

SLOVENSKI STANDARD

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

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

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

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

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

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35.100.70	Uporabniški sloj	Application layer
35.110	Omreževanje	Networking

SIST EN 61158-5-5:2015

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English Version

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

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

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

This European Standard was approved by CENELEC on 2014-09-22. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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SIST EN 61158-5-5:2015

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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 2 of IEC 61158-5-5, 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 61158-5-5:2014.

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 61158-5-5:2008.

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

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

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

IEC 61784-1	NOTE	Harmonized as EN 61784-1.
IEC 61784-2	NOTE	Harmonized as EN 61784-2.

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	-	Programmable controllers - Part 3: Programming languages	EN 61131-3	-
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 61158-3-1	-	Industrial communication networks - Fieldbus specifications - Part 3-1: Data-link layer service definition - Type 1 elements	EN 61158-3-1	-
IEC 61158-4-1	-	Industrial communication networks - Fieldbus specifications - Part 4-1: Data-link layer protocol specification - Type 1 elements	EN 61158-4-1	-
IEC 61158-5	Series	Industrial communication networks - Fieldbus specifications - Part 5: Application layer service definition	EN 61158-5	Series
IEC 61158-6-5	-	Industrial communication networks - Fieldbus specifications - Part 6-5: Application layer protocol specification - Type 5 elements	EN 61158-6-5	-
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	-	-
ISO/IEC 8822	-	Information technology - Open Systems Interconnection - Presentation service definition	-	-
ISO/IEC 8824	1990 ¹⁾	Information technology - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1)	-	-

¹⁾ Withdrawn publication.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 9545	-	Information technology - Open Systems Interconnection - Application layer structure	-	-
ISO/IEC 10731	-	Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-	-
ANSI/IEEE 754	1985	Binary Floating-Point Arithmetic	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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

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

This second edition cancels and replaces the first edition published in 2007. This edition constitutes a technical revision. The main change with respect to the previous edition is listed below:

- Added message padding

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

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

FDIS	Report on voting
65C/763/FDIS	65C/773/RVD

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

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under <http://webstore.iec.ch> in the data related to the specific publication. At this date, the publication will be:

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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INTRODUCTION

This part of IEC 61158 is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the “three-layer” fieldbus reference model described in IEC 61158-1.

The application service is provided by the application protocol making use of the services available from the data-link or other immediately lower layer. This standard defines the application service characteristics that fieldbus applications and/or system management may exploit.

Throughout the set of fieldbus standards, the term “service” refers to the abstract capability provided by one layer of the OSI Basic Reference Model to the layer immediately above. Thus, the application layer service defined in this standard is a conceptual architectural service, independent of administrative and implementation divisions.

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