

SLOVENSKI STANDARD

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Nadomešča:

SIST EN 61158-5-2:2012

Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 5-2. del: Definicija opravil na aplikacijski ravni - Elementi tipa 2 (IEC 61158-5-2:2014)

Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements (IEC 61158-5-2:2014)

Industrielle Kommunikationsnetze - Feldbusse - Teil 5-2: Dienstfestlegungen des Application Layer (Anwendungsschicht) - Typ 2-Elemente (IEC 61158-5-2:2014)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 5-2: Définition des services de la couche application - Éléments de type 2 (CEI 61158-5-2:2014)

Ta slovenski standard je istoveten z: EN 61158-5-2:2014

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.70	Uporabniški sloj	Application layer
35.110	Omreževanje	Networking

SIST EN 61158-5-2:2015

en

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EUROPEAN STANDARD

EN 61158-5-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2014

ICS 25.040.40; 35.100.70; 35.110

Supersedes EN 61158-5-2:2012

English Version

**Industrial communication networks - Fieldbus specifications -
Part 5-2: Application layer service definition - Type 2 elements
(IEC 61158-5-2:2014)**

Réseaux de communication industriels - Spécifications
des bus de terrain -
Partie 5-2: Définition des services de la couche application -
Éléments de type 2
(CEI 61158-5-2:2014)

Industrielle Kommunikationsnetze - Feldbusse -
Teil 5-2: Dienstfestlegungen des Application Layer
(Anwendungsschicht) - Typ 2-Elemente
(IEC 61158-5-2:2014)

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[SIST EN 61158-5-2:2015](https://standards.iteh.ai/catalog/standards/sist/9e15cfe-5767-4a15-ab6c-9c2246c01182/en-61158-5-2-2014)

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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

Foreword

The text of document 65C/763/FDIS, future edition 3 of IEC 61158-5-2, prepared by SC 65C "Industrial networks" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61158-5-2:2014.

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) 2015-06-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-09-22

This document supersedes EN 61158-5-2:2012.

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The text of the International Standard IEC 61158-5-2:2014 was approved by CENELEC as a European Standard without any modification.

[SIST EN 61158-5-2:2015](#)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61131-1	NOTE	Harmonized as EN 61131-1.
IEC 61158-2:2014	NOTE	Harmonized as EN 61158-2 ¹⁾ (not modified).
IEC 61784-1:2014	NOTE	Harmonized as EN 61784-1:2014 (not modified).
IEC 61784-2:2014	NOTE	Harmonized as EN 61784-2 ¹⁾ (not modified).
IEC 62026-3	NOTE	Harmonized as EN 62026-3 (not modified).

¹⁾ To be published.

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: www.cenelec.eu

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-3	2003 ²⁾	Programmable controllers - Part 3: Programming languages	EN 61131-3	2003 ³⁾
IEC 61158-1	2014	Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series	EN 61158-1	2014
IEC 61158-3-2	2014	Industrial communication networks - Fieldbus specifications - Part 3-2: Data-link layer service definition - Type 2 elements	EN 61158-3-2 ⁴⁾	-
IEC 61158-4-2	2014	Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements	EN 61158-4-2 ⁴⁾	-
IEC 61158-6-2	2014	Industrial communication networks - Fieldbus specifications - Part 6-2: Application layer protocol specification - Type 2 elements	EN 61158-6-2 ⁴⁾	-
IEC 61588	2009	Precision clock synchronization protocol for networked measurement and control systems	-	-
IEC 61784-3-2	-	Industrial communication networks - Profiles - Part 3-2: Functional safety fieldbuses - Additional specifications for CPF 2	EN 61784-3-2	-
ISO/IEC 646	-	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 7498-1	-	Information technology - Open Systems Interconnection - Basic reference model: The basic model	-	-

²⁾ Superseded by IEC 61131-3:2013.

³⁾ Superseded by EN 61131-3:2013 (IEC 61131-3:2013).

⁴⁾ To be published.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 8859-1	-	Information technology - 8-bit single-byte coded graphic character sets - Part-1: Latin alphabet No. 1	-	-
ISO/IEC 8859-5	1988 ⁵⁾	Information processing - 8-bit single-byte coded graphic character sets - Part 5: Latin/Cyrillic alphabet	-	-
ISO/IEC 8859-9	1989 ⁶⁾	Information processing - 8-bit single-byte coded graphic character sets - Part 9: Latin alphabet No. 5	-	-
ISO/IEC 9545	-	Information technology - Open Systems Interconnection - Application layer structure	-	-
ISO/IEC 10646	-	Information technology - Universal Coded Character Set (UCS)	-	-
ISO/IEC 10731	-	Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-	-
ISO/IEC/IEEE 60559	-	Information technology - Microprocessor Systems - Floating-Point arithmetic	-	-
ISO 639-2	-	Codes for the representation of names of languages - Part-2: Alpha-3 code	-	-
ISO 8859-1	1987 ⁷⁾	Information processing - 8-bit single-byte coded graphic character sets - Part 1: Latin alphabet No. 1	-	-
ISO 8859-2	1987 ⁸⁾	Information processing - 8-bit single byte coded graphic character sets - Part 2: Latin alphabet No. 2	-	-
ISO 8859-3	1988 ⁹⁾	Information processing - 8-bit single-byte coded graphic character sets - Part-3: Latin alphabet no. 3	-	-
ISO 8859-4	1988 ¹⁰⁾	Information processing - 8-bit single-byte coded graphic character sets - Part-4: Latin alphabet no. 4	-	-
ISO 8859-6	1987 ¹¹⁾	Information processing - 8-Bit single-byte coded graphic character sets - Part 6: Latin/Arabic alphabet	-	-

⁵⁾ Superseded by ISO/IEC 8859-5:1999.

⁶⁾ Superseded by ISO/IEC 8859-9:1999.

⁷⁾ Superseded by ISO/IEC 8859-1:1998.

⁸⁾ Superseded by ISO/IEC 8859-2:1999.

⁹⁾ Superseded by ISO/IEC 8859-3:1999.

¹⁰⁾ Superseded by ISO/IEC 8859-4:1998.

¹¹⁾ Superseded by ISO/IEC 8859-6:1999.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 8859-7	1987 ¹²⁾	Information processing - 8-bit single-byte coded graphic character sets - Part 7: Latin/Greek alphabet	-	-
ISO 8859-8	1988 ¹³⁾	Information processing - 8-bit single-byte coded graphic character sets - Part-8: Latin/hebrew alphabet	-	-
ISO 11898	1993 ¹⁴⁾	Road vehicles - Interchange of digital information - Controller area network (CAN) for high-speed communication	-	-
IETF RFC 1759	-	Printer MIB	-	-

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¹²⁾ Superseded by ISO/IEC 8859-7:2003.

¹³⁾ Superseded by ISO/IEC 8859-8:1999.

¹⁴⁾ Superseded by ISO 11898-1:2003 and ISO 11898-2:2003.

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IEC 61158-5-2

Edition 3.0 2014-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Industrial communication networks – Fieldbus specifications –
Part 5-2: Application layer service definition – Type 2 elements**

**Réseaux de communication industriels – Spécifications des bus de terrain –
Partie 5-2: Définition des services de la couche application – Éléments de type 2**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –
FIELD BUS SPECIFICATIONS –****Part 5-2: Application layer service definition –
Type 2 elements**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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Attention is drawn to the fact that the use of the associated protocol type is restricted by its intellectual-property-right holders. In all cases, the commitment to limited release of intellectual-property-rights made by the holders of those rights permits a layer protocol type to be used with other layer protocols of the same type, or in other type combinations explicitly authorized by its intellectual-property-right holders.

NOTE Combinations of protocol types are specified in IEC 61784-1 and IEC 61784-2.

International Standard IEC 61158-5-2 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This third edition cancels and replaces the second edition published in 2010. This edition constitutes a technical revision.

The main changes with respect to the previous edition are listed below:

- Updates of definitions used by the Time Sync ASE;
- Corrections to numbering of services in 6.2;
- Addition of “member” and and object specific services in 6.2.1.2.1, 6.2.1.2.3, 6.2.1.3.1, 6.2.1.3.20 to 6.2.1.3.23, 6.2.1.3.28, and 6.5;
- Updates of Identity ASE in 6.2.1.2.2;
- Updates of Assembly ASE in 6.2.1.2.3;
- Updates of Message Router ASE in 6.2.1.2.4;
- Updates of Time Sync ASE in 6.2.1.2.6;
- Updates of FAL service status codes in 6.2.1.3.3;
- Miscellaneous clarifications of FAL services in 6.2.1.3.4 to 6.2.1.3.19;
- Updates of Connection Manager ASE in 6.2.2;
- Updates of Connection ASE in 6.2.3;
- Removal of obsolete transport classes 4 to 6 in 6.3.1, 6.3.3 and 6.4;
- Miscellaneous editorial corrections.

The text of this standard is based on the following documents:

FDIS	Report on voting
65C/763/FDIS EN 61158-5-2:2014	65C/773/RVD

<https://standards.iteh.ai/catalog/standards/sist/9e15cfc6-5767-4a15-ab6c-dcb72204e8eb/sist-en-61158-5-2-2015>

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 ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61158 series, published under the general title *Industrial communication networks – Fieldbus specifications*, can be found on the IEC web site.