PD CLC/TS 50459-3:2021

BSI Standards Publication

Railway applications — Communication, signalling and processing systems — European Rail Traffic Management System

Part 3: Ergonomic arrangements of non ETCS information

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National foreword

This Published Document is the UK implementation of CLC/TS 50459-3:2021. It supersedes PD CLC/TS 50459-3:2016, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/9/1, Railway Electrotechnical Applications - Signalling and communications.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

Railway applications - Communication, signalling and processing systems - European Rail Traffic Management System - Part 3: Ergonomic arrangements of non ETCS information

Applications ferroviaires - Systèmes de signalisation, de télécommunications et de traitement - Système européen de gestion du trafic ferroviaire - Interface de conduite - Partie 3: Principes généraux pour la présentation des informations non ETCS

Bahnanwendungen - Telekommunikationstechnik, Signaltechnik und Datenverarbeitungssysteme - Europäisches Leitsystem für den Schienenverkehr - Teil 3: Ergonomische Anordnung der Nicht-ETCS Informationen

This Technical Specification was approved by CENELEC on 2021-02-08.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (CLC/TS 50459-3:2021) has been prepared by CLC/SC 9XA “Communication, signalling and processing systems”, of Technical Committee CENELEC TC 9X “Electrical and electronic applications for railways”.

This document supersedes CLC/TS 50459-3:2016.

CLC/TS 50459-3:2021 includes the following significant technical changes with respect to CLC/TS 50459-3:2016:

— Update general principles for the presentation of non ETCS information correlated with ERA document ERA_ERTMS_015560.

— Update ergonomic arrangements with EN 16186 series.

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

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

Introduction

This document should be read in conjunction with ERA_ERTMS_015560:2016 “ETCS Driver Machine Interface” and EN 16186 series, “Railway applications — Driver's Cab”.

This document is Part 3 of a series with the following parts:

— CLC/TS 50459-1, *General principles for the presentation of ERTMS/ETCS/GSM-R information*

— CLC/TS 50459-2, *Ergonomic arrangements of ERTMS/GSM-R information*

— CLC/TS 50459-3, *Ergonomic arrangements of non ETCS information*

This part of the CLC/TS 50459 series contains the ergonomic arrangements of non ETCS information.

Annex A of this document shows examples of existing NTC DMI layouts.

Annex B of this document lists the sound examples for NTC and other train functions (not exhaustive).

1 Scope

This document describes from an ergonomic point of view how non ETCS information are arranged and displayed on the CCD. More specifically, it covers information that is not within the scope of ERA document ERA_ERTMS_015560.

This document describes two possible technologies for implementing the ETCS DMI namely touch screen and soft key.

National systems not integrated within ETCS DMI are not within the scope of this document.

Redundancy concepts are not within the scope of this document.

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.

EN 16186-3:2016+A1:2018, *Railway applications - Driver's cab - Part 3: Design of displays*

CLC/TS 50459-1, *Railway applications - Communication, signalling and processing systems - European Rail Traffic Management System - Driver-Machine Interface - Part 1: General principles for the presentation of ERTMS/ETCS/GSM-R information*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in CLC/TS 50459-1 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 https://www.iso.org/obp

3.1.1
ETCS DMI
CCD that allows communication between ETCS on-board equipment and the driver

3.1.2
ETCS default window
total image screen area with the allocation of objects, text messages and buttons as described in ERA ERTMS 015560 Chapter 8 and 9

3.1.3
NTC default window
shown in NTC operation (Level NTC, modes SN or NL)

Note 1 to entry: The layout of an NTC default window could differ from an ETCS default window.