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Railway applications - External visible and audible  
warning devices for trains - Part 1: Head, marker and  
tail lamps

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 15153-1:2013+A1:2016 sisaldab Euroopa standardi EN 15153-1:2013+A1:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 15153-1:2013+A1:2016 consists of the English text of the European standard EN 15153-1:2013+A1:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.10.2016.	Date of Availability of the European standard is 26.10.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

Railway applications - External visible and audible  
warning devices for trains - Part 1: Head, marker and tail  
lamps

Applications ferroviaires - Dispositifs externes  
d'avertissement optiques et acoustiques pour les trains  
- Partie 1: Signaux de face avant, signaux d'extrémité  
avant et signaux de face arrière

Bahnanwendungen - Optische und akustische  
Warneinrichtungen für Schienenfahrzeuge - Teil 1:  
Fernlichter, Spitzensignale und Zugschlusssignale

This European Standard was approved by CEN on 27 October 2012 and includes Amendment 1 approved by CEN on 25 July 2016.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 9 November 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (EN 15153-1:2013+A1:2016) 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 April 2017, and conflicting national standards shall be withdrawn at the latest by April 2017.

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

This document includes Amendment 1 approved by CEN on 2016-07-25.

This document supersedes A1 EN 15153-1:2013 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

A1 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. A1

The main changes with respect to the previous edition are:

- technical requirements have been brought in line with the conventional TSIs, and
- requirements have been revised to permit new technologies.

This series of documents *Railway applications — External visible and audible warning devices for trains* consists of the following parts:

- *Part 1: Head, marker and tail lamps* (the present document);
- *Part 2: Warning horns.*

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

This European Standard was produced following a review of EN 15153-1:2007 to incorporate the requirements of rolling stock TSIs.

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## 1 Scope

This European Standard defines the functional and technical requirements for head, marker and tail lamps for trains, including high speed and conventional rail, but excluding road, metro and self-contained systems.

This European Standard also defines the requirements for testing and conformity assessment.

Portable lamps are excluded from the scope of this European Standard.

## 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.

prEN 16186-2:2015, *Railway applications — Driver's cab — Part 2: Integration of displays, controls and indicators* <sup>A1</sup>

CIE 15, *Colorimetry*<sup>1)</sup>

CIE 69, *Methods of characterizing illuminance meters and luminance meters; performance, characteristics and specifications* <sup>1)</sup>

CIE 70, *The measurement of absolute luminous intensity distributions* <sup>1)</sup>

ISO 11664-1 (CIE S 014-1/E), *Colorimetry — Part 1: CIE standard colorimetric observers* <sup>1)</sup>

NOTE ISO 11664-1 was previously published as ISO 10527:2007, which has been withdrawn.

## 3 Terms and definitions

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

### 3.1

#### **high speed train**

train which is designed to operate at speeds equal to or greater than 190 km/h

Note 1 to entry: This includes Class 1 and Class 2 high speed trains as defined in the HS RST TSI.

### 3.2

#### **conventional train**

train which is designed to operate at a maximum speed lower than 190 km/h and designed to travel on all or part of the conventional lines of the TEN (Trans-European rail system Network)

Note 1 to entry: See also CR LOC&PAS TSI, §2.1 (Locomotives and Passenger Rolling Stock).

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<sup>1)</sup> Available from: International Commission of Illumination, CIE Central Bureau, Kegelgasse 27, A-1030 Wien.