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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 16585-2:2017 sisaldab Euroopa standardi EN 16585-2:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 16585-2:2017 consists of the English text of the European standard EN 16585-2:2017.
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ICS 11.180.01; 45.060.20

English Version

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

Applications ferroviaires - Conception destinée à l'usage par les PMR - Equipements et éléments à bord du matériel roulant - Partie 2 : Eléments pour position assise, position debout et déplacement

Bahnanwendungen - Gestaltung für die Nutzung durch PRM - Ausstattung und Bauteile in Schienenfahrzeugen - Teil 2: Bauteile zum Sitzen, Stehen und Fortbewegen

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

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## European foreword

This document (EN 16585-2:2017) 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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 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:

- Part 1 contains:
  - toilets;
- this document is Part 2 and 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 16584-1:2017, *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 16585-1:2017, *Railway applications — Design for PRM use — Equipment and components on board rolling stock — Part 1: Toilets*

EN 16585-3:2017, *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

##### **clearway**

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

#### 3.2

##### **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

#### 3.3

##### **fixed longitudinal seat**

passenger seat which are installed along the body side (not foldable or intended to tip up) facing perpendicular to the direction of travel

#### 3.4

##### **gangway**

means for passengers to pass from one vehicle of a train to the adjacent vehicle and includes the inter-vehicle connection device and any aisle (e.g. between body end cupboards, cabinets or toilets) immediately adjacent to the device

Note 1 to entry: This definition is intentionally different from EN 16286-1.

#### 3.5

##### **inter-vehicle gangway**

articulating device allowing transit between vehicles (provided for passenger use)

#### 3.6

##### **handhold**

discontinuous element designed to be gripped or held in order to aid personal stability

#### 3.7

##### **handrail**

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