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Railway applications - Design for PRM use - Equipment
and components onboard rolling stock - Part 1: Toilets

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16585-1:2017 sisaldab Euroopa standardi EN 16585-1:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 16585-1:2017 consists of the English text of the European standard EN 16585-1:2017.
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English Version

Railway applications - Design for PRM use - Equipment and components onboard rolling stock - Part 1: Toilets

Applications ferroviaires - Conception destinée à
l'usage par les PMR - Equipements et éléments à bord
du matériel roulant - Partie 1 : Toilettes

Bahnanwendungen - Gestaltung für die Nutzung durch
PRM - Ausstattung und Bauteile in Schienenfahrzeugen
- Teil 1: Toiletten

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European foreword

This document (EN 16585-1:2017) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

This document supersedes CEN/TS 16635:2014.

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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.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 toilets, elements for sitting, standing and moving and clearways and internal doors. 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 rolling stock is in its defined operating condition;
- where minimum or maximum dimensions are quoted these are absolute NOT nominal requirements.

The 'Equipment and Components' standard is written in three parts:

- this document is Part 1 and contains:
 - toilets;
- part 2 contains:
 - handholds;
 - seats;
 - wheelchair spaces;
- part 3 contains:
 - clearways;
 - internal doors.

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 12183, *Manual wheelchairs - Requirements and test methods*

EN 12221-1:2008+A1:2013, *Child use and care articles - Changing units for domestic use - Part 1: Safety requirements*

EN 12221-2:2008+A1:2013, *Child use and care articles - Changing units for domestic use - Part 2: Test methods*

EN 12790, *Child use and care articles - Reclined cradles*

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

EN 16584-2:2017, *Railway applications - Design for PRM use - General requirements - Part 2: Information*

EN 16585-2, *Railway applications — Design for PRM use — Equipment and components on board rolling stock - Part 2: Elements for sitting, standing and moving*

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

3 Terms and definitions

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

3.1

clear width

clear usable width

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

3.2

clearway

unobstructed space with defined widths and heights to allow movement within a vehicle

3.3

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 moveable 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.

3.4

handrail

continuous element with round cross section for passengers to use to aid personal stability by gripping around

3.5

last step

final step for an ascending passenger to use to overcome a height change, forming the edge of the walking floor

3.6

manual door

unpowered door which the passenger has to physically open and/or close

3.7

palm operable

operable by the palm or any part of the hand, not requiring fingers to be unclenched

Note 1 to entry: The design need is that passengers with painful conditions, which affect their joints such as arthritis, may be unable to (and are likely to experience discomfort or pain if they do) exert any force with the tip of a single finger. Many may not be able to unclench their fingers to do this or perform any pulling action.