

# SVENSK STANDARD

## SS-EN 16585-1:2017



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### **Järnvägar – Utformning för personer med funktionsnedsättning – Utrustning ombord på rullande materiel – Del 1: Toaletter**

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

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EUROPEAN STANDARD

**EN 16585-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2017

ICS 11.180.01; 45.060.20

Supersedes CEN/TS 16635:2014

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

This European Standard was approved by CEN on 26 September 2016.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**SS-EN 16585-1:2017 (E)**

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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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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 this document.

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## SS-EN 16585-1:2017 (E)

### 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*

## **SS-EN 16585-1:2017 (E)**

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.

**3.8**

**proximity sensor**

sensor that can be used to control facilities without the control device being physically touched

**3.9**

**sharp edge**

thin edge capable of cutting or an abrupt end or discontinuity of a surface which has the potential to injure a passenger in normal use

**3.10**

**standard toilet**

toilet not designed to be accessible to a passenger in a wheelchair

**3.11**

**universal toilet**

toilet designed to be used by all passengers including passengers in wheelchairs

**3.12**

**usable width**

unobstructed width of an open door or passageway allowing for passengers to pass through

**3.13**

**wheelchair**

wheeled personal mobility device

Note 1 to entry: Wheelchair characteristics are defined in Annex A.

**3.14**

**wheelchair accessible doorway**

closest doorway to the wheelchair space (and wheelchair accessible sleeping accommodation, where fitted)

**3.15**

**wheelchair space**

designated space in the passenger compartment for the wheelchair users and their wheelchairs

Note 1 to entry: Space can be designed for two wheelchairs, one beside the other (dual).