

Railway applications — Communications, signalling and processing systems — ERTMS/ETCS — External signalling for lines equipped with ERTMS/ETCS Level 2

ICS 93.100

National foreword

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**Railway applications -
Communications, signalling and processing systems -
ERTMS/ETCS -
External signalling for lines equipped with ERTMS/ETCS Level 2**

Applications ferroviaires -
Systèmes de signalisation,
de télécommunications et de traitement -
ERTMS/ETCS -
Signalisation extérieure pour les lignes
équipées de ERTMS/ETCS Niveau 2

Eisenbahnanwendungen -
Systeme für die Kommunikation,
Signalisierung und Datenverarbeitung -
ERTMS/ETCS -
Außensignale für mit ERTMS/ETCS
Level 2 ausgestattete Strecken

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CENELEC

European Committee for Electrotechnical Standardization
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Foreword

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

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1 Scope

The scope of this Technical Report is to present the different line side information used in 2006 on the ERTMS/ETCS Level 2 lines and required for the application of the ERTMS/ETCS Level 2 operational rules.

NOTE The signs described in this Technical Report are only referring to ERTMS/ETCS Level 2 operations. On lines equipped with ERTMS/ETCS Level 2 there may be some additional signs needed for maintenance, degraded modes, transition to and from other signalling systems and other operational rules. These signs are not necessarily described in this Technical Report.

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.

EN 12899-1:2001, *Fixed, vertical road traffic signs – Part 1: Fixed signs*

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

CLC/TS 50459-2, *Railway applications – Communication, signalling and processing systems - European Rail Traffic Management System - Driver-Machine Interface - Part 2: Ergonomic arrangements of ERTMS/ETCS information*

CLC/TS 50459-3, *Railway applications – Communication, signalling and processing systems - European Rail Traffic Management System - Driver-Machine Interface – Part 3: Ergonomic arrangements of ERTMS/GSM-R information*

CLC/TS 50459-4, *Railway applications – Communication, signalling and processing systems - European Rail Traffic Management System - Driver-Machine Interface - Part 4: Data entry for the ERTMS/ETCS/GSM-R systems*

CLC/TS 50459-5, *Railway applications – Communication, signalling and processing systems - European Rail Traffic Management System - Driver-Machine Interface - Part 5: Symbols*

CLC/TS 50459-6, *Railway applications – Communication, signalling and processing systems - European Rail Traffic Management System - Driver-Machine Interface - Part 6: Audible information*

UIC 651, *Layout of driver's cabs in locomotives, railcars, multiple-unit trains and driving trailers*