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I.S. EN 62769-1:2015

Field device integration (FDI) - Part 1: Overview

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EUROPÄISCHE NORM

EN 62769-1

June 2015

ICS 25.040.40; 35.100

English Version

Field device integration (FDI) - Part 1: Overview (IEC 62769-1:2015)

Intégration des appareils de terrain (FDI) - Partie 1: Vue d'ensemble (IEC 62769-1:2015)

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European foreword

The text of document 65E/337/CDV, future edition 1 of IEC 62769-1, 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 62769-1:2015.

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
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IEC 61804-3	NOTE	Harmonized as EN 61804-3.
IEC/TR 61804-4	NOTE	Harmonized as CLC/TR 61804-4.
IEC 62769-4	NOTE	Harmonized as EN 62769-4.
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IEC 62769-6	NOTE	Harmonized as EN 62769-6.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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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	series	Function Blocks (FB) for process control	EN 61804	series
IEC 62453	series	Field device tool (FDT) interface specification	EN 62453	series
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 62541-5	-	OPC unified architecture - Part 5: Information Model	EN 62541-5	-
IEC 62541	series	OPC Unified Architecture	EN 62541	series
IEC 62541-100	-	OPC unified architecture - Part 100: Device Interface	EN 62541-100	-
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 62769-6	2015	Devices and integration in enterprise systems; Field Device Integration - Part6: Technology Mapping	-	-
IEC 62769-7	2015	Devices and integration in enterprise systems; Field Device Integration - Part 7: Communication Devices	-	-
IEC/TR 62541-1	-	OPC unified architecture - Part 1: Overview and concepts	CLC/TR 62541-1	-
ISO/IEC 11578	-	Information technology - Open Systems Interconnection - Remote Procedure Call (RPC)	-	-

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Edition 1.0 2015-05

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Field device integration (FDI) – Part 1: Overview

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Edition 1.0 2015-05

INTERNATIONAL STANDARD

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Field device integration (FDI) – Part 1: Overview

Intégration des appareils de terrain (FDI) – Partie 1: Vue d'ensemble

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FIELD DEVICE INTEGRATION (FDI) –

Part 1: Overview

FOREWORD

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

CDV	Report on voting
65E/337/CDV	65E/421/RVC

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 IEC 62769 series, published under the general title *Field Device Integration (FDI)*, can be found on the IEC website.

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INTRODUCTION

The IEC 62657 series has the general title "Field Device Integration (FDI)" and the following parts:

– Part 1: Overview
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– Part 4: FDI Packages
– Part 5: FDI Information Model
– Part 6: FDI Technology Mapping
– Part 7: FDI Communication Devices
– Part 101-1: Profiles – Foundation Fieldbus H1
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FIELD DEVICE INTEGRATION (FDI) –

Part 1: Overview

1 Scope

This part of IEC 62769 describes the concepts and overview of the Field Device Integration (FDI) specifications. The detailed motivation for the creation of this technology is also described (see 4.1). Reading this document is helpful to understand the other parts of this multi-part standard.

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 62453 (all parts), *Field device tool (*FDT®*) interface specification*

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

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

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

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

IEC 62541-5, *OPC Unified Architecture – Part 5: Information Model*

IEC 62541-100, *OPC Unified Architecture – Part 100: Device Interface*

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

NOTE IEC 62769-2 is technically identical to FDI-2022[4] [1]

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

NOTE IEC 62769-3 is technically identical to FDI-2023. [5]

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

NOTE IEC 62769-4 is technically identical to FDI-2024. [6]

IEC 62769-5:2015, *Field Device Integration (FDI) – Part 5: FDI Information Model*

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