

Field Device Integration (FDI) - Part 2: FDI Client

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 25.040.40, 35.100

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English Version

**Field Device Integration (FDI) - Part 2: FDI Client
(IEC 62769-2:2015)**

Intégration des appareils de terrain (FDI) - Partie 2: Client
FDI
(IEC 62769-2:2015)

Feldgeräteintegration (FDI) - Teil 2: FDI-Client
(IEC 62769-2:2015)

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European foreword

The text of document 65E/345/CDV, future edition 1 of IEC 62769-2, 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 62769-2:2015.

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62541-3	-	OPC unified architecture - Part 3: Address Space Model	EN 62541-3	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	EN 62541-4	-
IEC 62769-1	-	Devices and integration in enterprise systems; Field Device Integration - Part 1: Overview	-	-
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 62769-6	2015	Devices and integration in enterprise systems; Field Device Integration - Part 6: Technology Mapping	-	-
ISO 639	-	Code for the representation of names of languages	-	-
ISO 3166	-	Codes for the representation of names of countries	-	-
ISO/IEC 10918-1	-	Information technology; digital compression and coding of continuous-tone still images; requirements and guidelines	-	-
ISO/IEC 15948	-	Information technology - Computer graphics and image processing - Portable Network Graphics (PNG) - Functional specification	-	-
IEEE 754	-	IEEE Standard for Binary Floating-Point Arithmetic	-	-
IETF RFC 2083	-	PNG (Portable Network Graphics) - Specification Version 1.0	-	-
IETF RFC 3066	-	Tags for the Identification of Languages	-	-
XML-1	-	XML Schema Part 1: Structures, W3C	-	-
XML-2	-	XML Schema Part 2: Datatypes, W3C	-	-

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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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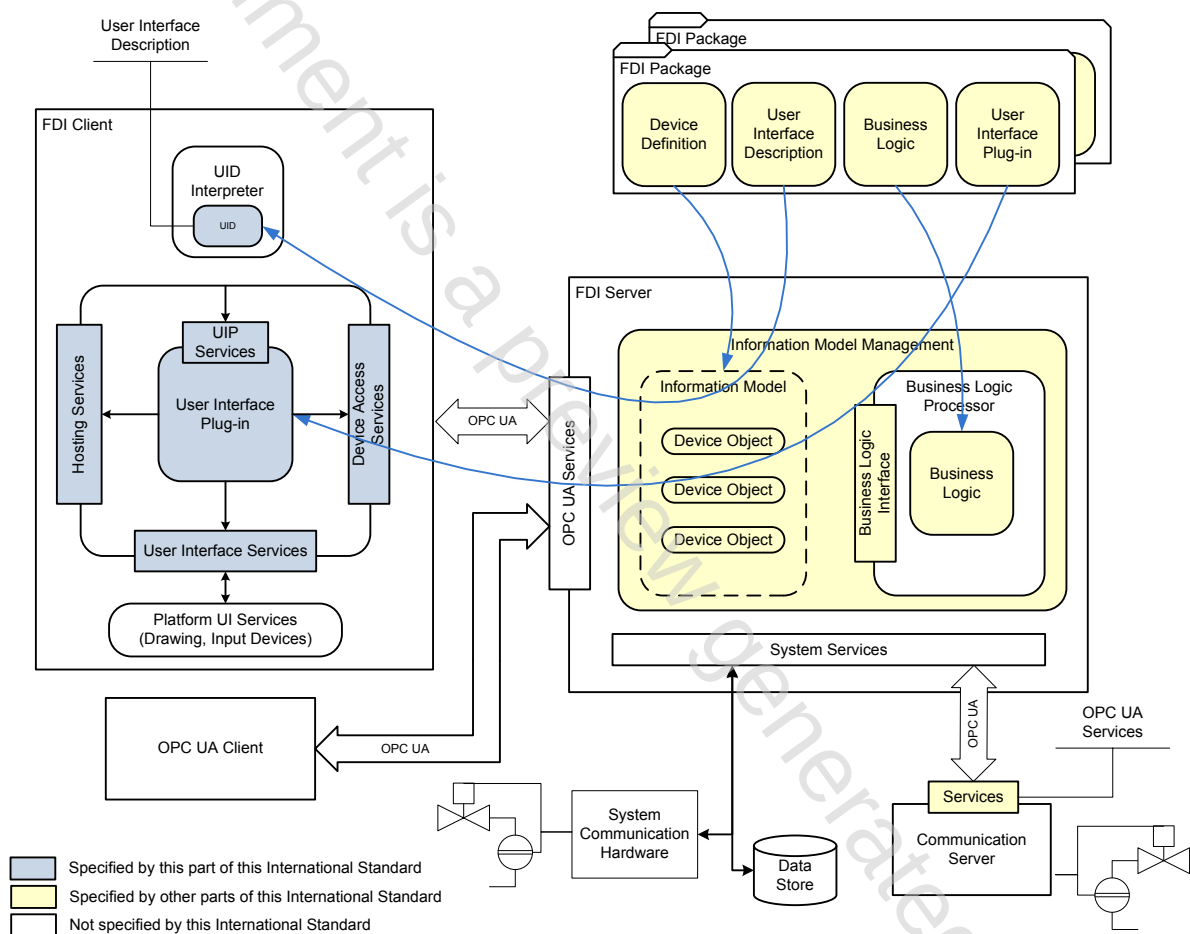
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FIELD DEVICE INTEGRATION (FDI) –

Part 2: FDI Client

1 Scope

This part of IEC 62769 specifies the FDI Client. 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.



IEC

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

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

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.

IEC 62769-6:2015, *Field Device Integration (FDI) – Part 6: FDI Technology Mapping*

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

IEC 62541-3, *OPC Unified Architecture – Part 3: Address Space Model*

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

ISO 639, *Codes for the representation of names of languages*

ISO 3166, *Codes for the representation of names of countries and their subdivisions*

ISO/IEC 10918-1, *Information technology – Digital compression and coding of continuous-tone still images: Requirements and guidelines*

ISO/IEC 15948, *Information technology – Computer graphics and image processing – Portable Network Graphics (PNG): Functional specification*

IEEE 754, *IEEE Standard for Floating-Point Arithmetic*

IETF RFC 2083, *PNG (Portable Network Graphics) Specification Version 1.0*

IETF RFC 3066, *Tags for the Identification of Languages*

XML Schema-1, *XML Schema: Structures* (available at <http://www.w3.org/TR/xmlschema-1/>)

XML Schema-2, *XML Schema: Datatypes* (available at <http://www.w3.org/TR/xmlschema-2/>)

3 Terms, definitions, abbreviated terms, acronyms and conventions

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62769-1 as well as the following apply.

3.1.1 Terms used for Services

3.1.1.1

Locking Services

set of Services through which access to a Device is controlled

3.1.1.2

Device Model Services

sub-set of the Device Access Services through which a UIP can access the information of a Device