

Moving Europe towards a sustainable and
safe railway system without frontiers.

OPINION

ERA/OPI/2024-5

OF THE EUROPEAN UNION AGENCY FOR RAILWAYS

for THE EUROPEAN COMMISSION regarding

New standards or new standards versions released since the
publication of TSI package 2023 (Acceptable means of compliance)

Disclaimer:

The present document is a non-legally binding opinion of the European Union Agency for Railways. It does not represent the view of other EU institutions and bodies and is without prejudice to the decision-making processes foreseen by the applicable EU legislation. Furthermore, a binding interpretation of EU law is the sole competence of the Court of Justice of the European Union.

1. General Context

Request for a technical opinion.

On 20 August 2024, the European Commission (EC) requested a technical opinion from the European Union Agency for Railways (the Agency) (see annex I) pursuant to Article 10 (2) Regulation (EU) 2016/796. In accordance also with Multi-annual TSI revision framework - List and description of actions to be done, the Agency was mandated to monitor the evolution of standards quoted in TSIs to propose technical opinions where new version of standards will be assessed and, where appropriate, declared as an alternative acceptable means of compliant toward TSIs.

2. Legal Background

According to Article 10 (2) Regulation (EU) 2016/796, *“The Agency shall issue opinions at the request of the Commission on amendments to any act adopted on the basis of Directive (EU) 2016/797 or Directive (EU) 2016/798, especially where any alleged deficiency is signalled.”*

According to Article 4 (f), the Agency shall issue opinions constituting acceptable means of compliance pursuant to Article 19.

Article 19 (1) (d) Regulation (EU) 2016/796, empowers the Agency to issue opinions which constitute acceptable means of compliance concerning deficiencies in TSIs, in accordance with Article 6(4) of Directive (EU) 2016/797, and provide those opinions to the Commission.

Article 6 (4) Directive 2016/797 sets out that any member of the network of representative bodies referred to in Article 38(4) of Regulation (EU) 2016/796 may make the Commission aware of possible TSI deficiencies.

3. Analysis

3.1 Scope

This opinion is issued in accordance with Article 19 (1) (d) Regulation (EU) 2016/796.

The opinion’s scope covers the following TSIs:

- TSI CCS: Regulation (EU) No 2023/1695
- TSI OPE: Regulation (EU) No 2019/773 amended by Regulation (EU) No 2020/778 amended by Regulation (EU) 2021/2238 amended by Regulation (EU) 2023/1693
- TSI LOC&PAS: Regulation (EU) No 1302/2014 amended by Regulation (EU) No 2016/919 amended by Regulation (EU) 2018/868 amended by Regulation (EU) 2019/776 amended by Regulation (EU) 2020/387 amended by Regulation (EU) 2023/1694
- TSI WAG: Regulation (EU) No 321/2013 amended by Regulation (EU) No 1236/2013 amended by Regulation (EU) 2015/924 amended by Regulation (EU) 2019/776 amended by Regulation (EU) 2020/387 amended by Regulation (EU) 2023/1694
- TSI NOI: Regulation (EU) No 1304/2014 amended by Regulation (EU) 2019/774 amended by Regulation (EU) 2023/1694
- TSI PRM: Regulation (EU) No 1300/2013 amended by Regulation (EU) No 2019/72 amended by Regulation (EU) 2022/721 amended by Regulation (EU) 2023/62 amended by Regulation (EU) 2023/1694
- TSI INF: Regulation (EU) No 1299/2014 amended by Regulation (EU) 2019/776 amended by Regulation (EU) 2023/1694
- TSI ENE: Regulation (EU) No 1301/2014 amended by Regulation (EU) 2018/868 amended by Regulation (EU) 2019/776 amended by Regulation (EU) 2023/1694
- TSI SRT: Regulation (EU) No 1303/2014 amended by Regulation (EU) 2016/912 amended by Regulation (EU) 2019/776

- TSI TAF: Regulation (EU) No 1305/2014 amended by Regulation (EU) No 2018/278 amended by Regulation (EU) 2019/778 amended by Regulation (EU) 2021/541
- TSI TAP: Regulation (EU) No 454/2011 amended by Regulation (EU) No 665/2012 amended by Regulation (EU) 1273/2013 amended by Regulation (EU) 2015/302 amended by Regulation (EU) 2016/527 amended by Regulation (EU) 2019/775

3.2 Process followed

Through the topical working group on standardisation (TWG STA), the Agency monitored the new versions of standards published since the publications of the TSI package 2023.

This technical opinion is limited to the standards resulted of the analysis performed.

Two change requests (i.e. 640 and 652) have been raised : : CR640 and CR652.

- Change request 640 has been approved by the Working party on 18/04/2024.
- Change request 652 has been approved by the Working party on 03/07/2024.

The outcome of the change request is presented in point 3.3 of this opinion.

3.3 Detailed analysis

- **Detailed analysis CR640**

Standard reference	Title	Version quoted in TSI	TSI Appendix	New version to be quoted	TSI modification proposal
EN 12663-2	Railway applications - Structural requirements of railway vehicle bodies - Part 2: Freight wagons	2010 (TSI Loc&Pas) 2010 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [51] TSI WAG Appendix D.1 index : [1]	2010+A1:2023	TSI Loc&pas Appendix J-1 index :[51] :EN 12663-2:2010+A1:2023 TSI WAG Appendix D.1 index :[1] :EN 12663-2:2010+A1:2023
EN 13232-3	Railway applications – Track – Switches and crossings – Part 3: Requirements for wheel/rail interaction	2003 (TSI INF)	TSI INF Appendix T index : [17]	2023	Appendix S table 48, row 53 replaced by "Unguided length is the portion of obtuse crossing where there is no guidance of the wheel described as 'unguided distance' in the specification referenced in Appendix T, Index [17]. appendix T index 17 : EN 13232-3:2023 [17.1] : clause of the standard 5.3.6
EN 15085-2	Railway applications - Welding of railway vehicles and components - Part 2: Requirements for welding manufacturer	2020 (WAG TSI)	TSI WAG Appendix D.1 index : [51]	2020+A1:2023	TSI WAG Appendix D.1 index :[51] EN 15085-2:2020+A1:2023
EN 15085-3	Railway applications - Welding of railway vehicles and components - Part 3: Design requirements	2022 (WAG TSI)	TSI WAG Appendix D.1 index : [52]	2022+A1:2023	TSI WAG Appendix D.1 index :[52] : EN 15085-3:2022+A1:2023
EN 15085-4	Railway applications - Welding of railway vehicles and components - Part 4: Production requirements	2007 (WAG TSI)	TSI WAG Appendix D.1 index : [53]	2023	TSI WAG Appendix D.1 index :[53] : EN 15085-4:2023
EN 15085-5	Railway applications - Welding of railway vehicles and components - Part 5: Inspection, testing and documentation	2007 (WAG TSI) ;	TSI WAG Appendix D.1 index : [54]	2023	TSI WAG Appendix D.1 index :[54] : EN 15085-5:2023
EN 15595	Railway applications - Braking - Wheel slide protection	2018+AC :2021 (TSI Loc&Pas) 2018+AC :2021 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [15] TSI WAG Appendix D.1 index : [49]	2018+A1 :2023	TSI Loc&pas Appendix J-1 index : [15] : EN 15595:2018+A1 :2023 TSI WAG Appendix D.1 index : [49]
EN 45545-2	Railway applications - Fire protection on railway vehicles -Part 2: Requirements for fire behaviour of materials and components	2020 (TSI Loc&Pas) 2020 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [30] TSI WAG Appendix D.1 index : [22]	2020+A1:2023	TSI Loc&pas Appendix J-1 index :[30] EN 45545-2:2020+A1:2023 TSI WAG Appendix D.1 index :[22] EN 45545-2:2020+A1:2023

- **Detailed analysis CR652**

Standard reference	Title	Version quoted in TSI	TSI Appendix	New version to be quoted	TSI modification proposal
EN 12663-1	Railway applications - Structural requirements of railway vehicle bodies - Part 1: Locomotives and passenger rolling stock (and alternative method for freight wagons)	2010+A1:2014 (TSI Loc&Pas) 2010+A1:2014 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [1] TSI WAG Appendix D.1 index : [3]	2010+A2:2023	TSI Loc&pas Appendix J-1 index :[1] : EN 12663-1:2010+A2:2023 TSI WAG Appendix D.1 index :[3]EN 12663-1:2010+A2:2023
EN 13103-1	Railway applications - Wheelsets and bogies - Part 1: Design method for axles with external journals	2017 (TSI Loc&Pas) 2017+A1:2022 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [47] TSI WAG Appendix D.1 index : [12]	2017+A1:2022	TSI Loc&pas Appendix J-1 index :[47] : EN 13103-1 : 2017+A1:2022
EN 13749	Railway applications - Wheelsets and bogies - Method of specifying the structural requirements of bogie frames	2021 (TSI Loc&Pas) 2021 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [11] TSI WAG Appendix D.1 index : [9]	2021+A1:2023	TSI Loc&pas Appendix J-1 index :[11] EN 13749:2021+A1:2023 TSI WAG Appendix D.1 index :[9]EN 13749:2021+A1:2023
EN 13979-1	Railway applications - Wheelsets and bogies - Monobloc wheels - Technical approval procedure - Part 1: Forged and rolled wheels	2020 (TSI Loc&Pas) 2020 (WAG TSI) 2020 (TSI NOI)	TSI Loc&pas Appendix J-1 index : [40] TSI WAG Appendix D.1 index : [11] TSI NOI Appendix B index : [3]	2023	TSI Loc&pas Appendix J-1 index :[40] : EN 13979-1:2023 TSI WAG Appendix D.1 index :[11] EN 13979-1:2023 TSI NOI Appendix B index : [3] EN 13979-1:2023 TSI Point : 6.2.3 – table 7 (Simplified evaluation. clauses of the standard : Annex I
EN 15085-1	Railway applications -Welding of railway vehicles and components -Part 1: General	2007+A1:2013 (WAG TSI)	TSI WAG Appendix D.1 index : [50]	2023	TSI WAG Appendix D.1 index : [50] EN 15085-1:2023
EN 15152	Railway applications - Front windscreens for train cabs	2019 (TSI Loc&Pas)	TSI Loc&pas Appendix J-1 index : [28]	2019+A1:2023	TSI Loc&pas Appendix J-1 index : [28] : EN 15152:2019+A1:2023
EN 15437-1	Railway applications – Axle box condition monitoring – Interface and design requirements - Part 1: Track side equipment and rolling stock axle box	2009 (TSI Loc&Pas) 2009+A1:2022 (WAG TSI)	TSI Loc&pas Appendix J-1 index : [8] TSI WAG Appendix D.1 index : [6]	2009+A1:2022	TSI Loc&pas Appendix J-1 index :[8] EN 15437-1 :2009+A1:2022
EN 16235	Railway application - Testing for the acceptance of running characteristics of railway vehicles - Freight wagons - Conditions for dispensation of freight wagons with defined characteristics from on-track tests in accordance with EN 14363	2013 (WAG TSI)	TSI WAG Appendix D.1 index : [8]	2023	TSI WAG Appendix D.1 index : [8] : EN 16235:2023

3.4 Impact assessment

See Annex 2.

4. The opinion

The Agency is of the opinion that the new version of the standards referred in change requests 640 and 652 can be declared as alternative means of compliance for the relevant TSIs.

The applicant for EC verification is allowed to use, on a voluntary basis the following standards:

With the same clauses number as the ones quoted in TSI:

EN 12663-1:2010+A2:2023 instead of EN 12663-1:2010+A1:2014,
EN 12663-2:2010+A1:2023 instead of EN 12663-2:2010,
EN 13103-1:2017+A1:2022 instead of EN 13103-1:2017,
EN 13749:2021+A1:2023 instead of EN 13749:2021,
EN 15085-1:2023 instead of EN 15085-1:2007+A1:2013,
EN 15085-2:2020+A1:2023 instead of EN 15085-2:2020,
EN 15085-3:2022+A1:2023 instead of EN 15085-3:2022,
EN 15085-4:2023 instead of EN 15085-4:2007,
EN 15085-5:2023 instead of EN 15085-5:2007,
EN 15152:2019+A1:2023 instead of EN 15152:2019,
EN 15437-1:2009+A1:2022 instead of EN 15437-1:2009,
EN 15595:2018+A1 :2023 instead of EN 15595:2018+AC:2021,
EN 16235:2023 instead of EN 16235:2013,
EN 45545-2:2020+A1:2023 instead of EN 45545-2:2020.

With deviations in the mandatory clauses:

EN 13232-3:2023 instead of EN 13232-3:2003: Appendix S table 48, row 54 replaced by "*Unguided length is the portion of obtuse crossing where there is no guidance of the wheel described as 'unguided distance' in the specification referenced in Appendix T, Index [17]*".
EN 13979-1:2023 instead of EN 13979-1:2020: Same clauses for TSI Loc&pas and WAG. TSI NOISE appendix B index [3.1] clauses of the standard: Annex I. Appendix [3.2] : same clause.

The notified bodies in charge of the EC verification process should accept the possibility to use the new version of standards without further justifications to be provided by the Applicants.

The Agency is of the opinion that the technical opinion could be used as an acceptable means of compliance, as foreseen in Article 6 (3) of Directive (EU) 2016/797 and may therefore be used for the assessment of projects, pending the adoption of a revised TSI.

This technical opinion is valid for the TSIs versions listed in chapter 3.1 only.

Valenciennes, 08/10/2024
Josef DOPPELBAUER
Executive Director

Annex 1 : commission’s request



EUROPEAN COMMISSION
 DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT
 Directorate C – Land
 C.4 – Rail Safety & Interoperability

Brussels, 20 August 2024

Request of the Commission to the Agency for an Opinion

Requesting Organisation (name, address)	DG MOVE C4	
Contact information		
Legal base	Opinion	<i>Agency Regulation Art. 10.2</i>
	Advice	
Objective	Technical opinion	
Scope	All TSIs: <ul style="list-style-type: none"> • TSI ENE Reg (EU) No 1301/2014 amended by Reg (EU) 2018/868 amended by Reg (EU) 2019/776 amended by Reg (EU) 2023/1694 • TSI INF Reg (EU) No 1299/2014 amended by Reg (EU) 2019/776 amended by Reg (EU) 2023/1694 • TSI Loc&Pas Reg (EU) No 1302/2014 amended by Reg (EU) No 2016/919 amended by Reg (EU) 2018/868 amended by Reg (EU) 2019/776 amended by Reg (EU) 2020/387 amended by Reg (EU) 2023/1694 • TSI NOI Reg (EU) No 1304/2014 amended by Reg (EU) 2019/774 amended by Reg (EU) 2023/1694 • TSI WAG Reg (EU) No 321/2013 amended by Reg (EU) No 1236/2013 amended by Reg (EU) 2015/924 amended by Reg (EU) 2019/776 amended by Reg (EU) 2020/387 amended by Reg (EU) 2023/1694 • TSI SRT Reg (EU) No 1303/2014 amended by Reg (EU) 2016/912 amended by Reg (EU) 2019/776 amended by Reg (EU) 2024/191 (for BG, DE, PL, PT and SI) and Reg (EU) No 1303/2014 amended by Reg (EU) 2016/912 amended by Reg (EU) 2019/776 (for other EU member states) • TSI CCS Reg (EU) No 2023/1695 • TSI PRM Reg (EU) No 1300/2013 amended by Reg (EU) No 2019/72 amended by Reg (EU) 2022/721 amended by Reg (EU) 2023/62 amended by Reg (EU) 2023/1694 	

Commission européenne/Europese Commissie, 1049 Bruxelles/Brussel, BELGIQUE/BELGIË – Tel. +32 22991111

	<ul style="list-style-type: none"> • TSI OPE Reg (EU) No 2019/773 amended by Reg (EU) No 2020/778 amended by Reg (EU) 2021/2238 amended by Reg (EU) 2023/1693 • TSI TAF Reg (EU) No 1305/2014 amended by Reg (EU) No 2018/278 amended by Reg (EU) 2019/778 amended by Reg (EU) 2021/541 • TSI TAP Reg (EU) No 454/2011 amended by Reg (EU) No 665/2012 amended by Reg (EU) 1273/2013 amended by Reg (EU) 2015/302 amended by Reg (EU) 2016/527 amended by Reg (EU) 2019/775
Task Description	<p>Technical opinion.</p> <p>The Agency's opinion shall constitute an acceptable means of compliance.</p>
Key input documents	<p><i>Background information and justification for the request</i></p> <p>In the EC request - Multi-annual TSI revision framework in topic BR-03, the European Commission has given the agency the mandate to monitor the evolution of standards quoted in TSIs to propose:</p> <ol style="list-style-type: none"> 1) change requests to be integrated in the next TSI(s) release; 2) technical opinions where new version of standards will be assessed and, where appropriate, declared as an alternative acceptable means of compliant toward TSI, <p>Based on the input provided by the Topical Working Group on Standardisation, the agency should write the opinion referred to in point 2 above.</p>

Annex 2

Impact Note

New standards or new standards versions released since the publication of TSI package 2023

Issued as per Art. 8(1) of Regulation (EU) 2016/796 and the Impact Assessment procedure adopted by the ERA Management Board (Decision n.290, 16/03/2022)

1. Context and assessment of impacts																															
1.1. Scope																															
<p>The European Commission has requested the Agency (see annex I) to issue Technical Opinions where new versions of standards will be assessed and, where appropriate, declared as an alternative acceptable means of compliance.</p> <p>Since the introduction of the last TSI revision, several new standards have been published. Those standards within scope of change request (CR) 640 and CR652 are assessed in this Opinion.</p>																															
1.2. Assessment of impacts																															
<p>Based on the analysis, the Agency is of the opinion that the new versions of the standards referred to in CR640 and CR652 are alternative means of compliance. At the same time, it remains possible to use the previous version of the applicable standards.</p> <p>As such, the Opinion provides greater flexibility in the application for a vehicle authorisation to demonstrate compliance with the TSIs currently in force. The Opinion thus generates benefits for the railway sector by offering more flexibility concerning the design of rolling stock.</p>																															
1.3. Stakeholders affected																															
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Associations	<input type="checkbox"/>	Other (Please specify) ...	<input type="checkbox"/>																												
2. Preferred option																															
2.1. Conclusion																															
<p>This impact note concludes that the Opinion provides greater flexibility to the sector without any or negligible negative impacts.</p>																															