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**RAILWAY APPLICATIONS -  
COMMUNICATION, SIGNALLING AND  
PROCESSING SYSTEMS - EUROPEAN RAIL  
TRAFFIC MANAGEMENT SYSTEM -  
DRIVER-MACHINE INTERFACE -- PART 7:  
SPECIFIC TRANSMISSION MODULES**

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TECHNICAL REPORT  
RAPPORT TECHNIQUE  
TECHNISCHER BERICHT

**CLC/TR 50459-7**

May 2007

ICS 03.220.30; 13.180; 35.240.60

English version

**Railway applications -  
Communication, signalling and processing systems -  
European Rail Traffic Management System -  
Driver-Machine interface -  
Part 7: Specific Transmission Modules**

Applications ferroviaires -  
Systèmes de signalisation, de  
télécommunications et de traitement -  
Système européen de gestion du trafic  
ferroviaire -  
Interface de conduite -  
Partie 7: Modules spécifiques de  
transmission

Eisenbahnanwendungen -  
Systeme für die Kommunikation,  
Signalisierung und Datenverarbeitung -  
Europäisches Leitsystem für den  
Schienenverkehr -  
Mensch-Maschine Schnittstelle -  
Teil 7: Spezifische Übertragungseinheiten  
ERTMS/ETCS/GSM-R Systeme

This Technical Report was approved by CENELEC on 2006-06-24.

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**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## **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.

The text of the draft was circulated for vote in accordance with the Internal Regulations, Part 2, Subclause 11.4.3.3 and was approved by CENELEC as CLC/TR 50459-7 on 2006-06-24.

This Technical Report has been prepared under mandates M/024 and M/334 given to CENELEC by the European Commission and the European Free Trade Association.

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## **Introduction**

This Technical Report presents how to display information of national cab signalling systems associated with the ERTMS Driver Machine Interface defined in the series of Technical Specifications CLC/TS 50459.

## **1 Scope**

The scope of this Technical Report is to define the ERTMS DMI in STM mode for each system include in Annex B of STI CC.

This Technical Report defines the ergonomics for the Specific Transmission Module integrated in the Driver-Machine Interface (DMI) for the ERTMS/ETCS Train Control System, and for the integrated ERTMS/GSM-R Train Control and Train Radio Systems.

The ergonomics covers the

- general arrangements (dialogue structure, sequences, layout philosophy, colour philosophy),
- symbols,
- audible information, and
- data entry arrangements.

The reasons for defining the ergonomics of the DMI are as follows:

1. Achieving harmonised and coherent presentation for ERTMS/ETCS and STM information. Given the large number of STM's requiring the use the ERTMS/ETCS DMI, only a harmonised approach is feasible.
2. Defining Driver-Machine Interface ergonomics that is compatible with agreed interoperable ERTMS specifications.
3. To reduce the risk of incorrect operation by a driver working with different trains fitted with ERTMS/ETCS.
4. Facilitating train operation with a unified ergonomics, hence reducing the cost of driver training.

This Technical Report is applicable on all trains fitted with the ERTMS/ETCS.

## **2 Normative references**

Void

## **3 Terms and definitions**

For the purposes of this document, the terms and definitions given in CLC/TS 50459-1 apply.

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