appendix G

Minimum elements relevant to professional qualification for the task of...

- 1. GENERAL REQUIREMENTS
  - (a) This Appendix, which must be read in conjunction with point...
  - (b) The expression ' professional qualification ', when taken within...
  - (c) Rules and procedures apply to the task being performed and...
- 2. PROFESSIONAL KNOWLEDGE
  - 2.1. General professional knowledge
    - (a) Principles of organisation's safety management system, relevant to the task....
    - (b) Roles and responsibilities of the key players involved in operations....
    - (c) General conditions relevant to the safety of passengers and/or cargo...
    - (d) Appreciation of hazards, especially in relation to the risks involving...
    - (e) Conditions of health and safety at work.
    - (f) General principles of security of the railway system.
    - (g) Personal safety when on or in the vicinity of rail...
    - (h) Communications principles and formalised messaging procedure including use of communication...
    - 2.2. Knowledge of operational procedures and safety systems relevant to the...
      - (a) Working of trains in normal, degraded and emergency situations.
      - (b) Operational procedures at individual locations (signalling, station/depot/yard equipment) and safety...
      - (c) Local operating arrangements.
    - 2.3. Knowledge of train equipment

- (a) Purpose and use of wagon and vehicle equipment.
- (b) Identification of and arranging for technical inspections.
- (c) Appropriate knowledge of safety-critical tasks in respect to procedures and...
- 3. ABILITY TO PUT THE KNOWLEDGE INTO PRACTICE

### Appendix H

European Vehicle Number and linked alphabetical marking on the bodywork...

- 1. GENERAL PROVISIONS ON THE EUROPEAN VEHICLE NUMBER
- 2. GENERAL ARRANGEMENTS FOR EXTERNAL MARKINGS
- 3. WAGONS
- 4. COACHES AND HAULED PASSENGER STOCK
- 5. LOCOMOTIVES, POWER CARS AND SPECIAL VEHICLES
- 6. ALPHABETICAL MARKING OF THE INTEROPERABILITY CAPABILITY

## Appendix I

List of open points Appendix B (see point 4.4)

Appendix J

# ANNEX II

The Annex to Decision 2007/756/EC is amended as follows: Chapter 1 is amended as follows: The description of the...

- (1) OJ L 191, 18.7.2008, p. 1.
- (2) OJ L 164, 30.4.2004, p. 1.
- (**3**) OJ L 84, 26.3.2008, p. 1.
- (**4**) OJ L 144, 31.5.2011, p. 1.
- (5) OJ L 305, 23.11.2007, p. 30.

#### **Changes to legislation:**

There are outstanding changes not yet made to Commission Decision of 14 November 2012 concerning the technical specification for interoperability relating to the 'operation and traffic management' subsystem of the rail system in the European Union and amending Decision 2007/756/EC (notified under document C(2012) 8075) (Text with EEA relevance) (2012/757/EU). Any changes that have already been made to the legislation appear in the content and are referenced with annotations.

View outstanding changes

#### Changes and effects yet to be applied to :

- Decision partial repeal by EUR 2019/773 Regulation (This amendment by the EU not applied to legislation.gov.uk because it is brought into force after IP completion day.)
- Decision repeal by EUR 2019/773 Regulation (This amendment by the EU not applied to legislation.gov.uk because it is brought into force after IP completion day.)
- Art. 1-4 revoked by S.I. 2020/318 Sch. 2
- Art. 6-8 revoked by S.I. 2020/318 Sch. 2