Implementation Plan TSI OPE

Implementation plan according to Article 3d (2) of Commission Regulation 2015/995/EU of 8 June 2015 amending Decision 2012/757/EU concerning the technical specification for interoperability relating to the ‘operation and traffic management’ subsystem of the rail system in the European Union
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1 Introduction
Commission Regulation 2015/995/EU of 8 June 2015 amending Decision 2012/757/EU concerning the technical specification for interoperability relating to the ‘operation and traffic management’ subsystem of the rail system in the European Union (hereafter TSI OPE or the TSI) is part of Norwegian law according to Regulation 19 June 2012 no. 564 on the implementation of TSI operation and traffic management § 1.

The EEA States shall, according to Article 3d (2) of the Regulation, prepare a national implementation plan, describing the actions they plan to take to comply with the Decision, in accordance with Section 7 of Annex I. The national implementation plan shall be forwarded to the EFTA Surveillance Authority by 1 July 2017 at the latest.

The Norwegian implementation plan is based on previous implementation plans. It describes the principles for the implementation, how the legal implementation will take place and how the conformity assessments shall be performed.

2 The TSI OPE in brief
The purpose of the TSI is to specify the subsystem operation and traffic management as specified in Annex II point 2.5 to the Interoperability Directive¹, namely:

«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.»

The TSI does not give the complete specification for operating a railway undertaking and running trains, but is a common set of rules for ensuring the interoperability of this subsystems and those affecting it. The TSI also defines who is responsible for fulfilling those requirements. TSI OPE hereby ensures that the different subsystems are functioning well together after they are placed into service, and during their lifecycle. Together with the other national rules and the remaining parts of the safety management systems of the railway undertakings and infrastructure managers, TSI OPE gives a coherent framework for ensuring an interoperable railway system when fully implemented in the target system.

The technical and geographical scope of the TSI follows from chapter 1 of the TSI and § 7 in the Interoperability Regulation². The TSI applies to the operation of trains on the railway network and sets out the rules for preparing trains, train running, traffic planning and management during both normal and degraded operation and professional qualifications, health and safety conditions etc.

Chapter 2 contains the essential definitions, and defines the types of personnel subject to health and qualifications requirements. The TSI covers personnel undertaking safety-critical tasks on board trains and contains requirements for train drivers in addition to the health and qualifications requirements set out in the Driver Regulation³. The TSI also sets out requirements for personnel in border-crossing traffic and requirements for mutual recognition for staff undertaking safety-critical tasks associated with train preparation and train despatch.

¹ Directive 2008/57/EC of 17 June 2008 on the interoperability of the Community railway system
² Regulation 16 June 2010 no. 820 on the interoperability of the national railway network, see https://lovdata.no/dokument/SF/forskrift/2010-06-16-820
³ Regulation 27 November 2009 no. 1414 on the certification of train drivers on the national railway network, see https://lovdata.no/dokument/SF/forskrift/2009-11-27-1414
Chapter 3 contains references to the relevant essential requirements and how these are further specified by the TSI.

Chapter 4 lists the functional and technical requirements and specifies the interfaces to the other subsystems.

According to chapter 5, there are no interoperability constituents for the subsystem operation and traffic management.

In chapter 6, the procedures for verifications and suitability for use are described.

Chapter 7 contains the framework for the implementation of the TSI, hereunder the strategic guidelines. This implementation plan needs to take these guidelines into consideration.

The appendixes of the TSI contains more in detail the specific requirements for certain areas, such as operating rules for ERTMS-equipped lines, common operational rules and principles and rules for safety-related communications methodology, specification of the elements the infrastructure manager has to provide to the railway undertaking for the Route Book and for the train compatibility over the route intended for operation, minimum elements relevant to professional qualification for staff and rules for marking and identification of vehicle.

3 Implementation in general

The basic principles for implementing parts of the EEA Agreement into Norwegian law apply. In this chapter these are considered together with the guidelines and principles from chapter 7 in the TSI.

3.1 Principles for the implementation

TSI OPE is taken into Norwegian law with legal base in the Interoperability Regulation § 3 paragraph six (now paragraph eight). The Interoperability Regulation transposed the Interoperability Directive into Norwegian law. The purpose of these rules is to ensure the interoperability of the railway system. This means that when introducing new systems or procedures or adapting existing systems and procedures, the interoperability of the systems or procedures must be considered. The authorizing of subsystems or new procedures must be based on the existing relevant TSIs and additional national rules when the latter exist and are permitted.

Chapter 7.1 of the TSI sets the principles for the implementation:

«Implementation of this TSI and conformity with the relevant points of this TSI must be determined in accordance with an implementation plan that must be drawn up by each Member State for the lines for which they are responsible.

This plan must take into account:
(a) the specific human factors issues associated with operating any given line;
(b) the individual operating and safety elements of each line involved; and
(c) whether implementation of the element(s) under consideration is to be:
   – for all trains on the line, or not,
   – only for certain lines, 30.6.2015 EN Official Journal of the European Union L 165/39
   – applicable on all lines,
   – applicable to all trains running on the network;
   – the relationship with implementation of the other subsystems (control-command and signalling, rolling stock, etc.).
At this time any specific exceptions that may be applicable should be taken into account and documented as part of the plan.

The implementation plan must take into account the various levels of potential for implementation from any of the following events, namely when:
(a) a railway undertaking or infrastructure manager commences operations;
(b) a renewal or upgrade to the existing operational systems of a railway undertaking or infrastructure manager is introduced;
(c) new or upgraded infrastructure, energy, rolling stock or command control and signalling subsystems, requiring a corresponding set of operating procedures, are put into service.

It is commonly understood that the full implementation of all elements of this TSI cannot be complete until the hardware (infrastructure, control and command, etc.) that is to be operated has been harmonised. The guidelines set out in this Chapter must therefore only be seen as an interim phase supporting migration to the target system.»

3.2 Implementation guidelines
Chapter 7.2 of the TSI sets out the «Implementation guidelines»:

«There are three distinct elements to implementation:
(a) confirmation that any existing systems and processes comply with the requirements of this TSI;
(b) adaptation of any existing systems and processes to comply with the requirements of this TSI;
(c) new systems and processes arising from implementation of other subsystems
   − new/upgraded conventional lines (infrastructure/energy),
   − new or upgraded ETCS signalling installations, GSM-R radio installations, hot axle box detectors, etc. (control-command and signalling),
   − new rolling stock (rolling stock)»

3.3 Implementation in other states
The Member States must prepare a national implementation plan according to Article 3d (2). The guidelines for this are the same for all Member States according to Chapter 7.2 of the TSI.

TSI OPE is a Commission Regulation, and has direct effect in the Member States. Norway has collaborated with Sweden and Denmark in the preparation of the implementation plan.

4 Implementation in Norwegian law

4.1 Adaption to the railway legislation
The TSI as such is made a national regulation by means of Regulation 19 June 2012 no. 564 on the implementation of TSI operation and traffic management on the national railway network. There are no adaptation texts or specific cases for Norway, so the entire TSI is a national regulation. The text must be read with the normal EEA adaptations following from the EEA Agreement, especially Protocol 1 to the Agreement.
As stated in previous implementation plans, there are a number of requirements in the existing railway legislation that correspond to requirements in the TSI. The Operation Regulation\textsuperscript{4} and the ERTMS Operation\textsuperscript{5} Regulation essentially regulates the same conditions as those in the TSI OPE, but the scope and degree of specification of the rules are different. The Operation Regulation § 1-1 paragraph four and the ERTMS Operation Regulation § 1-1 paragraph two both declare that TSI OPE supersedes national rules in case of conflict.

It can be derived from the principle of loyalty expressed in Article 3 of the EEA Agreement that a situation in which the same rule or requirement are based both in an EEA legal act and a national rule should be avoided. Furthermore, the latest version of the TSI OPE is a regulation, and shall therefore be implemented in Norwegian law "as such", see Article 7 (a) of the EEA Agreement.

The Norwegian Railway Authority has submitted a hearing proposing the repeal of the Operation Regulation and the ERTMS Operation Regulation. The Authority aims to repeal the regulations with effect from 1 June 2019. This eliminates Norway's national rules in accordance with the guidelines for the EEA countries. In the currently ongoing revision of the TSI OPE, the European Union Agency for Railways has expressed that Appendix I will list permitted national rules. There is therefore still a possibility that national rules will be part of Norwegian legislation in 2019.

4.2 Geographical scope for the requirements
According to chapter 7.1 paragraph two c) of the TSI OPE, it must be considered whether the implementation of the different parts of the TSI shall apply to all trains on the line, or not, only for certain lines, all lines or all trains running on the network. The requirements of the TSI OPE apply to infrastructure managers and railway undertakings related to the operation of trains on the national railway network, see TSI chapter 2.2 and the Interoperability Regulation § 7.

4.3 Implementation plan for the TSI OPE 2015/995/EU
It is verified compliance with all chapters in the TSI OPE, except from those described below.

a) Chapter 4.2.2.6 (Train braking) shall be implemented on lines equipped with ERTMS. On already existing lines current rules will remain in force.

b) Chapter 4.2.3.5 (Data recording) shall be implemented on new or significantly upgraded infrastructure and vehicles, according to relevant TSIs. Certain requirements found in national rules apply to existing infrastructure and vehicles.

c) The following chapters will be implemented from 1 June 2019: Chapter 4.6 (Professional competences), Appendix B (Common operational principles and rules), Appendix D (Elements the infrastructure manager has to provide to the railway undertaking for the Route Book and for the train compatibility over the route intended for operation), Appendix F (Minimum elements relevant to professional qualification for the tasks associated with «accompanying trains») and Appendix G (Minimum elements relevant to professional qualification for the task of preparing trains).

The infrastructure managers and railway undertakings are responsible for ensuring implementation of the TSI OPE concurrently with the repeal of national rules in the Operation Regulation and the ERTMS Operation Regulation.

\textsuperscript{4} Regulation 29 February 2009 no. 240 on train operations on the national railway network, see https://lovdata.no/pro/#document/SF/forskrift/2008-02-29-240

\textsuperscript{5} Regulation 12 January 2012 no. 63 on train operations on ERTMS lines, see https://lovdata.no/pro/#document/SF/forskrift/2012-01-12-63
5 Conformity assessment

The principles for the conformity assessments of the rules in the TSI are to be found in clause 6.2.1:

«The operation and traffic management subsystem is a functional subsystem according to Annex II to Directive 2008/57/EC.

In accordance with Articles 10 and 11 of Directive 2004/49/EC, railway undertakings and infrastructure managers must demonstrate compliance with the requirements of this TSI within their safety management system when applying for any new or amended safety certificate or safety authorisation.

The common safety methods on conformity assessment require national safety authorities to set up an inspection regime to supervise and monitor the day to day compliance with the safety management system including all TSIs. It should be noted that none of the elements contained within this TSI require separate assessment by a Notified Body.

Requirements in this TSI that refer to structural subsystems and are listed in the interfaces (point 4.3) are assessed under the relevant structural TSIs.»

This is further explained in the application guide to the TSI, written and published by the European Union Agency for Railways:

«The subsystem operation and traffic management is a functional subsystem. The assessment principles are laid down in chapter 6.2 of the TSI. The TSI OPE defines requirements on processes and procedures to be established by IMs respectively RUs under their SMS. Section 4.3 sets out the interfaces with structural TSIs and the technical requirements. This means that these technical requirements are not to be assessed against the TSI OPE. They are to be assessed by the Notified Bodies during the process for the authorisation for placing into service of structural subsystems as described in those relevant structural TSIs.

The compliance with the TSI OPE cannot be assessed like the conformity of a structural subsystem. The EC verification procedure is not applicable. The procedures and processes required by the TSI OPE should become part of operational rules and procedures. They also become a part of the IM’s / RU’s SMS. The compliance with the TSI OPE should be demonstrated when the NSA assesses the SMS before granting the safety authorisation/ certificate (see Articles 10 and 11 and Annex III of the Safety Directive) and when the NSA performs supervision and inspections (See Regulations 1158/2010, 1169/2010 and 1077/2012). The NSA should also check that the operational rules used by the RU/IM do not contradict the requirements in the TSI OPE. In addition EC Regulation 1078/2012 requires that RUs and IMs set out processes and procedures to effectively monitor the effectiveness of the SMS and the delivery of it through their operational activities (i.e. for the RU the operation of the train and for the IM the control of the infrastructure).»

Railway undertakings and infrastructure managers shall as part of the application for a safety certificate or safety authorisation demonstrate that they have taken the relevant TSI requirements into account, and state the reasons for not complying with certain requirements. This follows from the Licence Regulation\(^6\) §§ 17 and 24.

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\(^6\) Regulation 20 December 2016 no. 1747 on licence, safety certificate, safety authorisation and other railway safety related matters
The Norwegian Railway Authority follows the requirements deriving from Commission Regulation (EU) no. 1158/2010\(^7\) on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates and Commission Regulation (EU) no. 1169/2010\(^8\) on a common safety method for assessing conformity with the requirements for obtaining a railway safety authorisation when granting and revising safety certificates of railway undertakings or safety authorisations of infrastructure managers. This includes assessments of whether the TSI is being complied with correctly.

In other words, it is when granting, revising and supervising the safety certificates of railway undertakings and safety authorisations of infrastructure managers that the Norwegian Railway Authority verify the conformity with the relevant requirements in the TSI. The holders of the safety certificates/authorisations must under the specified circumstances consider whether the specific requirements are to be complied with based on the guidelines in clause 7.2 of the TSI. It will be stated in the National Transportation Plan when new or upgraded lines are planned to be placed into service, and when rolling stock should be equipped with ETCS on-board equipment. This will be defining for when the railway undertakings and the infrastructure manager need to adapt their safety management systems for the subsystem operation and traffic management as specified in the TSI.

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\(^7\) Commission Regulation (EU) No. 1158/2010 of 9 December 2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates

\(^8\) Commission Regulation (EU) No. 1169/2010 of 10 December 2010 on a common safety method for assessing conformity with the requirements for obtaining a railway safety authorisation