

# SLOVENSKI STANDARD

## SIST EN IEC 61158-4-24:2023

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**Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 4-24. del: Specifikacija protokola na ravni podatkovnih povezav - Elementi tipa 24 (IEC 61158-4-24:2023)**

Industrial communication networks - Fieldbus specifications - Part 4-24: Data-link layer protocol specification - Type 24 elements (IEC 61158-4-24:2023)

Industrielle Kommunikationsnetze - Feldbusse – Teil 4-24: Protokollspezifikation des Data Link Layer (Sicherheitsschicht) - Typ 24-Elemente (IEC 61158-4-24:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 4-24: Spécification du protocole de la couche liaison de données - Éléments de type 24 (IEC 61158-4-24:2023)

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**Ta slovenski standard je istoveten z: EN IEC 61158-4-24:2023**

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35.100.20	Podatkovni povezovalni sloj	Data link layer
35.110	Omreževanje	Networking

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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May 2023

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Supersedes EN IEC 61158-4-24:2019

English Version

**Industrial communication networks - Fieldbus specifications -  
Part 4-24: Data-link layer protocol specification - Type 24  
elements  
(IEC 61158-4-24:2023)**

Réseaux de communication industriels - Spécifications des  
bus de terrain - Partie 4-24: Spécification du protocole de la  
couche liaison de données - Éléments de type 24  
(IEC 61158-4-24:2023)

Industrielle Kommunikationsnetze - Feldbusse – Teil 4-24:  
Protokollspezifikation des Data Link Layer  
(Sicherheitsschicht) - Typ 24-Elemente  
(IEC 61158-4-24:2023)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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

**EN IEC 61158-4-24:2023 (E)****European foreword**

The text of document 65C/1202/FDIS, future edition 3 of IEC 61158-4-24, 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 61158-4-24:2023.

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) 2024-02-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-05-02

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### Endorsement notice

The text of the International Standard IEC 61158-4-24:2023 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 61784-1 (series) NOTE Approved as EN IEC 61784-1 (series)

IEC 61784-2 (series) NOTE Approved as EN IEC 61784-2 (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.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61158-2	2023	Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition	EN IEC 61158-2	2023
IEC 61158-3-24	2023	Industrial communication networks - Fieldbus specifications - Part 3-24: Data-link layer service definition - Type 24 elements	EN IEC 61158-3-24	2023
ISO/IEC 7498-1	-	Information technology - Open Systems Interconnection - Basic reference model: The basic model	-	-
ISO/IEC 7498-3	-	Information technology - Open Systems Interconnection - Basic reference model: Naming and addressing	-	-
ISO/IEC/IEEE 8802-3	2021	Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Part 3: Standard for Ethernet	-	-
ISO/IEC 9899	-	Information technology - Programming languages - C	-	-
ISO/IEC 10731	-	Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-	-
ISO/IEC 13239	2002	Information technology - Telecommunications and information exchange between systems - High-level data link control (HDLC) procedures	-	-
ISO/IEC 19501	2005	Information technology - Open Distributed Processing - Unified Modeling Language (UML) Version 1.4.2	-	-





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# INTERNATIONAL STANDARD

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**Industrial communication networks – Fieldbus specifications –  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –  
FIELDBUS SPECIFICATIONS –****Part 4-24: Data-link layer protocol specification –  
Type 24 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 61158-4-24 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:

- addition of a new cyclic transmission mode which called "no time slot type" in Subclause 4.3.2.4;
- addition of a new frame format for no time slot type in Subclause 5.4;
- addition of a new DLE element procedure for no time slot type in Subclause 6.2.3.2.4, 6.3.3.2.2.4, 6.3.3.3.2.4;
- addition of a new DLM protocol machine for no time slot type in Subclause 7.5, 7.6; and
- spelling and grammar.

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

Draft	Report on voting
65C/1202/FDIS	65C/1243/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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all 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 document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be ...-24:2023

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