ICS 25.040.40, 33.040,
33.040.40, 35.100.05

SLOVENSKÁ TECHNICKÁ NORMA

Október 2019

STN	**Priemyselné komunikačné siete Špecifikácie prevádzkových zberníc Časť 1: Prehľad a príručka k súborom noriem IEC 61158 a IEC 61784**	**STN EN IEC 61158-1** 18 4020

Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/19

Obsahuje: EN IEC 61158-1:2019, IEC 61158-1:2019

Oznámením tejto normy sa od 15.05.2022 ruší
STN EN 61158-1 (18 4020) z februára 2015

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61158-1

May 2019

ICS 25.040.40; 33.040; 35.100.05 Supersedes EN 61158-1:2014

English Version

Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series (IEC 61158-1:2019)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 1: Présentation et lignes directrices des séries CEI 61158 et CEI 61784 (IEC 61158-1:2019)

Industrielle Kommunikationsnetze - Feldbusse - Teil 1: Überblick und Leitfaden zu den Normen der Reihe IEC 61158 und IEC 61784 (IEC 61158-1:2019)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 61158-1:2019 E

European foreword

The text of document 65C/944/FDIS, future edition 2 of IEC 61158-1, 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 IEC 61158-1:2019.

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) 2020-02-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-05-15

This document supersedes EN 61158-1:2014.

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The text of the International Standard IEC 61158-1:2019 was approved by CENELEC as a European Standard without any modification.

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

IEC 60793-2-30:2015	NOTE Harmonized as EN 60793-2-30:2015 (not modified)
IEC 60793-2-40:2015	NOTE Harmonized as EN 60793-2-40:2016 (not modified)
IEC 61000-6-2	NOTE Harmonized as EN IEC 61000-6-2
IEC 61131-2	NOTE Harmonized as EN 61131-2
IEC 61158-2:2014	NOTE Harmonized as EN 61158-2:2014 (not modified)
IEC 61158-3-2:2014	NOTE Harmonized as EN 61158-3-2:2014 (not modified)
IEC 61158-3-1:2014	NOTE Harmonized as EN 61158-3-1:2014 (not modified)
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IEC 61158-3-4	NOTE Harmonized as EN 61158-3-4
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IEC 62601	NOTE Harmonized as EN 62601
IEC 62657-2	NOTE Harmonized as EN 62657-2
IEC 62734	NOTE Harmonized as EN 62734
IEC 62948	NOTE Harmonized as EN 62948

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INTERNATIONAL STANDARD

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Industrial communication networks – Fieldbus specifications – Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

IEC 61158-1:2019-04(en)

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IEC 61158-1

Edition 2.0 2019-04

INTERNATIONAL STANDARD

colour inside

Industrial communication networks – Fieldbus specifications – Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 25.040.40; 33.040.40; 35.100.05 ISBN 978-2-8322-6723-3

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INDUSTRIAL COMMUNICATION NETWORKS – FIELDBUS SPECIFICATIONS –

Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

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

International Standard IEC 61158 1 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 2014. This edition constitutes a technical revision.

This edition includes the following significant changes with respect to the previous edition:

- updates of the references to and information about the IEC 61158 series, IEC 61784-1, IEC 61784-3, IEC 61784-5 series and IEC 61918 throughout the document;
- new Type 25 and the related profile family CPF 20;
- new Type 26 and the related profile family CPF 21.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
65C/944/FDIS	65C/953/RVD

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

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

A list of all the parts of the IEC 61158 series, published 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INDUSTRIAL COMMUNICATION NETWORKS – FIELDBUS SPECIFICATIONS –

Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series

1 Scope

This part of IEC 61158 specifies the generic concept of fieldbuses.

This document also presents an overview and guidance for the IEC 61158 series by:

- explaining the structure and content of the IEC 61158 series;
- relating the structure of the IEC 61158 series to the ISO/IEC 7498-1 OSI Basic Reference Model;
- showing the logical structure of the IEC 61784 series;
- showing how to use parts of the IEC 61158 series in combination with the IEC 61784 series;
- providing explanations of some aspects of the IEC 61158 series that are common to the type specific parts of the IEC 61158-5 including the application layer service description concepts and the generic fieldbus data types.

2 Normative references

There are no normative references in this document.