



BSI Standards Publication

Industrial communication networks — Fieldbus specifications

Part 6-19: Application layer protocol specification — Type 19 elements

National foreword

This British Standard is the UK implementation of EN IEC 61158-6-19:2019. It is identical to IEC 61158-6-19:2019. It supersedes BS EN 61158-6-19:2014, which will be withdrawn on 25 July 2022.

The UK participation in its preparation was entrusted to Technical Committee GEL/65/3, Industrial communications: process measurement and control, including fieldbus.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

Industrial communication networks - Fieldbus specifications -
Part 6-19: Application layer protocol specification - Type 19
elements
(IEC 61158-6-19:2019)

Réseaux de communication industriels - Spécifications des
bus de terrain - Partie 6-19: Spécification du protocole de la
couche application - Eléments de type 19
(IEC 61158-6-19:2019)

Industrielle Kommunikationsnetze - Feldbusse - Teil 6-19:
Protokollspezifikation des Application Layer
(Anwendungsschicht) - Typ 19-Elemente
(IEC 61158-6-19:2019)

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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

European foreword

The text of document 65C/948/FDIS, future edition 4 of IEC 61158-6-19, 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 61158-6-19:2019.

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) 2020-04-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-25

This document supersedes EN 61158-6-19:2014 and all of its amendments and corrigenda (if any).

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

IEC 61131 (series)	NOTE	Harmonized as EN 61131 (series)
IEC 61158-1	NOTE	Harmonized as EN IEC 61158-1
IEC 61158-4-16	NOTE	Harmonized as EN 61158-4-16
IEC 61784-1	NOTE	Harmonized as EN IEC 61784-1
IEC 61784-2	NOTE	Harmonized as EN IEC 61784-2
IEC 61800 (series)	NOTE	Harmonized as EN 61800 (series)

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where 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 61158-3-19	2019	Industrial communication networks - Fieldbus specifications - Part 3-19: Data-link layer service definition - Type 19 elements	EN IEC 61158-3-19	2019
IEC 61158-4-19	2019	Industrial communication networks - Fieldbus specifications - Part 4 -19: Data-link layer protocol specification - Type 19 elements	EN IEC 61158-4-19	2019
IEC 61158-5-19	2019	Industrial communication networks - Fieldbus specifications - Part 5-19: Application layer service definition - Type 19 elements	EN IEC 61158-5-19	2019
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 8824-1	-	Information technology - Abstract Syntax - Notation One (ASN.1): Specification of basic notation		-
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		-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –
FIELDBUS SPECIFICATIONS –****Part 6-19: Application layer protocol specification –
Type 19 elements**

FOREWORD

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

International Standard IEC 61158-6-19 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This fourth edition cancels and replaces the third edition published in 2014. This edition constitutes a technical revision.

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

- improving the hotplug and redundancy features;
- improving the phase switching and the error handling;
- editorial improvements.

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

FDIS	Report on voting
65C/948/FDIS	65C/956/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 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.

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.

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