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OSA 2: ABIVAHENDID RONGILE MINEKUKS

Railway applications - Design for PRM use - Accessibility
of persons with reduced mobility to rolling stock - Part
2: Boarding aids

EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 16586-2:2017 sisaldab Euroopa standardi EN 16586-2:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 16586-2:2017 consists of the English text of the European standard EN 16586-2:2017.
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English Version

Railway applications - Design for PRM use - Accessibility of persons with reduced mobility to rolling stock - Part 2: Boarding aids

Applications ferroviaires - Conception destinée à l'usage par les PMR - Accessibilité du matériel roulant aux personnes à mobilité réduite - Partie 2 : Dispositifs d'aide à l'embarquement et au débarquement

Bahnanwendungen - Gestaltung für die Nutzung durch PRM - Barrierefreier Zugang - Teil 2: Einstiegshilfen

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European foreword

This document (EN 16586-2:2017) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.

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

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Introduction

This document is part of a suite of four 'Design for PRM use' standards that have in total nine parts:

- EN 16584 is a standard that covers both infrastructure and rolling Stock — Railway applications — Design for PRM use — General requirements:
 - Part 1: Contrast (EN 16584-1)
 - Part 2: Information (EN 16584-2)
 - Part 3: Optical and friction characteristics (EN 16584-3)
- EN 16585 is a standard that covers rolling stock — Railway applications — Design for PRM use — Equipment and components on board rolling stock:
 - Part 1: Toilets (EN 16585-1)
 - Part 2: Elements for sitting, standing and moving (EN 16585-2)
 - Part 3: Clearways and internal doors (EN 16585-3)
- EN 16586 is a standard that covers rolling stock — Railway applications — Design for PRM use — Accessibility of persons with reduced mobility to rolling stock:
 - Part 1: Steps for access and egress (EN 16586-1)
 - Part 2: Boarding aids (EN 16586-2)
- EN 16587 is a standard that covers infrastructure — Railway applications — Design for PRM use — Requirements for obstacle free routes for infrastructure.

These standards aim to clarify the requirements (with clear and consistent terms and definitions) and to define the associated criteria and, where appropriate, methodologies to allow a clear pass/fail assessment.

1 Scope

This European Standard describes the specific 'Design for PRM use' requirements applying to rolling stock and the assessment of those requirements. The following applies to this standard:

- the definitions and requirements describe specific aspects of 'Design for PRM use' required by persons with disabilities and persons with reduced mobility as defined in the PRM TSI;
- this standard defines elements which are universally valid for obstacle free travelling including steps for access and egress and boarding aids. The definitions and requirements of this standard are to be used for rolling stock applications;
- this standard only refers to aspects of accessibility for PRM passengers it does not define general requirements and general definitions;
- this standard assumes that the vehicle is in the defined operating condition;
- where minimum or maximum dimensions are quoted these are absolute NOT nominal.

The 'Accessibility of persons with reduced mobility' standard is written in two parts:

- Part 1 contains:
 - steps for access and egress.
- this document is Part 2 and contains:
 - boarding aids.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1756-2:2004+A1:2009, *Tail lifts - Platform lifts for mounting on wheeled vehicles - Safety requirements - Part 2: Tail lifts for passengers*

EN 14752, *Railway applications - Body side entrance systems for rolling stock*

EN 15273-2, *Railway applications - Gauges - Part 2: Rolling stock gauge*

EN 16584-1, *Railway applications — Design for PRM use — General requirements — Part 1: Contrast*

EN 16584-3, *Railway applications — Design for PRM use — General requirements — Part 3: Optical and friction characteristics*

EN 16585-1:2017, *Railway applications — Design for PRM use — Equipment and components on board rolling stock — Part 1: Toilets*

EN 16585-3, *Railway applications — Design for PRM use — Equipment and components on board rolling stock — Part 3: Clearways and internal doors*

EN 16587, *Railway applications — Design for PRM use — Requirements on obstacle free routes for infrastructure*

ISO 18738-1, *Measurement of ride quality -- Part 1: Lifts (elevators)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

boarding aid

device (fixed or portable) that bridges the gap between rolling stock and platform to allow a PRM to board or alight from a train

Note 1 to entry: These include manual or automatic ramps, lifts and other devices.

3.2

bridging plate

retractable device integrated into the vehicle as close as possible to the door threshold level that enables access for wheelchair users, fully automatic and activated/controlled in conjunction with the door opening/closing sequences or semi-automatic on demand from passenger or staff

Note 1 to entry: It retains its strength without support on the station platform when extended.

3.3

clear width

clear usable width

unobstructed width of an open door or clearway to allow a PRM to pass through

3.4

doorway

opening in the vehicle body side that allows access to and egress from that vehicle

3.5

effective clear width

horizontal usable width of the surface of a boarding aid or entrance step

3.6

first step

step that is the first step for a passenger to use, to overcome a height change

Note 1 to entry: For the external access/egress steps this will normally be the step that is closest to the platform edge (it may be a fixed or a movable step), therefore this is the first step when boarding and the last step when alighting.

Note 2 to entry: In the context of steps for internal height changes (other than the external access/egress steps) this means the first usable step when ascending and the edge of the walking floor when descending.

3.7

gap

distance between a platform and the closest point on the rolling stock at the passenger door where passengers traverse from one to the other (both vertical and horizontal)