RAUDTEE ELEKTROONIKASEADMED. RAUDTEE PARDA-MULTIMEEDIA JA -TELEMAATIKA ALLSÜSTEEMID. OSA 1: ÜLDARHITEKTUUR

Electronic railway equipment - On-board multimedia and telematic subsystems for railways - Part 1: General Architecture



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

	This Estonian standard EVS-EN 62580-1:2016 consists of the English text of the European standard EN 62580-1:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.11.2016.	J 1
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#### ICS 45.060

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 62580-1

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#### **English Version**

Electronic railway equipment - On-board multimedia and telematic subsystems for railways Part 1: General architecture
(IEC 62580-1:2015)

Matériel électronique ferroviaire - Sous-systèmes ferroviaires multimédias et télématiques embarqués -Partie 1: Architecture générale (IEC 62580-1:2015) Elektronische Betriebsmittel für Bahnen - Bordinterne Multimedia- und Telematik-Untersysteme für Bahnanwendungen -Teil 1: Allgemeine Architektur (IEC 62580-1:2015)

This European Standard was approved by CENELEC on 2015-03-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

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

### **European foreword**

The text of document 9/1990/FDIS, future edition 1 of IEC 62580-1, 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 62580-1:2016.

The following dates are fixed:

standards conflicting with the

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patent rights.

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2017-05-11
•	latest date by which the national	(dow)	2019-11-11

document have to be withdrawn 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

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive.

For relationship with EU Directive 2008/57/EC amended by Commission Directive 2011/18/EU, see informative Annex ZZ, which is an integral part of this document.

#### **Endorsement notice**

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J15 was a The text of the International Standard IEC 62580-1:2015 was approved by CENELEC as a European Standard without any modification.

# 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: <a href="https://www.cenelec.eu">www.cenelec.eu</a>

<u>Publication</u>	Year	<u>Title</u>	EN/HD	<u>Year</u>
-	- (	Railway applications - Classification system for railway vehicles - Part 4: Function groups	EN 15380-4	-
IEC 61375	Series	Electronic railway equipment - Train communication network (TCN)	EN 61375	Series
IEC 61375-2-3	-	Electronic railway equipment - Train communication network (TCN) - Part 2-3: TCN communication profile	EN 61375-2-3	-
IEC/TS 61375-2-4	-	Electronic railway equipment - Train communication network (TCN) - Part 2-4: TCN Application profile	-	-
IEC 61375-2-6 <sup>1)</sup>	-	Electronic railway equipment - Train communication network - Part 2-6: Onboard to ground communication	EN 61375-2-6 <sup>1)</sup>	-
IEC 62280	-	Railway applications - Communication, signalling and processing systems - Safety related communication in transmission systems	- '	-
ISO/IEC 8824	series	Information technology - Abstract Syntax Notation One (ASN.1)	0,,	-
ISO/IEC 8825-1	-	Information technology - ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)	6,	-
ISO/IEC 9646	series	Information technology - Open Systems Interconnection - Conformance testing methodology and framework		
ISO/IEC/IEEE 42010	2011	Systems and software engineering - Architecture description	-	5

<sup>1)</sup> At draft stage.

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## Annex ZZ (informative)

# Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant essential requirements as given in Annex III of the EC Directive 2008/57/EC (also named as New Approach Directive 2008/57/EC Rail Systems: Interoperability).

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZZ.1 relating to 'rolling stock - locomotives and passenger rolling stock' and Table ZZ.2 relating to the 'telematics applications for passenger services' of the rail system in the European Union, confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZZ.1 - Correspondence between this European Standard, the RST LOC&PAS TSI (published in the Official Journal L 356 on 12 December 2014, p. 228) and Directive 2008/57/EC

Clauses of this European Standard	Chapter / § / points / of RST LOC&PAS TSI	Essential Requirements (ER) of	Comments
The whole standard is applicable	4.2.5. Passenger-related items  4.2.12.2 General documentation: - description of computerised on-board systems	2. Requirements specific to each sub-subsystem 2.4. Rolling Stock  2.4.2. Reliability and availability  2.4.3. Technical compatibility	The TSI does not impose any technical solution regarding physical interfaces between units.  The standard offers a general multi-purpose solution for the digital communication between applications and it is relevant to interoperability.

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Table ZZ.2 - Correspondence between this European Standard, the TAP TSI (published in the Official Journal L 123 on 12 May 2011, p. 11) and Directive 2008/57/EC

Clauses of this European Standard	Chapter / § / points / of TAP TSI	Essential Requirements (ER) of	Comments
The whole standard is applicable	4.2.21. Networking and communication 4.2.21.1. General architecture	2. Requirements specific to each subsubsystem  2.4. Rolling Stock  2.4.2. Reliability and availability  2.4.3. Technical compatibility	
WARNING: Other requi within the scope of this s	rements and other EU Directandard.	ectives may be applicable	e to the products falling
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