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**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)

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<https://standards.iteh.ai/catalog/standards/sist/61158-5-23-2023/iec-61158-5-23-2023> Ta slovenski standard je istoveten z: **EN IEC 61158-5-23:2023**

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35.100.70	Uporabniški sloj	Application layer
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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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EN IEC 61158-5-23:2023 (E)**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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-04-13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).

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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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**Industrial communication networks – Fieldbus specifications –
Part 5-23: Application layer service definition – Type 23 elements**

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CONTENTS

FOREWORD.....	6
INTRODUCTION.....	8
1 Scope.....	9
1.1 General.....	9
1.2 Specifications	10
1.3 Conformance	10
2 Normative references	10
3 Terms, definitions, symbols, abbreviated terms and conventions	11
3.1 Referenced terms and definitions.....	11
3.1.1 ISO/IEC 7498-1 terms.....	11
3.1.2 ISO/IEC 8822 terms.....	11
3.1.3 IEC 61158-1 terms.....	11
3.2 Additional Type 23 terms and definitions.....	12
3.3 Symbols and abbreviated terms	14
3.4 Conventions.....	15
3.4.1 General conventions.....	15
3.4.2 Conventions for class definitions	16
3.4.3 Conventions for service definitions	17
4 Concept.....	18
5 Data type ASE.....	18
5.1 Overview.....	18
5.2 Fixed length types.....	19
5.2.1 Bitstring types.....	19
5.2.2 Numeric types.....	20
6 Communication model specification.....	24
6.1 Communication model.....	24
6.1.1 General	24
6.1.2 Cyclic model n:n.....	24
6.1.3 Cyclic model 1:n.....	25
6.1.4 Transient model.....	25
6.2 ASE.....	26
6.2.1 Overview type C	26
6.2.2 Overview type F.....	26
6.2.3 Cyclic data ASE type C.....	26
6.2.4 Cyclic data ASE type F	33
6.2.5 Acyclic data ASE type C	38
6.2.6 Acyclic data ASE type F	44
6.2.7 Management ASE.....	57
6.2.8 Synchronization ASE	60
6.2.9 Measurement ASE.....	61
6.2.10 Overview type T.....	62
6.2.11 Cyclic data ASE type T	63
6.2.12 Acyclic data ASE type T	65
6.2.13 Management ASE type T	73
6.2.14 Time sync data ASE type T.....	75
6.2.15 SLMP data ASE type T	77

6.3	AR type C	78
6.3.1	Overview	78
6.3.2	Connection Control	79
6.3.3	Cyclic transmission type C	83
6.3.4	Acyclic transmission type C	84
6.3.5	Common parameter dist.....	87
6.4	AR type F	92
6.4.1	Overview	92
6.4.2	Channel control	93
6.4.3	Cyclic transmission type F	100
6.4.4	Acyclic transmission type F.....	102
6.4.5	Parameter dist.....	105
6.4.6	Synchronous trigger.....	108
6.4.7	Measurement transmission	109
6.5	AR type T	111
6.5.1	Overview	111
6.5.2	Cyclic transmission type T	112
6.5.3	Acyclic transmission type T.....	113
6.5.4	Channel control type T.....	114
6.5.5	Time sync control	117
6.5.6	IP trans control	118
6.5.7	Handler.....	119
	Bibliography.....	120
	Figure 1 – Cyclic model (n:n type distributed shared memory, unconfirmed push model)	25
	Figure 2 – Cyclic model (1:n type distributed shared memory, unconfirmed push model)	25
	Figure 3 – Transient model (Client server model).....	25
	Figure 4 – Transient model (Push model).....	26
	Figure 5 – Structure of ASE type C of FAL Type 23	26
	Figure 6 – Structure of ASE type F of FAL Type 23.....	26
	Figure 7 – Structure of ASE type T of FAL Type 23.....	63
	Figure 8 – Structure of AR type C	78
	Figure 9 – Structure of AR type F.....	92
	Figure 10 – Structure of AR type T.....	111
	Table 1 – Ld service parameters	28
	Table 2 – Set service parameters.....	28
	Table 3 – Reset service parameters.....	28
	Table 4 – Read service parameters.....	29
	Table 5 – Write service parameters.....	29
	Table 6 – Ld service parameters	30
	Table 7 – Set service parameters.....	31
	Table 8 – Reset service parameters.....	31
	Table 9 – Read service parameters.....	32
	Table 10 – Write service parameters.....	32
	Table 11 – Ld service parameters	34

Table 12 – Set service parameters.....	35
Table 13 – Reset service parameters.....	35
Table 14 – Read service parameters.....	36
Table 15 – Write service parameters.....	36
Table 16 – Get memory access info service parameters	39
Table 17 – Run service parameters.....	40
Table 18 – Stop service parameters.....	41
Table 19 – Read memory service parameters	42
Table 20 – Write memory service parameters	43
Table 21 – Get memory access info service parameters	45
Table 22 – Run service parameters.....	46
Table 23 – Stop service parameters.....	47
Table 24 – Read memory service parameters	48
Table 25 – Write memory service parameters	49
Table 26 – Vendor command service parameters.....	50
Table 27 – Distribute node info service parameters.....	51
Table 28 – Get statistics service parameters.....	52
Table 29 – Get node info detail service parameters	54
Table 30 – AC data service parameters	56
Table 31 – AC data ND service parameters	57
Table 32 – Get attribute service parameters	58
Table 33 – Set attribute service parameters.....	59
Table 34 – Synchronization trigger service parameters.....	60
Table 35 – Start measurement service parameters	61
Table 36 – Get offset service parameters.....	62
Table 37 – Read service parameters.....	64
Table 38 – Write service parameters.....	64
Table 39 – Priority service parameters.....	66
Table 40 – Detection service parameters	67
Table 41 – Detection Ack service parameters	68
Table 42 – Test data service parameters	70
Table 43 – Test data ack service parameters.....	71
Table 44 – Acyclic data rsv service parameters	72
Table 45 – Acyclic data nrsv service parameters.....	73
Table 46 – Get attribute service parameters	74
Table 47 – Set attribute service parameters.....	75
Table 48 – TimeSyncMng service parameters.....	76
Table 49 – SLMP data service parameters.....	77
Table 50 – Control cyclic service parameters.....	82
Table 51 – CT Update service parameters	84
Table 52 – AC Send service parameters	85
Table 53 – AC Param send service parameters.....	87
Table 54 – CPD Set service parameters	92

Table 55 – Control cyclic service parameters	99
Table 56 – CT Update service parameters	101
Table 57 – AC Send service parameters	102
Table 58 – AC Send ND service parameters	104
Table 59 – Synchronous trigger internal service parameters	108
Table 60 – Measure send service parameters	109
Table 61 – MeasureAck send service parameters	110
Table 62 – Offset send service parameters	110
Table 63 – Update send service parameters	111
Table 64 – C Update service parameters	112
Table 65 – AC Update service parameters	114
Table 66 – Send cyclic service parameters	115
Table 67 – Send acyclic service parameters	116
Table 68 – TimeSync service parameters.....	117
Table 69 – SLMPSend service parameters.....	118

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –
FIELDBUS SPECIFICATIONS –****Part 5-23: Application layer service definition –
Type 23 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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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.

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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.

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