SLOVENSKI STANDARD
SIST EN IEC 61158-5-23:2023

01-november-2023

Nadomešča:
SIST EN IEC 61158-5-23:2019

Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 5-23. del: Definicija opravil na aplikacijski ravni - Elementi tipa 23 (IEC 61158-5-23:2023)

Industrial communication networks - Fieldbus specifications - Part 5-23: Application layer service definition - Type 23 elements (IEC 61158-5-23:2023)

Industrielle Kommunikationsnetze - Feldbusse - Teil 5-23: Dienstfestlegungen des Application Layer (Anwendungsschicht) - Typ 23-Elemente (IEC 61158-5-23:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 5-23: Définition des services de la couche application - Eléments de type 23 (IEC 61158-5-23:2023)

Ta slovenski standard je istoveten z: **EN IEC 61158-5-23:2023**

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 IEC 61158-5-23:2023 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

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Supersedes EN IEC 61158-5-23:2019

English Version

Industrial communication networks - Fieldbus specifications - Part 5-23: Application layer service definition - Type 23 elements (IEC 61158-5-23:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 5-23 : Définition des services de la couche application - Éléments de type 23 (IEC 61158-5-23:2023)

Industrielle Kommunikationsnetze - Feldbusse - Teil 5-23: Dienstfestlegungen des Application Layer (Anwendungsschicht) - Typ 23-Elemente (IEC 61158-5-23:2023)

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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/1203/FDIS, future edition 3 of IEC 61158-5-23, 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 61158-5-23:2023.

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) 2024-01-13
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2026-04-13

This document supersedes EN IEC 61158-5-23:2019 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of the International Standard IEC 61158-5-23:2023 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 standard indicated:

IEC 61158-6 (series) NOTE Approved as EN 61158-6 (series)

IEC 61784-1 (series) NOTE Approved as EN IEC 61784-1 (series)[1]

IEC 61784-2 (series) NOTE Approved as EN IEC 61784-2 (series)[2]

[1] To be published. Stage at time of publication: FprEN IEC 61784-1-X:2023.

[2] To be published. Stage at time of publication: FprEN IEC 61784-2-X:2023.

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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61158-1	2023	Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series	EN IEC 61158-1	2023
IEC 61158-6	series	Industrial communication networks - Fieldbus specifications - Part 6-X: Application layer protocol specification	EN IEC 61158-6	series
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 8824-1	-	Information technology - Abstract Syntax Notation One (ASN.1) - Part 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	-	-
IEEE Std 1588	-	Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems	-	-
IEEE Std 802.1AS	-	IEEE standard for Local and metropolitan area networks - Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks	-	-

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INTERNATIONAL STANDARD

Industrial communication networks – Fieldbus specifications – Part 5-23: Application layer service definition – Type 23 elements

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INDUSTRIAL COMMUNICATION NETWORKS – FIELDBUS SPECIFICATIONS –

Part 5-23: Application layer service definition – Type 23 elements

FOREWORD

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

IEC 61158-5-23 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This third edition cancels and replaces the second edition published in 2019. This edition constitutes a technical revision.

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

a) addition of Type T ASE (6.2.10 to 6.2.15).

b) addition of Type T AR (6.5).

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

Draft	Report on voting
65C/1203/FDIS	65C/1244/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under 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.

INTRODUCTION

This document 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 document defines the application service characteristics that fieldbus applications and/or system management can 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 document is a conceptual architectural service, independent of administrative and implementation divisions.