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**Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 3-2. del:
Definicija opravil na ravni podatkovnih povezav - Elementi tipa 2 (IEC 61158-3-2:2023)**

Industrial communication networks - Fieldbus specifications - Part 3-2: Data-link layer service definition - Type 2 elements (IEC 61158-3-2:2023)

Industrielle Kommunikationsnetze - Feldbusse - Teil 3-2: Dienstfestlegungen des Data Link Layer (Sicherheitsschicht) - Typ 2-Elemente (IEC 61158-3-2:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 3-2: Définition des services de la couche liaison de données - Eléments de type 2 (IEC 61158-3-2:2023)

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35.100.20	Podatkovni povezovalni sloj	Data link layer
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EN 61158-3-2:2014/A1:2019

English Version

**Industrial communication networks - Fieldbus specifications -
Part 3-2: Data-link layer service definition - Type 2 elements
(IEC 61158-3-2:2023)**

Réseaux de communication industriels - Spécifications des
bus de terrain - Partie 3-2: Définition des services de la
couche liaison de données - Eléments de type 2
(IEC 61158-3-2:2023)

Industrielle Kommunikationsnetze - Feldbusse - Teil 3-2:
Dienstfestlegungen des Data Link Layer
(Sicherheitsschicht) - Typ 2-Elemente
(IEC 61158-3-2:2023)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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EN IEC 61158-3-2:2023 (E)**European foreword**

The text of document 65C/1201/FDIS, future edition 3 of IEC 61158-3-2, 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 61158-3-2:2023.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-04-13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 61158-3-2:2014 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.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

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<https://standards.iteh.ai> In the official version, for Bibliography, the following notes have to be added for the standard indicated: [-3-2-2023](https://standards.iteh.ai)

IEC 61158-1	NOTE Approved as EN IEC 61158-1
IEC 61158-2	NOTE Approved as EN 61158-2
IEC 61158-5-2	NOTE Approved as EN IEC 61158-5-2
IEC 61158-6-2	NOTE Approved as EN IEC 61158-6-2
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 61158-4-2	2023	Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements	EN IEC 61158-4-2	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 8886	-	Information technology - Open Systems Interconnection - Data link service definition	-	-
ISO/IEC 10731	1994	Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-	-



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**Industrial communication networks – Fieldbus specifications –
Part 3-2: Data-link layer service definition – Type 2 elements**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –
FIELDBUS SPECIFICATIONS –****Part 3-2: Data-link layer service definition –
Type 2 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 61158-3-2 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 2014 and Amendment 1:2019. This edition constitutes a technical revision.

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

- a) update of normative and bibliographic references;
- b) use of more inclusive terminology ("master" replaced by "active" or "supervisor");
- c) miscellaneous editorial corrections.

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

Draft	Report on voting
65C/1201/FDIS	65C/1242/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, 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 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 part of IEC 61158 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.

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 data-link layer service defined in this document is a conceptual architectural service, independent of administrative and implementation divisions.

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