

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Field device integration (FDI®) –
Part 6: FDI® Technology Mappings

Intégration des appareils de terrain (FDI®) –
Partie 6: Mappings de technologies FDI® 6:2023

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIELD DEVICE INTEGRATION (FDI®) –**Part 6: FDI® Technology Mappings**

FOREWORD

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IEC 62769-6 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) Separated each technology mapping out to subparts of Part 6 (i.e., Part 6-xxx)

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

Draft	Report on voting
65E/867/CDV	65E/924/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,
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FIELD DEVICE INTEGRATION (FDI®) –

Part 6: FDI® Technology Mappings

1 Scope

This part of IEC 62769 specifies the technology mapping for the concepts described in the Field Device Integration (FDI®¹) standard. The technology mapping focuses on implementation of the components FDI® Client and User Interface Plug-in (UIP) in the specified technologies for the WORKSTATION platform and the MOBILE platform as defined in IEC 62769-4. There are individual subparts for the currently supported technologies .NET and HTML5.

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

IEC 62769-6-100, *Field Device Integration (FDI®) – Part 6-100: Technology Mapping – .NET*

IEC 62769-6-200, *Field Device Integration (FDI®) – Part 6-200: Technology Mapping – HTML5*

FCG TS10099, *Field Device Integration (FDI®) – Technology Management*

HTML5, W3C Recommendation. World Wide Web Consortium (W3C) (2014)

ECMA-262, *ECMAScript 2016 Language Specification*

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 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

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.

3.2 Abbreviated terms and acronyms

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

CLR	Common Language Run-time
UML	Unified Modeling Language

4 Platforms and runtime

4.1 Runtime

4.1.1 .NET Framework

A UIP for the .NET-based runtime shall be built upon the Microsoft.NET™² Framework and executed in the .NET Common Language Runtime. The RuntimeId is ".NET Framework CLR<<CLR_Version>>". The concrete versions of the required .NET Framework and the CLR are specified in FCG TS10099 FDI® Technology Management.

IEC 62769-6-100 specifies the detailed technology mapping.

4.1.2 HTML5

A UIP for the HTML5-based runtime shall be built upon HTML5 (see HTML5, W3C Recommendation), ECMAScript^{®3} (see ECMA-262) and Cascading Style Sheets. The RuntimeId is "FDIHtml<<Version>>". The version and thus the concrete features to be supported are specified in FCG TS10099 FDI® Technology Management.

IEC 62769-6-200 specifies the detailed technology mapping.

4.2 Platforms

4.2.1 Workstation

The individual RuntimeIds to be supported by an FDI® Client for the Workstation platform are specified in FCG TS10099.

The PlatformId for the Workstation platform is "Workstation".

4.2.2 Mobile

The RuntimeIds to be supported by an FDI® Client for the Mobile platform are specified in FCG TS10099.

The PlatformId for the Mobile platform is "Mobile".

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Bibliography

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

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