ICS 25.040.40, 35.100.05 SLOVENSKÁ TECHNICKÁ NORMA August 2023

STN	**Integrácia softvérového nástroja (FDI®) Časť 1: Prehľad**	**STN EN IEC 62769-1 18 4012**

Field Device Integration (FDI) - Part 1: Overview

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. 07/23

Obsahuje: EN IEC 62769-1:2023, IEC 62769-1:2023

Oznámením tejto normy sa od 09.05.2026 ruší
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62769-1

May 2023

ICS 25.040.40; 35.100.05

Supersedes EN IEC 62769-1:2021

English Version

Field Device Integration (FDI®) - Part 1: Overview (IEC 62769-1:2023)

Intégration des appareils de terrain (FDI®) - Partie 1: Vue d'ensemble
(IEC 62769-1:2023)

Feldgeräteintegration (FDI®) - Teil 1: Überblick
(IEC 62769-1:2023)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 62769-1:2023 E

European foreword

The text of document 65E/854/CDV, future edition 3 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 IEC 62769-1:2023.

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) 2024-02-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-05-09

This document supersedes EN IEC 62769-1:2021 and all of its amendments and corrigenda (if any).

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

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 62769-1:2023 was approved by CENELEC as a European Standard without any modification.

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

IEC 62453-1	NOTE	Approved as EN 62453-1
IEC 62443 (series)	NOTE	Approved as EN IEC 62443 (series)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61804	series	Function blocks (FB) for process control and electronic device description language (EDDL)	EN IEC 61804	series
IEC 61804-3	-	Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 3: EDDL syntax and semantics	EN IEC 61804-3	-
IEC 61804-4	-	Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 4: EDD interpretation	EN IEC 61804-4	-
IEC 62453	series	Field device tool (FDT) interface specification	EN 62453	series
IEC 62541	series	OPC Unified Architecture	EN IEC 62541	series
IEC/TR 62541-1	-	OPC Unified Architecture - Part 1: Overview and concepts	CLC IEC/TR 62541-1	-
IEC 62541-3	-	OPC Unified Architecture - Part 3: Address Space Model	EN IEC 62541-3	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	EN IEC 62541-4	-
IEC 62541-5	-	OPC Unified Architecture - Part 5: Information Model	EN IEC 62541-5	-
IEC 62541-100	-	OPC Unified Architecture - Part 100: Device Interface	EN 62541-100	-
IEC 62769-2	-	Field Device Integration (FDI®) - Part 2: Client	-	-
IEC 62769-3	-	Field Device Integration (FDI®) - Part 3: Server	-	-
IEC 62769-4	2023	Field Device Integration (FDI®) - Part 4: FDI Packages	-	-

EN IEC 62769-1:2023 (E)

Publication	Year	Title	EN/HD	Year
IEC 62769-5	2023	Field Device Integration (FDI®) - Part 5: FDI Information Model	-	-
IEC 62769-6	2023	Field Device Integration (FDI®) - Part 6: FDI Technology Mappings	-	-
IEC 62769-7	-	Field Device Integration (FDI®) - Part 7: Communication Devices	-	-
IEC 62769-8	-	Field device integration (FDI®) - Part 8:EDD to OPC-UA Mapping	-	-
ISO/IEC 11578	-	Information technology - Open Systems Interconnection - Remote Procedure Call (RPC)	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Field device integration (FDI®) – Part 1: Overview

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

IEC 62769-1:2023-04(en-fr)

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Field device integration (FDI®) – Part 1: Overview

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIELD DEVICE INTEGRATION (FDI®) –

Part 1: Overview

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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
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IEC 62769-1 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This third edition cancels and replaces the second edition published in 2021. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) added references to Part 6-100 and Part 6-200 (technology mapping for .NET and HTML5);
b) updated Subclause 8.3.1: major version, minor version and revision shall be written as two-digit numbers;
c) added reference to new Part 8 and FDI® OPC UA Server Facet.

The text of this International Standard is based on the following documents:

Draft	Report on voting
65E/854/CDV	65E/927/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The "colour inside" logo on the cover page of this document 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.

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®[1]) 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 are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 61804 (all parts), *Devices and integration in enterprise systems − Function Blocks (FB) for process control and Electronic Device Description Language (EDDL)*

IEC 61804-3, *Devices and integration in enterprise systems − Function blocks (FB) for process control and electronic device description language (EDDL) − Part 3: EDDL syntax and semantics*

IEC 61804-4, *Devices and integration in enterprise systems − Function blocks (FB) for process control and electronic device description language (EDDL) − Part 4: EDD interpretation*

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: Client*

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[1] FDI® is a registered trademark of the non-profit organization Fieldbus Foundation, Inc. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the trademark holder or any of its products. Compliance does not require use of the trade name. Use of the trade name requires permission of the trade name holder.

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

IEC 62769-4:2023, *Field Device Integration (FDI®) – Part 4: FDI® Packages*

IEC 62769-5:2023, *Field Device Integration (FDI®) – Part 5: FDI® Information Model*

IEC 62769-6:2023, *Field Device Integration (FDI®) – Part 6: FDI® Technology Mappings*

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

IEC 62769-8, *Field Device Integration (FDI®) – Part 8: EDDL to OPC-UA Mapping*

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