



**SLOVENSKI STANDARD**  
**SIST EN 16186-1:2015/oprA1:2017**  
**01-junij-2017**

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**Železniške naprave - Voznikova kabina - 1. del: Antropometrični podatki in vidljivost**

Railway applications - Driver's cab - Part 1: Anthropometric data and visibility

Bahnanwendungen - Führerraum - Teil 1: Anthropometrische Daten und Sichtbedingungen

Applications ferroviaires - Cabines de conduite - Partie 1: Données anthropométriques et visibilité

**Ta slovenski standard je istoveten z: EN 16186-1:2014/prA1**

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**ICS:**

45.060.10      Vlečna vozila      Tractive stock

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EUROPEAN STANDARD  
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**DRAFT**  
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English Version

## Railway applications - Driver's cab - Part 1: Anthropometric data and visibility

Applications ferroviaires - Cabines de conduite - Partie  
1: Données anthropométriques et visibilité

Bahnanwendungen - Führerraum - Teil 1:  
Anthropometrische Daten und Sichtbedingungen

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 A1, if approved, will modify the European Standard EN 16186-1:2014. 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: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 16186-1:2014/prA1:2017) 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 mandate given to CEN 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 EN 16186-1:2014.

**EN 16186-1:2014/prA1:2017 (E)****1 Modifications to the European foreword**

*After the fifth paragraph add the following paragraph:*

"EN 16186, "Railway applications — Driver's cab" is written as an EN series on all the aspects to be considered when designing a driver's cab, from anthropometric data and visibility, over the integration of displays, controls and indicators as well as the design of displays to cab layout and access facilities. The background information on the anthropometric data used is provided in CEN/TR 16823."

*In the list after the sixth paragraph add a fourth bullet for part four:*

"EN 16186, *Railway applications — Driver's cab* currently consists of the following parts:

- *Part 1: Anthropometric data and visibility;*
- *Part 2: Integration of displays, controls and indicators;*
- *Part 3: Design of displays;*
- *Part 4: Layout and access"*

**2 Modifications to Clause 1, Scope**

*Replace the first paragraph by the following:*

"This part of EN 16186 applies to driver's cabs of Electrical Multiple Unit (EMU), Diesel Multiple Unit (DMU), railcars, locomotives and driving trailers.

NOTE 1 This standard applies to rolling stock in the scope of the Directive 2008/57/EC."

*In the third paragraph delete the numbers between brackets:*

"For OTMs, see EN 14033 and EN 15746-1."

*Renumber and replace the note after paragraph 4 by the following:*

"NOTE 2 Due to railway systems constraints the level of visibility provided to the persons outside the defined anthropometric range may vary. It is up to the operator's safety management system to address the potential restriction of front visibility, if the driver uses extreme seat positions combined with extreme body heights.

*Replace the fifth paragraph with the following:*

The actual seating and positioning habits of drivers regarding visibility, whether drivers are in or outside the range of anthropometric data of this standard is outside the scope of this document.

*Add the following sentence at the end of the scope:*

"This standard is not intended to be applicable for tramways, metros and light rail vehicles."

**3 Modifications to Clause 2, Normative references**

*Add the following references to the list of normative references:*

EN 50125-1, *Railway applications - Environmental conditions for equipment - Part 1: Rolling stock and on-board equipment*

EN 15663, *Railway applications - Definition of vehicle reference masses*

#### **4 Modifications to 5.2.1, Forward visibility requirements**

*Modify the second paragraph as follows:*

"The forward visibility for the driver from the normal seated position is covered by the following assessment based on standard reference points and on a vehicle in design mass under normal payload conditions (in accordance with EN 15663) on a straight and level track."

#### **5 Modifications to Annex ZA**

*Delete Tables ZA.1 and ZA.2*

*Add the following new Table ZA.1:*

**Table ZA.1 — Correspondence between this European Standard, the TSI Locomotive and Passenger Rolling Stock published on 12.12.2014 in the OJEU, and Directive 2008/57/EC**

Clause/ subclauses of this European Standard	Chapter/§/annexes of the TSI	Corresponding text, articles/§/annexes of the Directive 2008/57/EC	Comments
<p>The whole standard is applicable, except</p> <ul style="list-style-type: none"> <li>• Clause 4</li> <li>• Subclause 5.2.1</li> <li>• Annexes A</li> <li>• Annex B</li> </ul>	<p>4.Characterization of the Rolling stock subsystem</p> <p>4.2 Functional and technical specifications of the subsystem.</p> <p>4.2.9. Driver's Cab and driver-machine interface</p> <p>4.2.9.1 Driver's cab</p> <p>4.2.9.1.3 External visibility</p> <p>§4.2.9.1.3.1 Front visibility</p> <p>§4.2.9.1.3.2 Rear and side view</p> <p>4.2.9.2 Windscreen</p>	<p>Annex III, Essential requirements</p> <p>1 General requirements</p> <p>1.5 Technical compatibility §1</p>	<p>Clause 4, subclause 5.2.1, Annexes A and Annex B of the standard related to anthropometric data's and Front visibility will probably be used in future revision of this TSI Locomotives and Passenger Rolling Stock.</p> <p>For the current TSI, the data's and requirements of its Annexes E and F shall be used.</p>

## 6 Modification to the Bibliography

*Add the following reference:*

ISO/TR 7250-2, *Basic human body measurements for technological design — Part 2: Statistical summaries of body measurements from national populations.*

*Delete the following reference:*

EN 50125-1, *Railway applications - Environmental conditions for equipment - Part 1: Rolling stock and on-board equipment*