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Railway applications - Passenger alarm system - Part 2: System requirements for urban rail

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EUROPEAN STANDARD
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English Version

Railway applications - Passenger alarm system - Part 2: System requirements for urban rail

Applications ferroviaires - Système d'alarme passager
Partie 2 : Prescriptions relatives au système pour le rail
urbain

Bahnanwendungen - Fahrgastalarmsystem - Teil 2:
Systemanforderungen für Schienennahverkehr

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 256.

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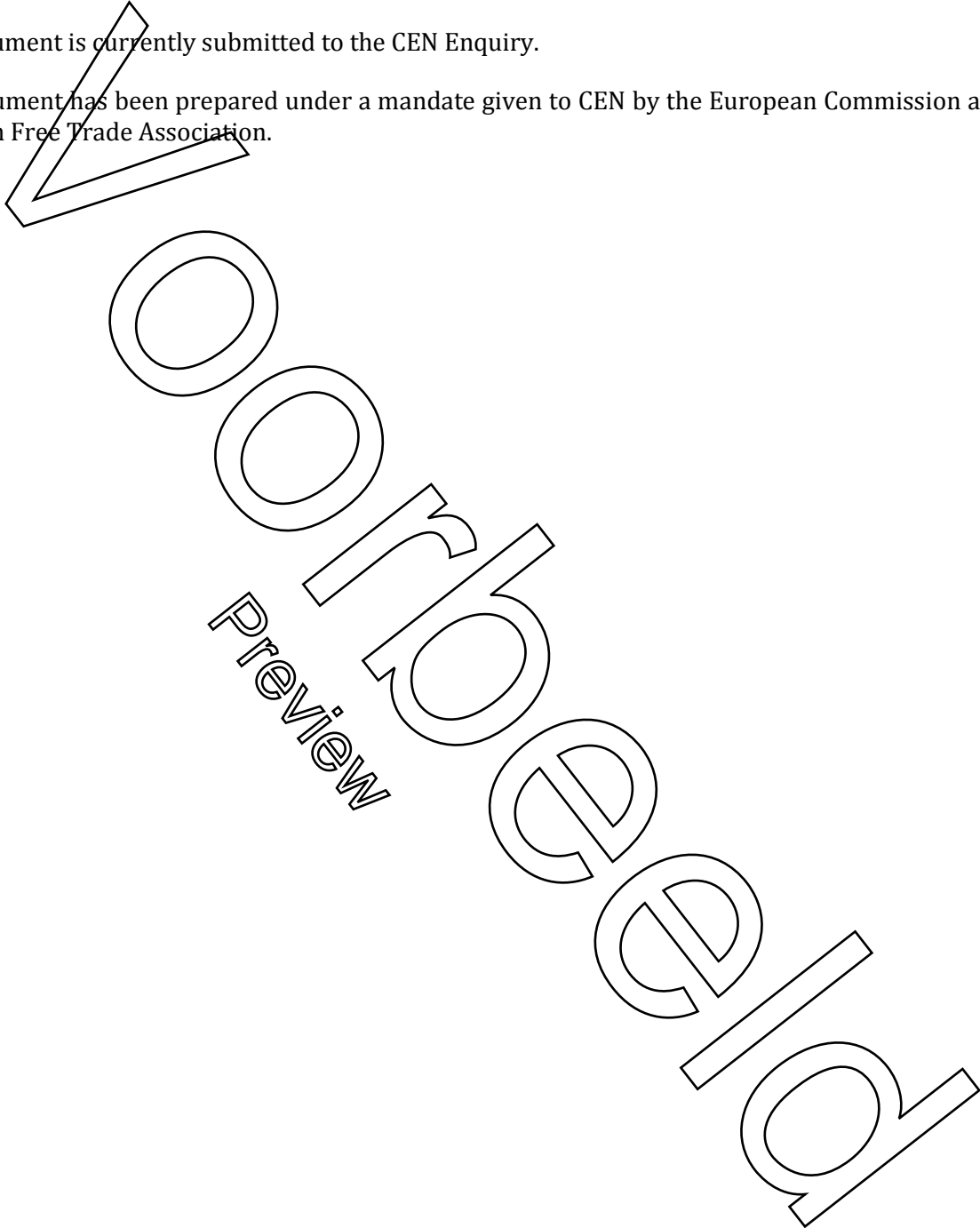
prEN 16334-2:2018 (E)

European foreword

This document (prEN 16334-2:2018) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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



1 Scope

This document specifies the characteristics of the Passenger Alarm System (PAS) for Urban Rail.

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

- the safety related requirements;
- the functional requirements of PAS triggered by passengers;
- the requirements for the communication channel between passengers and the driver or OCC;
- the requirements for the functional behaviour of the PAS;
- the requirements for the degraded modes management;
- the requirements for the Passenger Alarm Device (PAD) and PAD area.

This document is applicable to the categories I to III of Urban Rail rolling stock defined in CEN/CLC Guide 26:

- (I) metros;
- (II) trams;
- (III) light rail.

NOTE 1 CEN/CLC Guide 26 defines Metro, Tram and Light Rail as public transport systems permanently guided at least by one rail, intended for the operation of local urban and suburban passenger services with self-propelled vehicles and operated either segregated or not from general road and pedestrian traffic.

NOTE 2 The PAS function on existing vehicles may require modification to work in conjunction with vehicles that comply with this document.

NOTE 3 This European Standard covers urban rail rolling stock, both with or without a driver.

NOTE 4 For rolling stock devoted to suburban passenger services, this European Standard applies when the TSIs do not apply.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

prEN 13272-2, *Railway applications — Electrical lighting for rolling stock in public transport systems — Part 2: Urban rail systems*

EN 13452-1, *Railway applications — Braking — Mass transit brake systems — Part 1: Performance requirements*

EN 14478, *Railway applications - Braking - Generic vocabulary*

EN 62267:2009, *Railway applications — Automated urban guided transport (AUGT) — Safety requirements (IEC 62267:2009)*

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EN 62290 (all parts), *Railway applications — Urban guided transport management and command/control systems (IEC 62290, all parts)*

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 and EN 13452-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

**3.1 Automated Urban Guided Transport
AUGT**

system featuring driverless or unattended train operation (as defined below) with selfpropelled, guided vehicles, operating on an exclusive guideway

[SOURCE EN 62267:2009, 3.1.1]

**3.2 Passenger Alarm System
PAS**

alarm system for passengers that is intended to initiate appropriate measures in case of an emergency situation

**3.3 Closed Circuit Television System
CCTV**

system consisting of camera equipment, storage, monitoring and associated equipment for transmission and controlling purposes

[SOURCE: EN 50132-1:2010, 3.1.27, modified — The term originally defined was "CCTV system".]

**3.4 Passenger Alarm Device
PAD**

interface to the PAS through which the requirement for a defined Passenger Alarm System demand is indicated or initiated by passengers or on-board operational staff

Note 1 to entry: The PAD is sometimes called emergency handle or alarm handle. These short-terms should only be used where misunderstanding is not possible or in descriptions prepared for passengers.

[SOURCE: EN 16334:2014, 3.4, modified — The end of the definition was altered and the Note 1 to entry was shortened.]

3.5**PAD operated**

status indicated in the PAS by the PAD when operated by changing its mechanical position

[SOURCE: EN 16334:2014, 3.2, modified – The notion of handle is removed as in urban rail it may be another type of device.]

3.6**Passenger Alarm Interface****PAI**

arrangement of equipment close to each other or one single equipment, which includes:

- passenger alarm device (see Clause 10);
- microphone;
- loudspeaker;
- visual indicators (e.g. lights);
- resetting device(s), if any;
- information labels;
- a seal (optional)

[SOURCE: EN 16334:2014, 3.3, modified – "If any" was added after "resetting device(s)" and "lights" is now introduced by "e.g."]

3.7**standstill signal**

signal that indicated that the vehicle is at a standstill (as defined in EN 14478:2018, 4.6.22)

Note 1 to entry: Standstill signal is used for door release and/or braking control. The standstill condition is normally related to minimum velocity.

3.8**Operations Control Centre****OCC**

centre from which operation of the line or the network is supervised and managed

[SOURCE: EN 62267:2009, 3.1.10]

3.9**operational rules**

set of operational specifications and requirements defined by transport operators

Note 1 to entry: The precise content of these rules is defined in CEN/CLC Guide 26:2013, 5.1.2.

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