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STN	**Integrácia softvérového nástroja (FDI). Časť 7: Komunikačné zariadenia FDI.**	**STN EN 62769-7** 18 4012

Field Device Integration (FDI) - Part 7: FDI Communication Devices

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/15

Obsahuje: EN 62769-7:2015, IEC 62769-7:2015

121878

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62769-7

June 2015

ICS 25.040.40; 35.100

English Version

Field Device Integration (FDI) - Part 7: FDI Communication Devices (IEC 62769-7:2015)

Intégration des appareils de terrain (FDI) - Partie 7: Appareils de communication FDI (IEC 62769-7:2015)

Feldgeräteintegration (FDI) - Teil 7: Kommunikationsgeräte (IEC 62769-7:2015)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 62769-7:2015

European foreword

The text of document 65E/350/CDV, future edition 1 of IEC 62769-7, prepared by SC 65E “Devices and integration in enterprise systems” of IEC/TC 65 “Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62769-7:2015.

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)	2016-03-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-06-16

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62769-7:2015 was approved by CENELEC as a European Standard without any modification.

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 61804-3	-	Function Blocks (FB) for process control -- Part 3: Electronic Device Description Language (EDDL)	EN 61804-3	-
IEC 61804-4	-	Function blocks (FB) for process control -- Part 4: EDD interpretation	-	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	EN 62541-4	-
IEC 62541-6	-	OPC unified architecture - Part 6: Mappings	EN 62541-6	-
IEC 62541-7	-	OPC unified architecture - Part 7: Profiles	EN 62541-7	-
IEC 62541	series	OPC Unified Architecture	EN 62541	series
IEC 62541-100	-	OPC unified architecture - Part 100: Device Interface	EN 62541-100	-
IEC 62769-1	-	Devices and integration in enterprise systems; Field Device Integration - Part 1: Overview	-	-
IEC 62769-2	-	Devices and integration in enterprise systems; Field Device Integration - Part 2: FDI Client	-	-
IEC 62769-3	-	Devices and integration in enterprise systems; Field Device Integration - Part 3: FDI Server	-	-
IEC 62769-4	2015	Devices and integration in enterprise systems; Field Device Integration - Part 4: FDI Packages	-	-
IEC 62769-5	-	Devices and integration in enterprise systems; Field Device Integration - Part 5: FDI Information Model	-	-
IEC/TR 62541-1	-	OPC unified architecture - Part 1: Overview and concepts	CLC/TR 62541-1	-

IEC 62769-7

Edition 1.0 2015-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Field Device Integration (FDI) – Part 7: FDI Communication Devices

Intégration des appareils de terrain (FDI) – Partie 7: Appareils de communication FDI

IEC 62769-7:2015-05(en-fr)

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Field Device Integration (FDI) – Part 7: FDI Communication Devices

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FIELD DEVICE INTEGRATION (FDI) –

Part 7: FDI Communication Devices

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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International Standard IEC 62769-7 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

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

CDV	Report on voting
65E/350/CDV	65E/420/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 the ISO/IEC Directives, Part 2.

A list of all parts in the 62769 series, published under the general title *Field Device Integration (FDI)*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of patents concerning

a) Method for the Supplying and Installation of Device-Specific Functionalities, see Patent Family DE10357276;

b) Method and device for accessing a functional module of automation system, see Patent Family EP2182418;

c) Methods and apparatus to reduce memory requirements for process control system software applications, see Patent Family US2013232186;

d) Extensible Device Object Model, see Patent Family US12/893,680.

IEC takes no position concerning the evidence, validity and scope of this patent right.

The holders of these patent rights have assured the IEC that he/she is willing to negotiate licences either free of charge or under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with IEC. Information may be obtained from:

a) ABB Research Ltd
Claes Rytoft
Affolterstrasse 4
Zurich, 8050
Switzerland

b) Phoenix Contact GmbH & Co KG
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Flachsmarktstrasse 8, 32825 Blomberg
Germany

c) Fisher Controls International LLC
John Dilger, Emerson Process Management LLLP
301 S. 1st Avenue, Marshaltown, Iowa 50158
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d) Rockwell Automation Technologies, Inc.
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ISO (www.iso.org/patents) and IEC (http://patents.iec.ch) maintain on-line data bases of patents relevant to their standards. Users are encouraged to consult the data bases for the most up to date information concerning patents.

FIELD DEVICE INTEGRATION (FDI) –

Part 7: FDI Communication Devices

1 Scope

This part of IEC 62769 specifies the elements implementing communication capabilities called Communication Devices (IEC 62769-5).

The overall FDI architecture is illustrated in Figure 1. The architectural components that are within the scope of this document have been highlighted in this illustration. The document scope with respect to FDI Packages is limited to Communication Devices. The Communication Server shown in Figure 1 is an example of a specific Communication Device.

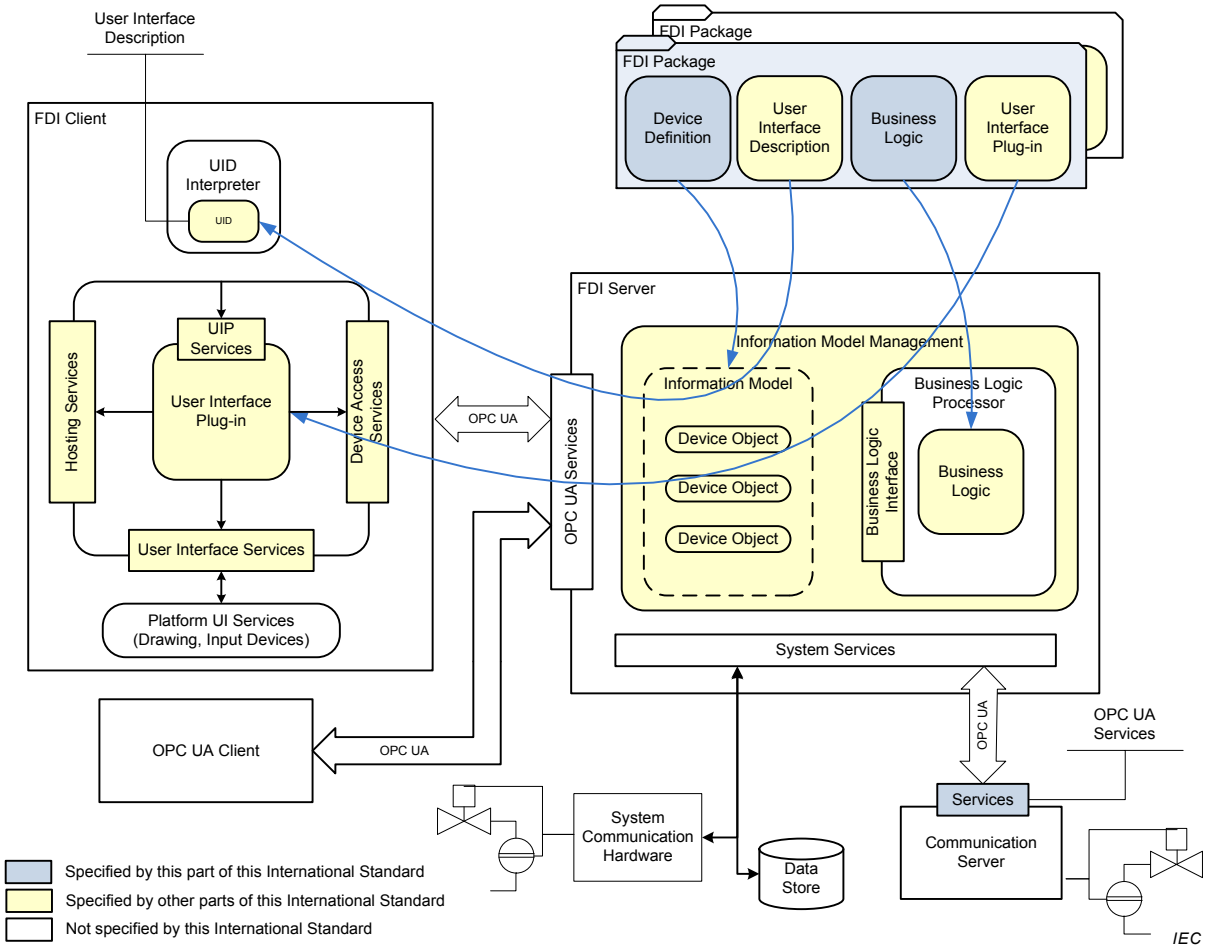

Figure 1 – FDI architecture diagram

2 Normative references

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.

IEC 61804-3, *Function blocks (FB) for process control and Electronic Device Description Language (EDDL) – Part 3: EDDL syntax and semantics*

IEC 61804-4, *Function blocks (FB) for process control and Electronic Device Description Language (EDDL) – Part 4: EDD interpretation*

IEC 62541 (all parts), *OPC Unified Architecture*

IEC TR 62541-1, *OPC Unified Architecture – Part 1: Overview and Concepts*

IEC 62541-4, *OPC Unified Architecture – Part 4: Services*

IEC 62541-6, *OPC Unified Architecture – Part 6: Mappings*

IEC 62541-7, *OPC Unified Architecture – Part 7: Profiles*

IEC 62541-100, *OPC Unified Architecture – Part 100: OPC UA for Devices*

IEC 62769-1*, Field Device Integration (FDI) – Part 1: Overview*

NOTE IEC 62769-1 is technically identical to FDI-2021.

IEC 62769-2, *Field Device Integration (FDI) – Part 2: FDI Client*

NOTE IEC 62769-2 is technically identical to FDI-2022.

IEC 62769-3, *Field Device Integration (FDI) – Part 3: FDI Server*

NOTE IEC 62769-3 is technically identical to FDI-2023.

IEC 62769-4:2015, *Field Device Integration (FDI) – Part 4: FDI Packages*

NOTE IEC 62769-4 is technically identical to FDI-2024.

IEC 62769-5, *Field Device Integration (FDI) – Part 5: FDI Information Model*

NOTE IEC 62769-5 is technically identical to FDI-2025.