SLOVENSKI STANDARD
SIST EN 15663:2017+A1:2019/oprA2:2022

01-september-2022

Železniške naprave - Določitev mase železniškega vozila

Railway applications - Vehicle reference masses

Bahnanwendungen - Fahrzeugreferenzmassen

Applications ferroviaires - Masses de référence des véhicules

Ta slovenski standard je istoveten z: **EN 15663:2017+A1:2018/prA2:2022**

ICS:

45.060.01	Železniška vozila na splošno	Railway rolling stock in general

SIST EN 15663:2017+A1:2019/oprA2:2022 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Railway applications - Vehicle reference masses

Applications ferroviaires - Masses de référence des véhicules

Bahnanwendungen - Fahrzeugreferenzmassen

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 256.

This draft amendment A2, if approved, will modify the European Standard EN 15663:2017+A1:2018. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 15663:2017+A1:2018/prA2:2022) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

1 Modifications to Clause 2, Normative references

Replace "There are no normative references in this document" *with the following*:

"The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 17343:2020, Railway applications — General terms and definitions"

2 Modifications to Clause 3, "Terms, definitions and abbreviations"

Replace "For the purposes of this document, the following terms and definitions apply." *with the following:* "For the purposes of this document, the terms and definition defined in EN 17343:2020 and the following terms and definitions apply."

Add the following new terms and definitions":

3.1.11
dead mass
mass of the vehicle in the 'as built' condition without consumables and without staff

Note 1 to entry: 4.3 gives a detailed definition.

3.1.12
working order
typical payload seen on a regular basis

Note 1 to entry: The amount of consumables depends on the vehicle condition (design condition or operational condition) as given in Table 6.

Note 2 to entry: This state is also described as unladen or tare,

3.1.13
normal payload
quantity of mass that is assumed to be lost in service due to abrasion and mechanical wear

Note 1 to entry: The normal payload depends on the vehicle condition (design or operational condition) as given in Table 4.

Note 2 to entry: 4.4 gives a detailed definition.

Note 3 to entry: For freight vehicles, the payload is always taken as the maximum payload as specified in the loading table of the vehicle.

3.1.14
exceptional payload
maximum possible payload that can be carried and that will be experienced only under exceptional conditions

Note 1 to entry: The exceptional payload is only defined for the design condition.

Note 2 to entry: 4.4 gives a detailed definition.,

3.1.15
design condition
theoretical state for analysis and calculation

3.1.16
operational condition
assumed average state when in service

3.1.17
special purpose mass
mass, specified in an application standard based on the reference mass definitions in accordance with this standard

Note 1 to entry: In accordance with this definition, a reference mass used directly by an application standard is not considered as a special purpose mass.

Note 2 to entry: 4.6 gives detailed information about the application mass definitions,

“

3 Modifications to 3.2, “Abbreviations”

Replace “The unused letters of the alphabet are available to denote a mass or payload condition that is defined by an application standard (see 4.6).”

with the following:

“The unused letters of the alphabet are available to denote a special purpose mass or payload condition that is defined by an application standard (see 4.6).”

Replace “If the default values for standing areas in passenger and catering areas set out in 7.2 and 7.3 are not used, the abbreviations shall be extended to indicate the values used in kg/m^2 (e.g. MXD160).”

with the following:

“If the default values for standing areas in passenger and catering areas set out in 7.2 and 7.3 are not used, the abbreviations shall be extended to indicate the particular values used in kg/m^2 (e.g. MXD160).”

4 Modifications to 4.1, “General”

Delete “The design condition is a theoretical state for analysis and calculation; the operational condition is an assumed average state when in service.”

Replace

“Methods are given in this document together with standard values and assumptions to be used. It is permissible to deviate from the standard values within the ranges given in 7.2 and 7.3. The vehicle specification together with an application standard gives these deviations.”

with the following:

“Methods are given in this document together with values and assumptions to be used. It is permissible to deviate from the standard default values and specify particular values within the ranges given in 7.2 and 7.3. The vehicle specification together with an application standard gives these deviations.

In specifying particular values for determining reference masses, consideration should be given to:

— consistency between payload states. For example, if the mass per square metre is modified for an exceptional payload, the value to be used for normal payload might also require modification;

— ensuring that any reference mass is applied consistently to applicable system components (for example body loads and bogie loads).”

5 Modification to 4.3, “Dead mass”

Delete “Dead mass is the mass of the vehicle in the “as built” condition without consumables and without staff (see Clause 5)”

6 Modifications to 4.6, “Additional or alternative mass definitions and payload states”

Replace title of 4.6 “Additional or alternative mass definitions and payload states” *with the following:* “Special purpose mass definitions and payload states”

Replace

“Non-standard reference masses, specified as additional or alternative mass or payload states shall be defined and justified in the application standard. In such cases the mass and payload definitions set out in 4.4 and 4.5 should be used as a basis wherever possible. This can be achieved for example by applying factors or by including a specific mass or payload increment. In such cases, a suitable notation should be defined following the principles of the system set out in 3.2. For this notation, the unused letters of the alphabet are available. In specifying particular values for determining reference masses, consideration should be given to:

— consistency between payload states. For example, if the mass per square metre is modified for an exceptional payload, the value to be used for normal payload might also require modification;

— ensuring that any reference mass is applied consistently to applicable system components (for example body loads and bogie loads).”

with the following:

“If technically necessary, special purpose masses or payload states shall be defined and justified in the application standard.

EXAMPLE “Maximum braking load” as defined and used in EN 16185-1:2014+A1:2020 is an example of a special purpose mass specified by this application standard.

In such cases the mass and payload definitions set out in 4.4 and 4.5 should be used as a basis wherever possible. This can be achieved for example by applying factors or by including a specific mass or payload increment. In such cases, a suitable notation should be defined following the principles of the system set out in 3.2. For this notation, the unused letters of the alphabet are available.”

7 Modification to Annex B, “Application standards”

Delete Annex B.

8 Modification to Annex C, “Application of EN 15663:2009 reference masses in TSI”

Delete Annex C.

9 Modification to Annex ZA, Relationship between this European Standard and the Essential Requirements of EU Directive 2016/797/EC

Replace the current Annex ZA with the following:

Annex ZA
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive (EU) 2016/797 aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/483 Mandate to CEN and CENELEC for Standardisation in the field of interoperability of the rail system" to provide one voluntary means of conforming to (parts of) Essential Requirements of Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on interoperability of the rail system (recast) as specified in the relevant technical specifications for interoperability (TSI).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 for freight wagons, Table ZA.2 for locomotive and passenger RST and Table ZA.3 for infrastructure confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive as specified in the technical specifications for interoperability (TSI), and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard, Commission Regulation (EU) No 321/2013 concerning the Technical Specification for Interoperability (TSI) relating to the subsystem 'rolling stock – freight wagons' of the rail system in the European Union* and Directive (EU) 2016/797

Essential Requirements of Directive (EU) 2016/797	Clauses of the Annex to the Technical Specification for Interoperability (TSI)	Clause/ subclauses of this European Standard	Comments
Section 3 of the Annex to the TSI indicates the correspondence between the TSI clauses and the Essential Requirements of Directive (EU) 2016/797	4.8.		MVD applies for tare; MND applies for fully laden.
	5.3.1.		MVD applies for tare.
	7.2.2.2. Table 11a		MND applies for design mass under normal payload.
* As amended by Commission Regulation (EU) No 1236/2013, Commission Regulation (EU) 2015/924, Commission Implementing Regulation (EU) 2019/776 and Commission Implementing Regulation (EU) 2020/387 NOTE The Technical Specification for Interoperability (TSI) can refer to other clauses of this standard making the application of those clauses mandatory. Possible references to such clauses are found in the Appendix D to the TSI.			

Table ZA.2 — Correspondence between this European Standard, Commission Regulation (EU) No°1302/2014 concerning the Technical Specification for Interoperability (TSI) relating to the 'rolling stock – locomotives and passenger rolling stock' subsystem of the rail system in the European Union* and Directive (EU) 2016/797

Essential Requirements of Directive (EU) 2016/797	Clauses of the Annex to the Technical Specification for Interoperability (TSI)	Clause/ subclauses of this European Standard	Comments
Section 3 of the Annex to the TSI indicates the correspondence between the TSI clauses and the Essential Requirements of Directive (EU) 2016/797	4.2.2.2.3 (a) (a-2) (1)		MVD applies.
	4.2.2.2.3 (a) (a-2) (2)		'All load conditions' comprises MVD, MND and MXD
	4.2.2.2.4 (3) (b)		'All load conditions' comprises MVD, MND and MXD
	4.2.2.10 (1)	4.5	Masses are abbreviated as follows: Design mass in working order (MVD), Design mass under normal payload (MND), Design mass under exceptional payload (MXD).
	4.2.2.10 (2)	4.5	Rules for parameter deviations (particular values) are given in 4.1.
	4.2.3.2.1. (3)		MXD applies.
	4.2.3.2.2 (1)		MVD applies.
	4.2.3.2.2 (2)		MND applies.
	4.2.3.5.2.1. (6)		MVD applies for tare.
	4.2.4.5.3. (1)		MND applies.
	4.2.4.5.5 (1)		MVD applies.
	4.2.4.10. (5)		MVD applies.
	4.2.5.8. (2)		MND applies.
	4.2.8.1.2 (4)		MND applies.
	4.2.8.1.2 (5)		MND applies.
	4.2.8.1.2 (8)		MND applies.
	6.2.3.1. (1)		MVD applies for design mass in working order; MU applies for dead mass.
	6.2.3.1. (3)		MVD applies for design mass in working order; MND applies for design mass under normal payload.
	6.2.3.2. (1)		MVD applies.
	7.5.1.1.		MND applies for design mass under normal payload; MXD applies for design mass under exceptional payload.

* As amended by Commission Regulation (EU) 2016/919, Commission Implementing Regulation (EU) 2018/868,Commission Implementing Regulation (EU) 2019/776 and Commission Implementing Regulation (EU) 2020/387

NOTE The Technical Specification for Interoperability (TSI) can refer to other clauses of this standard making the application of those clauses mandatory. Possible references to such clauses are found in the Appendix J to the TSI.