

Railway applications – Communication, signalling and processing systems – Safety related electronic systems for signalling

Bahnanwendungen –
Telekommunikationstechnik, Signaltechnik und Datenverarbeitungssysteme –
Sicherheitsrelevante elektronische Systeme für Signaltechnik

Applications ferroviaires –
Systèmes de signalisation, de télécommunications et de traitement –
Systèmes électroniques de sécurité pour la signalisation

Publisher and printing:
OVE Austrian Electrotechnical Association

ICS 93.100

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Identical (IDT) with EN 50129:2018 + AC:2019

Supersedes see National Foreword

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National Foreword

This European Standard EN 50129:2018 + AC:2019 has the status of an Austrian electrotechnical standard in accordance with the Austrian Electrical Engineering Act 1992.

The legal status of this Austrian electrotechnical standard is stated in the respective ordinance under the Electrical Engineering Act.

European Standards (EN) are implemented as Austrian electrotechnical standards according to the CENELEC Internal Regulations by publication of an identical text and by adding OVE to the EN number.

According to the foreword of the EN the latest date by which the national (electrotechnical) standards conflicting with the EN have to be withdrawn is 2021-11-23 (dow, date of withdrawal). Until this deadline the following standard may be applied:

ÖVE/ÖNORM EN 50129:2004-02-01,
ÖVE/ÖNORM EN 50129/AC:2010-10-01.

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Corrigendum to EN 50129:2018

English version

In Section 4.4 of subclause 7.2, replace EN 50114-4 with EN 50121-4.

April 2019

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EUROPÄISCHE NORM

November 2018

ICS 93.100

Supersedes CLC/TR 50451:2007, CLC/TR 50506-1:2007, CLC/TR 50506-2:2009, EN 50129:2003

English Version

Railway applications - Communication, signalling and processing systems - Safety related electronic systems for signalling

Applications ferroviaires - Systèmes de signalisation, de télécommunications et de traitement - Systèmes électroniques de sécurité pour la signalisation

Bahnanwendungen - Telekommunikationstechnik, Signaltechnik und Datenverarbeitungssysteme - Sicherheitsrelevante elektronische Systeme für Signaltechnik

This European Standard was approved by CENELEC on 2018-06-07. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 50129:2018) has been prepared by CLC/SC 9XA "Communication, signalling and processing systems" of CLC/TC 9X "Electrical and electronic applications for railways".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-05-23
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-11-23

This document supersedes EN 50129:2003.

CLC/TR 50451:2007, CLC/TR 50506-1:2007 and CLC/TR 50506-2:2009 are withdrawn by the time the present Publication is published.

The significant technical changes with respect to EN 50129:2003 are the following:

- A better alignment with the life cycle phases described in EN 50126-1:2017 has been made;
 - Clause 5 describes the requirements that apply to the development of safety-related electronic systems (until phase 9 of the life cycle),
 - Clause 8 focuses on the requirements for safety acceptance and approval of safety-related electronic systems and subsequent phases;
- Requirements and guidance have been added in Clause 6 on the following topics:
 - reuse of pre-existing systems,
 - safety-related tools,
 - impact of IT security threats on functional safety,
 - specific application safety cases;
- Requirements for the structure and content of the safety case are now defined in a dedicated Clause 7;
- Annex A has been aligned with EN 50126-2:2017 for the specification and allocation of safety integrity requirements;
- The content of former Annex D has been merged with Annex B, and has been changed from informative to normative;
- The status of the Annex E has been changed from informative to normative;
- An Annex F has been added as an informative annex on User Programmable Integrated Circuits.

A more detailed comparison of changes between EN 50129:2003 and this document can be found in Annex G.

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, and supports essential requirements of EU Directive(s).

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

The structure of this document is described in Clause 4.

This document is intended to be used in conjunction with 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*", and EN 50128:2011, "*Railway applications — Communication, signalling and processing systems — Software for railway control and protection systems*".

This document has been prepared under the Mandate M/483 given to CENELEC by the European Commission and the Commission Implementing Regulation (EU) No 402/2013 of 30 April 2013 on the common safety method (CSM) for risk evaluation and assessment and repealing Regulation (EC) No 352/2009 (with the subsequent amendment, Commission Implementing Regulation (EU) No 2015/1136 of 13 July 2015).