



National Standards Authority of Ireland

STANDARD

**I.S. EN 61158-5:2004**

ICS 25.040  
35.100.70  
35.240.50

**DIGITAL DATA COMMUNICATION FOR  
MEASUREMENT AND CONTROL - FIELDBUS  
FOR USE IN INDUSTRIAL CONTROL  
SYSTEMS PART 5: APPLICATION LAYER  
SERVICE DEFINITION (IEC 61158-5:2003 &  
CORRIGENDUM 2004)**

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EUROPEAN STANDARD

**EN 61158-5**

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2004

ICS 25.040; 35.100.70; 35.240.50

Partially supersedes EN 50170:1996 + A1:2002 + A2:1999 + A3:2002 and EN 50254:1998

English version

**Digital data communication for measurement and control -  
Fieldbus for use in industrial control systems  
Part 5: Application layer service definition  
(IEC 61158-5:2003 + corrigendum 2004)**

Communications numériques pour les  
systèmes de mesure et de commande -  
Bus de terrain utilisés dans les systèmes  
de commande industriels  
Partie 5: Définition des services  
de la couche d'application  
(CEI 61158-5:2003 + corrigendum 2004)

Digitale Datenkommunikation  
in der Leittechnik -  
Feldbus für industrielle Leitsysteme  
Teil 5: Definition der Dienste der  
Anwendungsschicht (Application Layer)  
(IEC 61158-5:2003 + Corrigendum 2004)

This European Standard was approved by CENELEC on 2004-03-16. 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 one official version (English). 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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**

## Foreword

The text of the International Standard IEC 61158-5:2003, prepared by SC 65C, Digital communications, of IEC TC 65, Industrial-process measurement and control, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 61158-5 on 2004-03-16 with inclusion of the accepted future IEC corrigendum.

This European Standard, together with EN 61158-2:2004 to EN 61158-4:2004, EN 61158-6:2004 and EN 61784-1:2004, supersedes EN 50170:1996 + A1:2002 (+ corr. Aug. 2002) + A2:1999 + A3:2002 (+ corr. Aug. 2002) and EN 50254:1998.

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) 2005-04-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2007-04-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61158-5:2003 and its corrigendum July 2004 was approved by CENELEC as a European Standard without any modification.

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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 Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-1	1992	Programmable controllers Part 1: General information	EN 61131-1	1994 <sup>1)</sup>
IEC 61131-3	1993	Part 3: Programming languages	EN 61131-3	1993 <sup>2)</sup>
IEC 61158-3	2003	Digital data communication for measurement and control - Fieldbus for use in industrial control systems Part 3: Data Link Layer service definition	EN 61158-3	2004
IEC 61158-4 + corr. July	2003 2004	Part 4: Data Link Layer protocol specification	EN 61158-4	2004
IEC 61158-6 + corr. July	2003 2004	Part 6: Application Layer protocol specification	EN 61158-6	2004
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 7498-1	1994	Information technology - Open systems interconnection - Basic reference model Part 1: The basic model	EN ISO/IEC 7498-1	1995
ISO/IEC 7498-3	1997	Part 3: Naming and addressing	-	-
ISO/IEC 8822	1994	Information technology - Open Systems Interconnection - Presentation service definition	-	-
ISO/IEC 8824	1990	Information technology - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1)	-	-

<sup>1)</sup> EN 61131-1:1994 is superseded by EN 61131-1:2003, which is based on IEC 61131-1:2003.

<sup>2)</sup> EN 61131-3:1993 is superseded by EN 61131-3:2003, which is based on IEC 61131-1:2003.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 8859-1	1998	Information technology - 8-bit single-byte coded graphic character sets Part 1: Latin alphabet No.1	-	-
ISO/IEC 9545	1994	Information technology - Open Systems Interconnection - Application Layer structure	-	-
ISO/IEC 10646-1	1993	Information technology - Universal Multiple-Octet Coded Character set (UCS) - Part 1: Architecture and Basic Multilingual Plane	-	-
ISO/IEC 10731	1994	Information technology - Open Systems Interconnection Basic reference model - Conventions for the definition of OSI services	-	-
IEEE 754	1985 (R1990)	Standard for Binary Floating-Point Arithmetic	-	-

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