



**SLOVENSKI STANDARD**  
**SIST EN 13232-2:2004/kFprA1:2011**  
**01-julij-2011**

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**Železniške naprave - Zgornji ustroj - Kretnice in križišča - 2.del: Geometrijske zahteve pri projektiranju**

Railway applications - Track - Switches and crossings - Part 2: Requirements for geometric design

Bahnanwendungen - Oberbau - Weichen und Kreuzungen - Teil 2: Anforderungen an den technischen Entwurf

Applications ferroviaires - Voie - Appareil de voie - Partie 2: Exigences pour la conception géométrique

**Ta slovenski standard je istoveten z: EN 13232-2:2003/FprA1**

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**ICS:**

45.080      Tračnice in železniški deli      Rails and railway components

**SIST EN 13232-2:2004/kFprA1:2011      en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 13232-2:2003**

**FprA1**

May 2011

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ICS 93.100

English Version

## Railway applications - Track - Switches and crossings - Part 2: Requirements for geometric design

Applications ferroviaires - Voie - Appareil de voie - Partie 2:  
Exigences pour la conception géométrique

Bahnanwendungen - Oberbau - Weichen und Kreuzungen -  
Teil 2: Anforderungen an den technischen Entwurf

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

This draft amendment A1, if approved, will modify the European Standard EN 13232-2:2003. 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.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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EN 13232-2:2003/FprA1:2011 (E)

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## Foreword

This document (EN 13232-2:2003/FprA1:2011) 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 Unique Acceptance Procedure.

**EN 13232-2:2003/FprA1:2011 (E)**

**1 Modification to the Foreword**

*Add the following paragraphs after the second paragraph: "*

This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document."

**2 Addition of Annex ZA**

*Add the following new Annex ZA: "*

## **Annex ZA** (informative)

### **Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC**

This European Standard has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the Directive 2008/57/EC<sup>1</sup>.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZA.1 for HS Infrastructure and in Table ZA.2 for CR Infrastructure confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

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<sup>1</sup> This Directive 2008/57/EC adopted on 17<sup>th</sup> June 2008 is a recast of the previous Directives 96/48/EC 'Interoperability of the trans-European high-speed rail system' and 2001/16/EC 'Interoperability of the trans-European conventional rail system' and revisions thereof by 2004/50/EC 'Corrigendum to Directive 2004/50/EC of the European Parliament and of the Council of 29<sup>th</sup> April 2004 amending Council Directive 96/48/EC on the interoperability of the trans-European high-speed rail system and Directive 2001/16/EC of the European Parliament and of the Council on the interoperability of the trans-European conventional rail system'.

## EN 13232-2:2003/FprA1:2011 (E)

Table ZA.1 — Correspondence between this European Standard, the HS TSI INF, published in OJEU dated 19<sup>th</sup> March 2008, and Directive 2008/57/EC

Clause(s)/ sub-clause(s) of this European Standard	Chapter/§/annexes of the TSI I	Corresponding text, articles/§/annexes of the Directive 2008/57/EC	Comments
The complete standard is for application	<p>4. Description of the infrastructure domain</p> <p>4.2.2. Nominal track gauge</p> <p>4.2.4. Distance between track centres</p> <p>4.2.8. Cant deficiency</p> <p>4.2.11.b) Rail inclination – Switches and crossings</p> <p>4.2.12.3 Switches and crossings – Geometrical characteristics</p> <p>4.2.13 Track resistance</p> <p>5 Interoperability constituents</p> <p>5.3. Constituents performances and specifications.</p> <p>5.3.1.1.b) The rail - Rail head profile – Switches and crossings</p> <p>5.3.4.c) Switches and crossings – Geometrical characteristics</p> <p>Annex A – Table A.1</p> <p>Annex B – Table B.1</p>	<p>Annex III Essential requirements</p> <p>1. General requirements</p> <p>1.1 Safety</p> <p>Clauses 1.1.1 – 1.1.2 and 1.1.3</p> <p>1.5. Technical compatibility</p>	



**Table ZA.2 — Correspondence between this European Standard, the CR TSI INF (Final draft 4.0 dated 18 September 2009) and Directive 2008/57/EC**

Clause(s)/ sub-clause(s) of this European Standard	Chapter/§/annexes of the TSI	Corresponding text, articles/§/annexes of the Directive 2008/57/EC	Comments
The complete standard is for application	<p>4. Description of the infrastructure sub-system.</p> <p>4.2.4.2 Distance between track centres</p> <p>4.2.5. Track parameters</p> <p>4.2.5.1 Nominal track gauge</p> <p>4.2.5.3 Rate of change of cant (as a function of time)</p> <p>4.2.5.4. Cant deficiency</p> <p>4.2.5.7 2 Rail inclination – Requirements for switches and crossings</p> <p>4.2.6.2 Switches and crossings - In service geometry of switches and crossings</p> <p>4.2.6.3 Maximum unguided length of switches and crossings</p> <p>4.2.7 Track resistance to applied loads</p> <p>5. Interoperability constituents</p> <p>5.3.1 Constituents performances and specifications - The rail</p> <p>6. Assessment of conformity of interoperability constituents and EC verification of the subsystems</p> <p>6.2.4.7 Assessment of geometry of switches and crossings</p> <p>6.2.5.2 Assessment of track resistance for switches and crossings</p> <p>Annex B – Table 21</p>	<p>Annex III Essential requirements</p> <p>1. General requirements</p> <p>1.1 Safety</p> <p>Clauses 1.1.1 – 1.1.2 and 1.1.3</p> <p>1.5. Technical compatibility</p>	<p>Rails, fastenings and sleepers used for short length of track for specific purposes, for example in switches and crossings, at expansion devices, transition slabs and special structures, are not to be considered to be interoperability constituents conforming to § 5.2 of the draft CR TSI INF</p>