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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 -4-24:2014)

Industrial communication networks - Fieldbus specifications - Part 4-24: Data-link layer protocol specification - Type 24 elements (IEC 61158-4-24:2014)

Industrielle Kommunikationsnetze - Feldbusse - Teil 4-24: Protokollspezifikation des Data Link Layer (Sicherungsschicht) - Typ 24-Elemente (IEC 61158-4-24:2014)

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35.100.20	Podatkovni povezovalni sloj	Data link layer
35.110	Omreževanje	Networking

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2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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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 (CEI 61158-4-24:2014)

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Foreword

The text of document 65C/762/FDIS, future edition 1 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 61158-4-24:2014.

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)	2015-06-19
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-09-19

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IEC 61158-1	NOTE	Harmonised as EN 61158-1
IEC 61784-1	NOTE	Harmonised as EN 61784-1
IEC 61784-2	NOTE	Harmonised as EN 61784-2

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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.

Publication	Year	Title	EN/HD	Year
IEC 61158-2	-	Industrial communication networks - Fieldbus specifications Part 2: Physical layer specification and service definition	EN 61158-2	-
IEC 61158-3-24	2014	Industrial communication networks - Fieldbus specifications Part 3-24: Data-link layer service definition - Type-24 elements	EN 61158-3-24	2014
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 8802-3	2000	Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications	-	-
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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INDUSTRIAL COMMUNICATION NETWORKS – FIELDBUS SPECIFICATIONS –

Part 4-24: Data-link layer protocol specification – Type 24 elements

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International Standard IEC 61158-4-24 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

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The text of this standard is based on the following documents:

FDIS	Report on voting
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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the 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.

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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.

The data-link protocol provides the data-link service by making use of the services available from the physical layer. The primary aim of this standard is to provide a set of rules for communication expressed in terms of the procedures to be carried out by peer data-link entities (DLEs) at the time of communication. These rules for communication are intended to provide a sound basis for development in order to serve a variety of purposes:

a) as a guide for implementors and designers;

b) for use in the testing and procurement of equipment;

c) as part of an agreement for the admittance of systems into the open systems environment;

d) as a refinement to the understanding of time-critical communications within OSI.

This standard is concerned, in particular, with the communication and interworking of sensors, effectors and other automation devices. By using this standard together with other standards positioned within the OSI or fieldbus reference models, otherwise incompatible systems may work together in any combination.

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US 8223804 JP 4760978 CN 200880002225.3 EPC 08738862.5 KR 10-2009-7011514 TW 97111183	[YE]	COMMUNICATION DEVICE, SYNCHRONIZED SYSTEM, AND SYCHRONIZED COMMUNICATION METHOD
US 7769935 JP 4683346 US 8046512 EPC 07850686.2 TW 96150287	[YE]	MASTER SLAVE COMMUNICATION SYSTEM AND MASTER SLAVE COMMUNICATION METHOD
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