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Railway applications – Driver's cab Train Display Controller (TDC) – Part 2: Display systems FIS

Bahnanwendungen – Display-Steuereinheit (TDC) für Führerräume – Teil 2: Spezifikation der Funktionalen Schnittstelle (FIS) Anzeigesysteme

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European foreword

This document (CLC/TR 50542-2:2016) has been prepared by CLC/TC 9X ”Electrical and electronic applications for railways”.

This document is currently submitted to voting in accordance with the Internal Regulations, Part 2, Subclause 11.4.3.3 (simple majority) for acceptance as a CENELEC Technical Report.

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

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Introduction

The perimeter of CLC/TR 50542-2 is the functional interface between the TDC and the displays. The functional definition of this interface is a key feature in the process to increase market development, for instance:

— by introducing more suppliers for new rolling stock development and for driver's cab refurbishment;

— by easing the control of maintenance and the replacement processes;

— by decreasing the related equipment Life cycle cost.

In this document the display and the TDC are considered only regarding their functionalities and not as physical devices.

The CLC/TR 50542 series consists of three documents:

— this document;

— CLC/TR 50542-1, Railway applications — Driver's cab Train Display Controller (TDC) — Part 1: General architecture;

— CLC/TR 50542-3, Railway applications — Driver's cab Train Display Controller (TDC) — Part 3: Other train systems FIS.

These documents should not be interpreted as standards but as a study on the future view of the system. They do not describe an existing solution for the TDS.

These documents are not written to be used in call for tenders because they are not sufficient. However, they can serve as a basis for future development and standardization including new technologies. These documents are a first step, and may be completed later.

NOTE In case of existing discrepancies between CLC/TR 50542–1:2014 and CLC/TR 50542–2:2016, the present document prevails.

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1 Scope

The scope of this Technical Report is the definition of the functional interface between TDC and DMIs. See Figure 1.

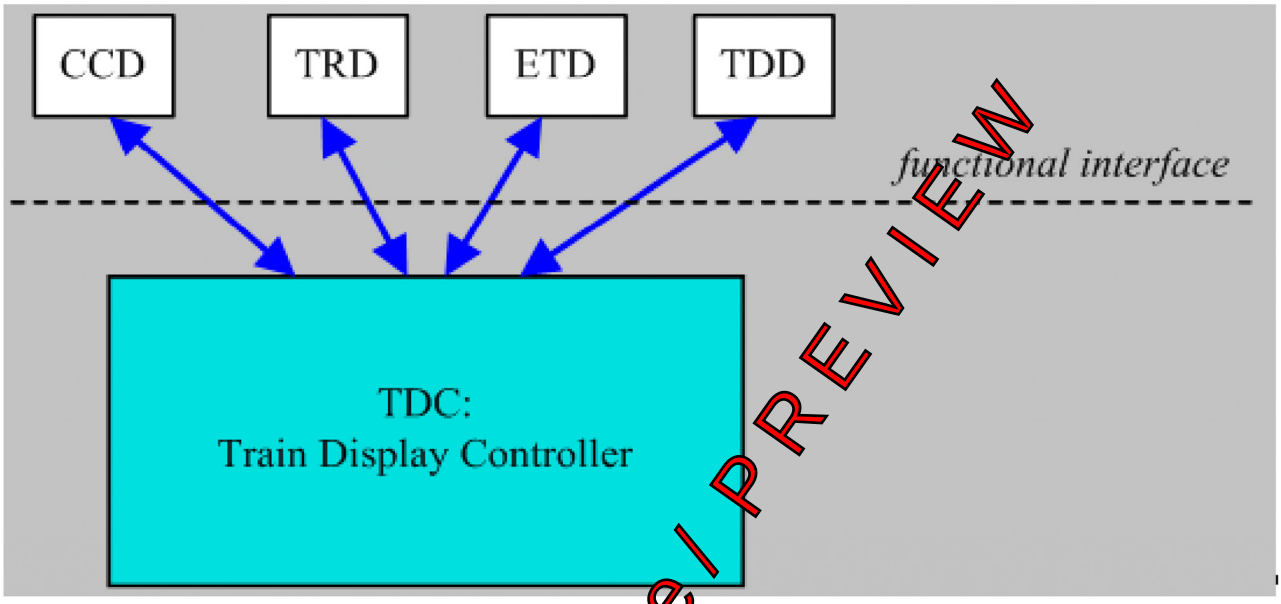


Figure 1 — TDC DMI functional architecture

The DMIs are those defined and considered in CLC/TR 50542-1.

The TDC is defined in document CLC/TR 50542-1.

NOTE 1 The conversion of physical signals into numerical representation is out of scope.

NOTE 2 The term DMI is used in this clause as synonym for display (see Clause 5).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CLC/TR 50542-1:2011, *Railway applications — Driver's cab train display controller (TDC) — Part 1: General architecture*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
input
information going from display to TDC

3.2
output
information going from the TDC to display

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