# **TECHNICAL REPORT RAPPORT TECHNIQUE TECHNISCHER BERICHT**

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**English Version** 

# Railway applications - Driver's cab - Background information on anthropometric data

Applications ferroviaires - Cabines d'opérateur -Justification des données anthropometriques

Bahnanwendungen - Führerraum -Hintergrundinformationen zu anthropometrischen Daten

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## **European foreword**

This document (CEN/TR 16823:2015) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

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This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

# Introduction

This document has been used as a basis for deriving the requirements related to anthropometric data used in the EN 16186 series [5]. The following principles have been applied for the purposes of this document:

- Principle 1: Every identified trend has the same direction in all member states. The direction of a trend could be upwards or downwards. An example for an upward trend would be changes in body height.
- Principle 2: All trends take place at the same time in all member states.
- Principle 3: The impact of every trend is different. Impacts can be treated like a vector.
- Principle 4: Using the average of body height of the European population does not create the height of the 'average European driver'.

### 1 Scope

This Technical Report describes the background on the anthropometric data provided by EN 16186-1 [1].

## 2 Terms and definitions

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

#### 2.1

#### driver

person tasked with operating a vehicle or a train by operating controls in a driver's cab or on a remote control unit

#### 2.2

#### driver's cab

compartment of a vehicle which is equipped with controls and instruments with which the driver controls traction units in the train

### 3 Background on anthropometric data

#### 3.1 Sources for current anthropometric data

- European database: PeopleSize Database [2];
- EN ISO 15537 [3];
- recent representative European customer specifications;
- UIC 651 [4].

NOTE It has been proven that anthropometric data provided by UIC 651 are more representative for northern than for southern European populations.