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Railway applications - Passenger Alarm System - Part 1: System requirements for mainline rail

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16334-1:2014+A1:2022 sisaldab Euroopa standardi EN 16334-1:2014+A1:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 16334-1:2014+A1:2022 consists of the English text of the European standard EN 16334-1:2014+A1:2022.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.05.2022.	Date of Availability of the European standard is 18.05.2022.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.320, 45.060.20

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16334-1:2014+A1

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ICS 13.320; 45.060.20

Supersedes EN 16334:2014

English Version

Railway applications - Passenger Alarm System - Part 1: System requirements for mainline rail

Applications ferroviaires - Système d'alarme passager - Partie 1: Prescriptions relatives au système

Bahnanwendungen - Fahrgastalarmsystem - Teil 1: Systemanforderungen für Vollbahnen

This European Standard was approved by CEN on 22 May 2014 and includes Amendment 1 approved by CEN on 20 March 2022.

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European foreword

This document (EN 16334:2014+A1:2022) 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of an identical text or by endorsement, at the latest by November 2022 and conflicting national standards shall be withdrawn at the latest by November 2022.

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 13 March 2022.

This document supersedes ⟦A1⟩ EN 16334:2014 ⟨A1⟧.

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

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

1 Scope

[A1] This document specifies the characteristics and the performance requirements of the Passenger Alarm System (PAS). The aim of the PAS is to:

— allow passengers, in case of emergency situations, to inform the driver;

— allow the driver to keep the train moving or to stop the train at a safe location;

— stop the train automatically:

a) at a platform,

b) if there is no acknowledgement by the driver.

This document covers the PAS fitted to passenger carrying rolling stock and specifies:

— the functional requirements for an alarm triggered in the driving cab (Clause 6);

— the communication channel between the driver and passengers or on-board staff (6.4)

— the dynamic analysis of the PAS (Clause 7);

— the requirements for the degraded modes management (Clause 8);

— the safety related requirements (Clause 9);

— requirements for the Passenger Alarm Device (PAD) and PAD area (Clause 10).

This document applies to heavy rail rolling stock, which is in the field of the EU Directive 2016/797/EU. This document does not apply to metros, trams and light rail, as defined by the CEN/CENELEC Guide 26.

Existing passenger alarm systems may require modification to work in conjunction with vehicles that comply with this document.

NOTE Most of the requirements of UIC 541-6 are compliant with this document.

Other communication systems such as “communication device for passengers”, “call for aid”, “emergency call” or “call for assistance” are covered by the EN 16683 series. [A1]

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.

[A1] EN 13272-1:2019, *Railway applications - Electrical lighting for rolling stock in public transport systems - Part 1: heavy rail* [A1]

EN 14478:2005, *Railway applications — Braking — Generic vocabulary*

[A1] EN 16186-2:2017, *Railway applications - Driver's cab - Part 2: Integration of displays, controls and indicators*

EN 16186-3:2018, *Railway applications - Driver's cab - Part 3: design of displays*

EN 50126-1:2017, *Railway Applications - The Specification and demonstration of reliability, availability, maintainability and safety (RAMS) - Part 1: generic RAMS process*

EN 50126-2:2017, *Railway Applications - The specification and demonstration of reliability, availability, maintainability and safety (RAMS) - Part 2: systems approach to safety* A1

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 3864-4:2011, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14478:2005 apply.

NOTE The definition for 'passenger alarm' given in EN 14478:2005, 4.9.2.2, is superseded by this document.

3.1
Closed Circuit Television
CCTV
on board video recording system

3.2
PAD operated
handle that is operated when it is manipulated in order to change its mechanical status and therefore to send an information to the PAS

3.3
Passenger Alarm Interface
PAI
arrangement of equipment close to each other or one single equipment, which includes:

— passenger alarm device (see Clause 9);

— microphone;

— loudspeaker;

— visual indicators: lights;

— resetting device(s);

— information labels;

— a seal (optional)

A1 Note 1 to entry: For units designed for operation with staff on-board (other than driver), it is permitted to have no microphone and loudspeaker. In that case, the communication link is established between the driver's cab and the staff on-board. A1