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Železniške elektronske naprave - Komunikacijsko omrežje vlaka - 3-4. del: Sestava omrežja Ethernet (ECN)

Electronic railway equipment -- Train communication network (TCN) -- Part 3-4: Ethernet Consist Network (ECN)

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Matériel électronique ferroviaire - Bus de train - Partie 3-4: Réseau de Rame Ethernet (ECN)

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EUROPEAN STANDARD

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**Electronic railway equipment - Train communication network
(TCN) - Part 3-4: Ethernet Consist Network (ECN)
(IEC 61375-3-4:2014)**

Matériel électronique ferroviaire - Réseau embarqué de
train (TCN) - Partie 3-4: Réseau Ethernet de Rame (ECN)
(CEI 61375-3-4:2014)

Elektronische Betriebsmittel für Bahnen - Zugbus - Teil 3-4:
ECN - Ethernet-Zugverband-Netzwerk
(IEC 61375-3-4:2014)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 9/1873/FDIS, future edition 1 of IEC 61375-3-4, prepared by IEC/TC 9 "Electrical equipment and systems for railways" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61375-3-4:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-01-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-04-23

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61076-2-101	-	Connectors for electronic equipment - Product EN 61076-2-101 requirements - Part 2-101: Circular connectors - Detail specification for M12 connectors with screw-locking		-
IEC 61076-3-104	-	Connectors for electronic equipment - Product EN 61076-3-104 requirements - Part 3-104: Detail specification for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 1000 MHz		-
IEC 61156-6	-	Multicore and symmetrical pair/quad cables for digital communications Part 6: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Work area wiring - Sectional specification		-
IEC 61375-1	-	Electronic railway equipment - Train communication network (TCN) - Part 1: General architecture	EN 61375-1	-
IEC 61375-2-1	-	Electronic railway equipment - Train communication network (TCN) - Part 2-1: Wire Train Bus (WTB)	EN 61375-2-1	-
IEC 61375-2-5	-	Electronic railway equipment - Train backbone - Part 2-5: Ethernet Train Backbone	EN 61375-2-5	-
IEC 62439 series	-	High availability automation networks	EN 62439 ¹⁾	-
ISO/IEC 7498 series	-	Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model		-
ISO/IEC 8824 series	-	Information technology - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1)		-
ISO/IEC 11801	-	Information technology - Generic cabling for customer premises		-

¹⁾ EN 62439 is superseded by EN 62439-6:2010, which is based on IEC 62439-6:2010.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEEE 802.3	-	IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) - Access Method and Physical Layer Specifications	-	-
IEEE 802.1Q	-	IEEE Standard for Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks	-	-
IEEE 802.1D	-	IEEE Standard for Local and Metropolitan Area Networks - Media Access Control (MAC) Bridges	-	-
ANSI/TIA/EIA 568-B.1	2001	Commercial Building Telecommunications Cabling Standard - Part 1: General requirements	-	-
ANSI X3.263	1995	EN-Information Technology - Fibre Distributed - Data Interface (FDDI) - Token Ring Twisted Pair Physical Layer Medium Dependent (TP-PMD)	-	-

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**Electronic railway equipment – Train communication network (TCN) –
Part 3-4: Ethernet Consist Network (ECN)**

**Matériel électronique ferroviaire – Réseau embarqué de train (TCN) –
Partie 3-4: Réseau Ethernet de Rame (ECN)**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRONIC RAILWAY EQUIPMENT –
TRAIN COMMUNICATION NETWORK (TCN) –****Part 3-4: Ethernet Consist Network (ECN)**

FOREWORD

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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 61375 series, under the general title *Electronic railway equipment – Train communication network (TCN)*, can be found on the IEC website.