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Field Device Integration (FDI) - Part 4: FDI Packages

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NATIONAL FOREWORD

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ICS 25.040.40, 35.100

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 62769-4

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English Version

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

Intégration des appareils de terrain (FDI) - Partie 4:
Paquetages FDI
(IEC 62769-4:2015)

Feldgeräteintegration (FDI) - Teil 4: FDI-Packages
(IEC 62769-4:2015)

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European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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

European foreword

The text of document 65E/347/CDV, future edition 1 of IEC 62769-4, 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 62769-4:2015.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-06-16

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61784-1	NOTE	Harmonized as EN 61784-1.
IEC 61784-2	NOTE	Harmonized as EN 61784-2.
IEC 61804-5	NOTE	Harmonized as EN 61804-5.
IEC 62591	NOTE	Harmonized as EN 62591.

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.

<u>Publication</u>	<u>Year series</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year series</u>
IEC 61804		Function Blocks (FB) for process control	EN 61804	
IEC 61804-3	-	Function blocks (FB) for process control and EDDL - Part 3: EDDL specification and communication profiles	-	-
IEC 61804-4	-	Function blocks (FB) for process control -- Part 4: EDD interpretation	--	-
IEC 62769-1	-	Devices and integration in enterprise systems; Field Device Integration - Part 1: Overview	-	-
IEC 62769-5	-	Devices and integration in enterprise systems; Field Device Integration - Part 5: FDI Information Model	-	-
IEC 62769-6	-	Devices and integration in enterprise systems; Field Device Integration - Part 6: Technology Mapping	-	-
IEC 62769-7	-	Devices and integration in enterprise systems; Field Device Integration - Part 7: Communication Devices	-	-
ISO 639-1	-	Codes for the representation of names of languages - Part 1: Alpha-2 code	-	-
ISO 32000-1	-	Document management - Portable document format - Part 1: PDF_1.7	-	-
ISO/IEC 11578	-	Information technology - Open Systems Interconnection - Remote Procedure Call (RPC)	-	-
ISO/IEC 29500-2	2012		-	-
W3C XML 1.1	-	Extensible Markup Language (XML) 1.1	-	-
XML 1.0	-	Extensible Markup Language, W3C Recommendation	-	-

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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.

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FIELD DEVICE INTEGRATION (FDI) –

Part 4: FDI Packages

1 Scope

This part of IEC 62769 specifies the FDI Packages. 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 figure.

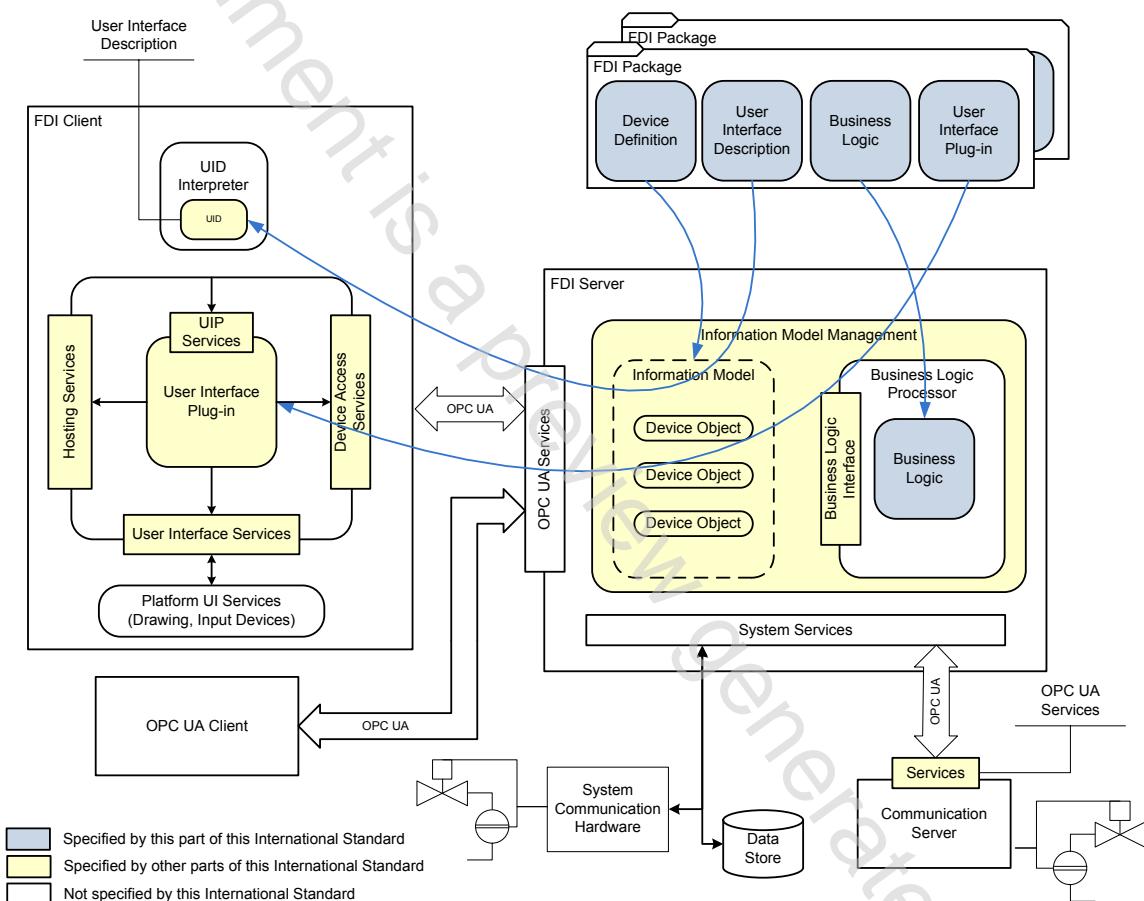


Figure 1 – FDI architecture diagram

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 (all parts), *Function blocks (FB) for process control and Electronic Device Description Language (EDDL)*

IEC 61804-3¹, *Function blocks (FB) for process control and Electronic Device Description Language (EDDL) – Part 3: EDDL syntax and semantics*

IEC 61804-4:-2, *Function blocks (FB) for process control and Electronic device description language (EDDL) – Part 4: EDD interpretation*

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

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

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

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

IEC 62769-6, *Field Device Integration (FDI) – Part 6: FDI Technology Mapping*

NOTE IEC 62769-6 is technically identical to FDI-2026.

IEC 62769-7, *Field Device Integration (FDI) – Part 7: FDI Communication Devices*

NOTE IEC 62769-7 is technically identical to FDI-2027.

ISO/IEC 11578, *Information technology – Open Systems Interconnection – Remote Procedure Call (RPC)*

ISO/IEC 29500-2:2011, *Information technology – Document description and processing languages – Office Open XML File Formats – Part 2: Open Packaging Conventions*

ISO 639-1, *Codes for the representation of names of languages – Part 1: Alpha-2 code*

ISO 32000-1, *Document management – Portable document format – Part 1: PDF 1.7*

Extensible Markup Language (XML) 1.0, W3C Recommendation, available at <<http://www.w3.org/TR/REC-xml/>>

XML Schema Definition Language (XSD) 1.1, W3C Recommendation, available at <<http://www.w3.org/TR/xmlschema11-1/>>

3 Terms, definitions, abbreviated terms and acronyms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62769-1, ISO/IEC 29500-2, and the following apply.

3.1.1

attachment

device and protocol specific support files that are not directly used to integrate the Device into the system

¹ To be published.

2 To be published.