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Railway applications -Communication, signalling and processing systems -Application Guide for EN 50129 -Part 1: Cross-acceptance

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CENELEC

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

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Foreword

This Technical Report was prepared by SC 9XA, Communication, signalling and processing systems, of <text> Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

The text of the draft was submitted to vote and was approved by CENELEC as CLC/TR 50506-1 on 2007-01-16.

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EN 50129 was developed in CENELEC and is now regularly called up in specifications. In essence, it lists factors that influence RAMS (see EN 50126) and adopts a broad risk-management approach to safety. EN 50129 is the basic standard for safety related electronic systems for signalling.

Use of EN 50129 has enhanced the general understanding of the issues, but has also shown that items like cross-acceptance need further explanation and clarification. Therefore CENELEC decided to address those items in this application guide for cross-acceptance.

1 Scope

This application guide for cross-acceptance is a Technical Report about the basic standard. It is applicable to the same systems and addresses the same audience as the standard itself. It provides additional information on the application of EN 50129 to cross-acceptance. Therefore it deals with the acceptance by a safety authority of a previously accepted system or product in a different environment and/or context, often referred to as cross-acceptance. It is mainly dedicated to safety assessors, safety authorities, validators, and safety managers.

In drafting this guide, it is assumed that the reader is familiar with the basic structure of the standard.

2 Normative references

The following referenced documents are indispensable for the application 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.

NOTE Additional informative references are included in the bibliography.

EN 50124-1, Railway applications - Insulation coordination - Part 1: Basic requirements - Clearances and creepage distances for all electrical and electronic equipment

EN 50126, Railway applications - The specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS)

EN 50128, Railway applications - Communication, signalling and processing systems - Software for railway control and protection systems

EN 50129, Railway applications - Communication, signalling and processing systems - Safety related electronic systems for signalling

EN 61508 series, Functional safety of electrical/electronic/programmable electronic safety-related systems (IEC 61508 series)

EN/ISO 9001:2000, Quality management systems – Requirements (ISO 9001:2000)

EN/ISO/IEC 17020, General criteria for the operation of various types of bodies performing inspection (ISO/IEC 17020)