

making the railway system
work better for society.

RECOMMENDATION ERA 1175-1218 OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

on

The TSI revision package 2022 – Digital Rail and Green Freight

THE EXECUTIVE DIRECTOR

HAVING REGARD TO Regulation (EU) 2016/796 of the European Parliament and of the Council of 11 May 2016 on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004, hereafter referred to as the ‘Agency Regulation’, in particular Articles 2, 4 and 5(1) thereof,]

HAVING REGARD TO Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system, hereafter referred to as the ‘Interoperability Directive’, in particular Article 5 thereof,]

HAVING REGARD TO Commission Delegated Decision (EU) 2017/1474 of 8 June 2017 supplementing Directive (EU) 2016/797 of the European Parliament and of the Council with regard to specific objectives for the drafting, adoption and review of technical specifications for interoperability, hereafter referred to as the ‘Commission Mandate’

Whereas

1. In January 2020, the European Commission published the list of priority topics that the European Union Agency for Railways (“Agency”) should cover for the TSI package 2022 which falls within the EU policy objectives of (1) a European Green Deal, (2) an economy that works for people, (3) a Europe fit for the digital age and (4) a stronger Europe in the world. Entitled ‘Digital Rail and Green Freight’, the TSI revision package includes a series of topics impacting the structural TSIs: CCS, ENE, INF, LOC&PAS, NOI, PRM, WAG and the OPE TSI.
2. In order to cover these topics, the Agency set up Working Parties and Working Groups and put in place a general change control management process. The present recommendation is a result of the discussions that took place during the meetings of these Working Groups and Working Parties.
3. Whereas this revision process took place almost entirely under the pandemic situation, restricting dramatically the possibility to have physical meetings and to get to know the experts involved in the working groups, most of the agreed Commission priorities have been processed and deliverables are available.
4. For Future Railway Mobile Communication system requirements (priority #17), this revision provides the definition of necessary interfaces with the on-board applications (ETCS and ATO) while the FRMCS specifications will be published through an Agency opinion or a future TSI revision.
5. On the implementation of the conclusions of the ERA report on combined transport (Commission priority #39), a working group was established to work on a dedicated guidance document supporting changes proposed in the TSIs INF, OPE and WAG and in the content of the RINF. These changes should enable a more harmonised application of the codification system and foster the development of combined transport.
6. As for interoperability requirements for automatic couplers for freight wagons (priority #44), a very good cooperation with the European DAC Delivery Program (EDDP) of Europe’s Rail Joint Undertaking was established with cross-participation to the relevant working groups. Due to technical development still ongoing at EDDP, no amendment to TSIs is proposed in this revision but documents are prepared for a swift introduction in a next revision before 1st January 2025.

7. The derailment detection function (priority #47) was discussed in a dedicated working group and results in proposals impacting the TSIs WAG and LOC&PAS that are implemented in the annexes to this recommendation.
8. A specific topical working group with experts on interfaces between rolling stock and fixed installations was established to harmonise the TSIs applicable to those subsystems and close remaining open points (priorities #43, #51, #51b and #52). This working group provided significant improvements of the TSIs ENE, INF, LOC&PAS and also OPE regarding these priorities. Concerning the provisions when to apply the TSIs in case of upgrade/renewal (priority #64), a proposal was discussed that eventually gathered positive feedback.
9. Regarding transitions between successive revisions of TSIs applicable to mobile subsystems (priority #67), a transversal working group made a proposal that should have a significant positive impact on the application of TSIs, including TSI CCS. This proposal will bring visibility and stability for the sector, while ensuring a swift implementation of changes impacting safety or technical compatibility, or resulting from a policy objective. However, the positive impact of this evolution will remain limited until Commission Decision 2010/713/EU of 9 November 2010 is revised, with the objective to simplify and clarify the conditions of validity of certificates related to the quality management system approval.
10. To implement the Commission priority #70 on reviewing the use of standards, update references to standards and incorporate new standards as appropriate, several change requests were created to update the references to more than 100 standards. To facilitate future updates, all details about standards are gathered in a dedicated appendix of each TSI, that can be amended without amending the TSI core text. This proposal is implemented in all TSIs on Fixed Installations and Rolling Stock. New versions of important standards are expected to be published between the date of this recommendation and the adoption of the revised TSIs; as far as possible these new versions will be referred to in the revised TSIs, requiring some updates of the annexes to this Recommendation.
11. For readability of the references to standards and to avoid mistakes by applicants, TSIs should be made available in a more workable format than a .pdf or .html file. Modern IT tools used by applicants, for instance for requirements capture, would perform better with a more workable document.
12. Regarding the provisions for EU-wide authorisation vehicles in the scope of the LOC&PAS TSI (priority #53), the proposal in the annex 4 of this Recommendation is to be considered as a draft document, subject to some amendments before adoption. Discussions are still ongoing, in particular on the topic of electromagnetic compatibility and compatibility with train detection systems.
13. Other changes proposed by the Commission, by National Safety Authorities and by Representative Bodies did also result in TSI revision proposals.
14. Apart from some exceptions, specific cases were not discussed by the Working Party. The progressive harmonisation brought by the new TSIs on one side, and the cleaning-up of national technical rules on the other side, may result in evolution of the specific cases. The need to add or

withdraw specific cases is generally considered during bilateral discussions; they should take place before the adoption of the revised TSIs.

15. Several changes also require the evolution of the parameters registered in the ERATV and/or in the RINF. For that reason, the tables listing the parameters of those registers are included in the recommendation for being amended together with the TSIs.
16. A consultation was organised, starting from 18 March and lasting until 17 June 2022. The answer to comments received during the consultation will be aggregated in a specific report that will form part of this recommendation. It will be delivered before the 14th of July 2022.
17. The reports accompanying this Recommendation (general report and impact assessment report) are being finalised and will be delivered before the 8th July 2022.

HAS ADOPTED the following recommendation:

A. Concerning the Commission Regulation (EU) 2016/919 of 27 May 2016 on the technical specification for interoperability relating to the ‘control-command and signalling’ subsystems of the rail system in the European Union (CCS TSI),

1. The enacting part should be amended as follows:
 - a. Article 11 should be replaced by the short title “FRMCS” and the following text “Where the Agency has issued an opinion on the draft release specifications relating to the future railway mobile communication system (FRMCS), suppliers and early implementers shall use those specifications in their pilots and shall inform the Commission and the Agency.”
 - b. A new Article 11b should be introduced with the following text for the short title “Innovative solutions” and the following text.
 1. In order to keep pace with technological progress, innovative solutions may be required, which do not comply with the specifications set out in the Annex and/or for which the assessment methods set out in the Annex cannot be applied. In that case, new specifications and/or new assessment methods associated with those innovative solutions shall be developed.
 2. Innovative solutions may be related to the CCS subsystem, its parts and its interoperability constituents.
 3. If an innovative solution is proposed, the manufacturer, or his/her authorised representative established within the Union, shall declare how it deviates from or complements to the relevant provisions of this TSI and submit the deviations to the Commission for analysis. The innovative solution shall be part of the scope of the Europe’s Rail Joint Undertaking (ERJU). The Commission shall request the opinion of the Agency on the proposed innovative solution.
 4. The Agency, as system authority, delivers an opinion to the Commission on the innovative solution proposed. If this opinion is positive, the appropriate functional and interface specifications and the assessment method, which need to be included in the TSI in order to allow the use of this innovative solution, shall be developed and subsequently integrated in the TSI during the revision process pursuant to Article 5 of Directive (EU) 2016/797. If the opinion is negative, the innovative solution proposed cannot be applied.
 5. Pending the review of the TSI, the positive opinion delivered by the Agency shall be considered as acceptable means of compliance with the essential requirements of Directive

(EU) 2016/797 and may therefore be used for the assessment and authorisation of the subsystems.”

- c. Given that no specific new competence is required for the assessment of conformity of interoperability constituents or the verification of subsystems, the Agency recommends to include in the enacting part of the revised TSI a statement that notified bodies notified for Commission Regulation (EU) 2016/919 remain notified for the current revision.
2. The draft Technical Specifications for Interoperability as set out in the Annex 1 of this recommendation should be adopted.

B. Concerning the Commission Regulation (EU) No 1301/2014 of 18 November 2014 on the technical specifications for interoperability relating to the ‘energy’ subsystem of the rail system in the Union (ENE TSI),

3. Given that no specific new competence is required for the assessment of conformity of interoperability constituents or the verification of subsystems, the Agency recommends to include in the enacting part of the revised TSI a statement that notified bodies notified for Commission Regulation (EU) 1301/2014 remain notified for the current revision.
4. The draft Technical Specifications for Interoperability as set out in the Annex 2 of this recommendation should be adopted.
5. In that document, references are made to a standard that isn’t published at the time of this authorisation but should be published before the adoption of the revised TSI (EN 50388:2022). In case its publication is delayed, the draft ENE TSI should be amended.

C. Concerning the Commission Regulation (EU) No 1299/2014 of 18 November 2014 on the technical specifications for interoperability relating to the ‘infrastructure’ subsystem of the rail system in the European Union (INF TSI),

6. Given that no specific new competence is required for the assessment of conformity of interoperability constituents or the verification of subsystems, the Agency recommends to include in the enacting part of the revised TSI a statement that notified bodies notified for Commission Regulation (EU) 1299/2014 remain notified for the current revision.
7. The draft Technical Specifications for Interoperability as set out in the Annex 3 of this recommendation should be adopted.

D. Concerning the Commission Regulation (EU) No 1302/2014 of 18 November 2014 concerning a technical specification for interoperability relating to the ‘rolling stock — locomotives and passenger rolling stock’ subsystem of the rail system in the European Union (LOC&PAS TSI),

8. The enacting part should be amended as follows:
 - a. In Article 2, the terms “mobile railway infrastructure construction and maintenance equipment” should be replaced by “special vehicles, such as OTMs” for consistency with Annex I to Directive (EU) 2016/797.
 - b. Article 8 should be deleted, being obsolete. All interoperability constituents are required to have an ‘EC’ declaration of conformity or suitability for use.
 - c. In Article 11 (1), the terms “without prejudice to clauses 7.1.1.4 to 7.1.1.8 of the Annex” should be rephrased, the clauses in reference being deleted from the Annex.

- d. Article 11 (1) (c) should be deleted, being in contradiction with the revised chapter 7 of the Annex.
 - e. Article 11 (3) should be deleted for the same reason.
 - f. Given that no specific new competence is required for the assessment of conformity of interoperability constituents or the verification of subsystems, the Agency recommends to include in the enacting part of the revised TSI a statement that notified bodies notified for Commission Regulation (EU) 1302/2014 remain notified for the current revision.
9. The draft Technical Specifications for Interoperability as set out in the Annex 4 of this recommendation should be adopted.

E. Concerning the Commission Regulation (EU) No 1304/2014 of 26 November 2014 on the technical specification for interoperability relating to the subsystem ‘rolling stock — noise’ (NOI TSI),

10. The enacting part should be amended as follows:
- a. A new Article 7a should be created with the following text: “Due to the novelty of the methodology set out in Appendix F, it may be that some brake blocks listed in appendix G do not comply with the pass-fail criterion. In this case, the manufacturer or its representative may notify a TSI deficiency to the Commission during a 10-year period after entry into force of this TSI in order to revise the pass-fail criterion or the methodology set out in appendix F.”,
 - b. Given that no specific new competence is required for the assessment of conformity of interoperability constituents or the verification of subsystems, the Agency recommends to include in the enacting part of the revised TSI a statement that notified bodies notified for Commission Regulation (EU) 1304/2014 remain notified for the current revision.
11. The draft Technical Specifications for Interoperability as set out in the Annex 5 of this recommendation should be adopted.

F. Concerning the Commission Regulation (EU) No 1300/2014 of 18 November 2014 on the technical specifications for interoperability relating to accessibility of the Union's rail system for persons with disabilities and persons with reduced mobility (PRM TSI),

12. The draft Technical Specifications for Interoperability as set out in the Annex 6 of this recommendation should be adopted; to avoid ambiguities, the document in annex 6 includes also all changes from the Recommendation ERA-REC-128-2 of 14 April 2020.
13. In case of divergence between the text in Annex 6 and ERA-REC-128-2, the text in Annex 6 prevails.
14. In case no ‘common priorities and criteria’ are integrated in chapter 7 of the TSI according to Article 8 (7) of the Regulation, the Appendix B of the Annex to the Regulation shouldn't be deleted.

G. Concerning the Commission Regulation (EU) No 321/2013 of 13 March 2013 concerning the technical specification for interoperability relating to the subsystem ‘rolling stock — freight wagons’ of the rail system in the European Union and repealing Decision 2006/861/EC (WAG TSI),

15. The enacting part should be amended as follows:
- a. Article 9a should be deleted
 - b. Given that no specific new competence is required for the assessment of conformity of interoperability constituents or the verification of subsystems, the Agency recommends to

include in the enacting part of the revised TSI a statement that notified bodies notified for Commission Regulation (EU) 321/2013 remain notified for the current revision.

16. The draft Technical Specifications for Interoperability as set out in the Annex 7 of this recommendation should be adopted.

H. Concerning the Commission Implementing Regulation (EU) 2019/773 of 16 May 2019 on the technical specification for interoperability relating to the operation and traffic management subsystem of the rail system within the European Union and repealing Decision 2012/757/EU (OPE TSI),

17. The enacting part should be amended as follows:
- a. Legal text including recitals need to be reviewed because of obsolete dates and tasks.
 - b. Art 4 - By **1 July 2019** at the latest, the Agency shall publish a guide on the application of the operation and traffic management subsystem (application guide). The Agency shall keep the application guide up to date. **This date should be considered as 2 month after TSI publication.**
 - c. Art 5 - **Decision 2012/757/EU** is repealed with effect from **16 June 2021**. However, Appendix A and C of the Annex to Decision 2012/757/EU may continue to apply until **31 December 2025**, at the latest. **References to date and legal text need to be updated with TSI publication data.**
 - d. Art 6 - This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.
 - i. It shall apply from **16 June 2021**.
 - ii. **However, Sections 4.2.2.1.3.2 and 4.4 of the Annex shall apply from 16 June 2019.**
 - iii. **Section 4.2.2.5 and Appendix D1 of the Annex to this Regulation shall apply from 16 June 2019 in the Member States that have not notified the Agency and the Commission in accordance with Article 57(2) of Directive (EU) 2016/797.**
 - iv. **Section 4.2.2.5 and Appendix D1 of the Annex to this Regulation shall apply from 16 June 2020 in the Member States that have notified the Agency and the Commission in accordance with Article 57(2) of Directive (EU) 2016/797 and that have not notified the Agency and the Commission in accordance with Article 57(2a) of Directive (EU) 2016/797.**
 - v. **Section 4.2.2.5 and Appendix D1 of the Annex to this Regulation shall apply from 31 October 2020 in the Member States that have notified the Agency and the Commission in accordance with Article 57(2a) of Directive (EU) 2016/797.**
 - vi. Appendix A and C of the Annex to this regulation shall apply from 31 December 2025 at the latest.

In yellow obsolete part to be removed.

18. The draft Technical Specifications for Interoperability as set out in the Annex 8 of this recommendation should be adopted.

I. Concerning the Commission Implementing Regulation (EU) 2019/777 of 16 May 2019 on the common specifications for the register of railway infrastructure and repealing Implementing Decision 2014/880/EU (RINF)

19. The table 1 as set out in the Annex 9 of this recommendation should be adopted.
20. The dates for the provision of information required in the additional parameters should be specified.

J. Concerning the Commission Implementing Decision 2011/665/EU of 4 October 2011 on the European register of authorised types of railway vehicles (ERATV)

21. The table of the Annex II and of the Annex III as set out in the Annex 10 of this recommendation should be adopted.

K. Concerning the 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

22. A limited revision should be initiated including the alignment of the Decision with the 4th Railway Package technical pillar, the review of the conditions of validity of QMS approval and a clarification on the deliverables further to surveillance audits.

This recommendation is addressed to the European Commission.

Valenciennes, 30th June 2022


Josef DOPPELBAUER
Executive Director

Annexes:

Annex1_CCS_TSI

Annex2_ENE_TSI

Annex3_INF_TSI

Annex4_LOC&PAS_TSI

Annex5_NOI_TSI

Annex6_PRM_TSI

Annex7_WAG_TSI

Annex8_OPE_TSI and one annex

Annex9_RINF_Parameters

Annex10_ERATV_Parameters

Annex11_Report_TSI2022 – *Will be delivered separately*

Annex12_Economic_evaluation_report – *Will be delivered separately*