SLOVENSKI STANDARD
SIST EN 61158-6-16:2008

01-julij-2008

Nadomešča:
SIST EN 61158-6:2004
SIST EN 61491:2001

Industrijska komunikacijska omrežja - Specifikacije za procesno vodilo - 6-16. del: Specifikacija protokola na aplikacijskem nivoju - Elementi tipa 16 (IEC 61158-6-16:2007)

Industrial communication networks - Fieldbus specifications - Part 6-16: Application layer protocol specification - Type 16 elements

Industrielle Kommunikationsnetze - Feldbusse - Teil 6-16: Protokollspezifikation des Application Layer (Anwendungsschicht) - Typ 16-Elemente

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 6-16: Spécification des services des couches d'application - Eléments de type 16

Ta slovenski standard je istoveten z: **EN 61158-6-16:2008**

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 61158-6-16:2008   **en,de**

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61158-6-16

March 2008

ICS 35.100.70; 25.040.40

Partially supersedes EN 61158-6:2004 and EN 61491:1998

English version

Industrial communication networks - Fieldbus specifications - Part 6-16: Application layer protocol specification - Type 16 elements
(IEC 61158-6-16:2007)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 6-16: Spécification des services des couches d'application - Eléments de type 16 (CEI 61158-6-16:2007)

Industrielle Kommunikationsnetze - Feldbusse - Teil 6-16: Protokollspezifikation des Application Layer (Anwendungsschicht) - Typ 16-Elemente (IEC 61158-6-16:2007)

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This European Standard was approved by CENELEC on 2008-02-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61158-6-16:2008 E

Foreword

The text of document 65C/476/FDIS, future edition 1 of IEC 61158-6-16, 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 was approved by CENELEC as EN 61158-6-16 on 2008-02-01.

This and the other parts of the EN 61158-6 series supersede EN 61158-6:2004. Together with EN 61158-2:2008 and its companion parts for Type 16, it also partially replaces EN 61491:1998 which is at present being revised (to be issued as a Technical Report).

With respect to EN 61158-6:2004 the following changes were made:

– deletion of Type 6 fieldbus for lack of market relevance;

– addition of new fieldbus types;

– partition into multiple parts numbered 6-2, 6-3, …6-20.

The following dates were fixed:

– latest date by which the EN has to be implemented
  at national level by publication of an identical
  national standard or by endorsement   (dop)   2008-11-01

– latest date by which the national standards conflicting
  with the EN have to be withdrawn   (dow)   2011-02-01

NOTE Use of some of the associated protocol types is restricted by their intellectual-property-right holders. In all cases, the commitment to limited release of intellectual-property-rights made by the holders of those rights permits a particular data-link layer protocol type to be used with physical layer and application layer protocols in type combinations as specified explicitly in the EN 61784 series. Use of the various protocol types in other combinations may require permission from their respective intellectual-property-right holders.

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61158-6-16:2007 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 standards indicated:

IEC 60559	NOTE	Harmonized as HD 592 S1:1991 (not modified).
IEC 61158-3-16	NOTE	Harmonized as EN 61158-3-16:2008 (not modified).
IEC 61784-1	NOTE	Harmonized as EN 61784-1:2008 (not modified).
ISO/IEC 8877	NOTE	Harmonized as EN 28877:1993 (not modified).
ISO 8601	NOTE	Harmonized as EN 28601:1992 (not modified).

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Annex ZA
(normative)

Normative references to international publications
with their corresponding European publications

The following referenced documents are indispensable for the application 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   When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 61158-4-16	- [1]	Industrial communication networks - Fieldbus specifications - Part 4-16 Application layer service definition - Type 16 elements	EN 61158-4-16	2008 [2]
IEC 61158-5-16	- [1]	Industrial communication networks - Fieldbus specifications - Part 5-16 Application layer service definition - Type 16 elements	EN 61158-5-16	2008 [2]
ISO/IEC 7498-1	- [1]	Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model	EN ISO/IEC 7498-1	1995 [2]
ISO/IEC 8822	1994	Information technology - Open Systems Interconnection - Presentation service definition	-	-
ISO/IEC 8824-2	- [1]	Information technology - Abstract Syntax Notation One (ASN.1): Information object specification	-	-
ISO/IEC 9545	- [1]	Information technology - Open Systems Interconnection - Application Layer structure	-	-
ISO/IEC 10731	- [1]	Information technology - Open Systems Interconnection - Basic reference model - Conventions for the definition of OSI services	-	-

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[1] Undated reference.

[2] Valid edition at date of issue.

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IEC 61158-6-16

Edition 1.0   2007-12

INTERNATIONAL STANDARD

Industrial communication networks – Fieldbus specifications –
Part 6-16: Application layer protocol specification – Type 16 elements

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION
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INDUSTRIAL COMMUNICATION NETWORKS – FIELDBUS SPECIFICATIONS –

Part 6-16: Application layer protocol specification – Type 16 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   Use of some of the associated protocol types is restricted by their intellectual-property-right holders. In all cases, the commitment to limited release of intellectual-property-rights made by the holders of those rights permits a particular data-link layer protocol type to be used with physical layer and application layer protocols in Type combinations as specified explicitly in the IEC 61784 series. Use of the various protocol types in other combinations may require permission from their respective intellectual-property-right holders.

International Standard IEC 61158-6-16 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This first edition and its companion parts of the IEC 61158-6 subseries cancel and replace IEC 61158-6:2003. This edition of this part constitutes a technical addition.This publication, together with its companion parts for Type 16, also partially replaces IEC 61491:2002 which is at present being revised. IEC 61491 will be issued as a technical report.

This edition of IEC 61158-6 includes the following significant changes from the previous edition:

a) deletion of the former Type 6 fieldbus for lack of market relevance;

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b) addition of new types of fieldbuses;

c) partition of part 6 of the third edition into multiple parts numbered -6-2, -6-3, …

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

FDIS	Report on voting
65C/476/FDIS	65C/487/RVD

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 ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under http://webstore.iec.ch in the data related to the specific publication. At this date, the publication will be:

•   reconfirmed;

•   withdrawn;

•   replaced by a revised edition, or

•   amended.

NOTE   The revision of this standard will be synchronized with the other parts of the IEC 61158 series.

The 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.

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/TR 61158-1.

The application protocol provides the application service by making use of the services available from the data-link or other immediately lower 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 application entities (AEs) 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:

- as a guide for implementors and designers;

- for use in the testing and procurement of equipment;

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

- 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.