



IEC 62769-6

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# INTERNATIONAL STANDARD



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**Field device integration (FDI) –  
Part 6: ~~FDI~~ Technology Mapping**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	2
1 Scope.....	8
2 Normative references .....	8
3 Terms, definitions, abbreviated terms, <del>acronyms</del> symbols and conventions .....	9
3.1 Terms and definitions.....	9
3.2 Abbreviated terms <del>and acronyms</del> .....	9
3.3 Symbols.....	9
3.4 Conventions.....	10
4 Technical concepts.....	10
4.1 General.....	10
4.1.1 Overview .....	10
4.1.2 Platforms .....	10
4.1.3 FDI Type Library.....	10
4.2 UIP representation.....	12
4.3 UIP executable representation .....	12
4.4 UIP executable compatibility rules .....	12
4.5 Allowed .NET Common Language Run-time versions.....	13
4.5.1 General .....	13
4.5.2 CLR compatibility strategy .....	13
4.5.3 How to identify the .NET target platform of a UIP .....	14
4.6 <del>Installing</del> UIP Deployment.....	14
4.7 UIP Lifecycle.....	15
4.7.1 General .....	15
4.7.2 UIP Assembly activation steps.....	15
4.7.3 UIP Assembly deactivation steps .....	17
4.8 Interaction between an FDI Client and a UIP.....	18
4.8.1 Handling of standard UI elements .....	18
4.8.2 Non-blocking service execution .....	18
4.8.3 Blocking service execution.....	19
4.8.4 Cancel service execution .....	20
4.8.5 Threading .....	21
4.8.6 Timeout .....	21
4.8.7 Exception handling .....	22
4.8.8 Type safe interfaces .....	23
4.8.9 Globalization and localization .....	23
4.8.10 WPF Control handling.....	23
4.8.11 Win Form handling.....	23
4.9 Security .....	23
4.9.1 General .....	23
4.9.2 Access permissions .....	24
4.9.3 Code identity concept .....	24
5 Interface definition.....	26
<del>Bibliography.....</del>	<del>.....</del>

Figure 1 – FDI Type Library structure..... 11

Figure 2 – .NET surrogate process ..... 13

Figure 3 – Identification of Run-time Version..... 14

Figure 4 – IAsyncPattern based asynchronous service execution example..... 19

Figure 5 – Blocking service execution example using IAsyncResult based pattern ..... 20

Figure 6 – Cancel service processing sequence example ..... 20

Figure 7 – Exception source ..... 22

  

Table 1 – Technology edition reference ..... 10

Table 2 – Base Property Services ..... 26

Table 3 – Device Model Services ..... 27

Table 4 – Access Control Services..... 27

Table 5 – Direct Access Services..... 27

Table 6 – Hosting Services ..... 27

Table 7 – UIP Services ..... 29

Table 8 – Base Data Types..... 30

Table 9 – Special Types ..... 30

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FIELD DEVICE INTEGRATION (FDI) –

Part 6: ~~FDI~~ Technology Mapping

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International Standard 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.

This second edition cancels and replaces the first edition published in 2015. This edition constitutes a technical revision.

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

- a) redesign of the security concept for UIP execution.

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

FDIS	Report on voting
65E/763/FDIS	65E/773/RVD

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- Part 1: Overview
- Part 2: FDI Client
- Part 3: FDI Server
- Part 4: FDI Packages
- Part 5: FDI Information Model
- Part 6: FDI Technology Mapping
- Part 7: FDI Communication Devices

- Part 100: Profiles – Generic Protocol Extensions
- Part 101-1: Profiles – Foundation Fieldbus H1
- Part 101-2: Profiles – Foundation Fieldbus HSE
- Part 103-1: Profiles – PROFIBUS
- Part 103-4: Profiles – PROFINET
- Part 109-1: Profiles – HART and WirelessHART
- Part 115-2: Profiles – Protocol-specific Definitions for Modbus RTU
- Part 150-1: Profiles – ISA 100.11a

## FIELD DEVICE INTEGRATION (FDI) –

### Part 6: ~~FDI~~ Technology Mapping

#### 1 Scope

This part of IEC 62769 specifies the technology mapping for the concepts described in the Field Device Integration (FDI) standard. The technology mapping focuses on implementation regarding the components FDI Client and User Interface Plug-in (UIP) that are specific only to the WORKSTATION platform/.NET as defined in IEC 62769-4:~~2015, Annex E~~.

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

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

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

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

~~IEC 61804 (all parts), *Function blocks (FB) for process control*~~

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

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

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

~~NOTE 1 – IEC 62769-2 is technically identical to FDI-2022.~~

~~NOTE 2 – IEC 62769-2 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 1 – IEC 62769-5 is technically identical to FDI-2025.~~

~~NOTE 2 – IEC 62769-5 is technically identical to FDI-2027.~~

ISO/IEC 19505-1, *Information technology – Object Management Group Unified Modeling Language (OMG UML) – Part 1: Infrastructure*



ISO/IEC 29500, (all parts) *Information technology – Document description and processing languages – Office Open XML File Formats*

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**Field device integration (FDI) –  
Part 6: Technology Mapping**

**Intégration des appareils de terrain (FDI) –  
Partie 6: Mapping de technologies**

## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references .....	7
3 Terms, definitions, abbreviated terms, symbols and conventions .....	7
3.1 Terms and definitions.....	7
3.2 Abbreviated terms.....	8
3.3 Symbols.....	8
3.4 Conventions.....	8
4 Technical concepts.....	8
4.1 General.....	8
4.1.1 Overview .....	8
4.1.2 Platforms .....	9
4.1.3 FDI Type Library.....	9
4.2 UIP representation.....	10
4.3 UIP executable representation .....	11
4.4 UIP executable compatibility rules .....	11
4.5 Allowed .NET Common Language Run-time versions.....	11
4.5.1 General .....	11
4.5.2 CLR compatibility strategy .....	11
4.5.3 How to identify the .NET target platform of a UIP .....	12
4.6 UIP Deployment.....	12
4.7 UIP Lifecycle.....	13
4.7.1 General .....	13
4.7.2 UIP Assembly activation steps.....	13
4.7.3 UIP Assembly deactivation steps .....	15
4.8 Interaction between an FDI Client and a UIP.....	16
4.8.1 Handling of standard UI elements .....	16
4.8.2 Non-blocking service execution .....	16
4.8.3 Blocking service execution.....	17
4.8.4 Cancel service execution .....	18
4.8.5 Threading .....	19
4.8.6 Timeout .....	19
4.8.7 Exception handling .....	20
4.8.8 Type safe interfaces .....	21
4.8.9 Globalization and localization .....	21
4.8.10 WPF Control handling.....	21
4.8.11 Win Form handling.....	21
4.9 Security .....	21
4.9.1 General .....	21
4.9.2 Access permissions .....	22
4.9.3 Code identity concept .....	22
5 Interface definition.....	23
Figure 1 – FDI Type Library structure.....	10

Figure 2 – .NET surrogate process ..... 12

Figure 3 – Identification of Run-time Version..... 12

Figure 4 – IAsyncPattern based asynchronous service execution example..... 17

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## FIELD DEVICE INTEGRATION (FDI) –

### Part 6: Technology Mapping

#### FOREWORD

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## SOMMAIRE

AVANT-PROPOS .....	30
INTRODUCTION .....	32
1 Domaine d'application .....	33
2 Références normatives .....	33
3 Termes, définitions, termes abrégés, symboles et conventions .....	33
3.1 Termes et définitions .....	33
3.2 Termes abrégés .....	34
3.3 Symboles .....	34
3.4 Conventions .....	34
4 Concepts techniques .....	34
4.1 Généralités .....	34
4.1.1 Vue d'ensemble .....	34
4.1.2 Plates-formes .....	34
4.1.3 Bibliothèque de Types FDI .....	35
4.2 Représentation de l'UIP .....	36
4.3 Représentation de l'exécutable de l'UIP .....	36
4.4 Règles de compatibilité de l'exécutable de l'UIP .....	37
4.5 Versions permises du CLR (Common Language Run-time) .NET .....	37
4.5.1 Généralités .....	37
4.5.2 Stratégie de compatibilité CLR .....	37
4.5.3 Comment identifier la plate-forme cible .NET d'un UIP .....	38
4.6 Déploiement de l'UIP .....	38
4.7 Cycle de vie de l'UIP .....	39
4.7.1 Généralités .....	39
4.7.2 Étapes d'activation de l'Assemblage UIP .....	39
4.7.3 Étapes de désactivation de l'Assemblage UIP .....	41
4.8 Interaction entre un Client FDI et un UIP .....	42
4.8.1 Traitement des éléments normalisés de l'Interface Utilisateur .....	42
4.8.2 Exécution d'un service sans blocage .....	42
4.8.3 Exécution d'un service de blocage .....	43
4.8.4 Exécution du service Cancel .....	43
4.8.5 Threading (enfilage) .....	44
4.8.6 Expiration de délai .....	45
4.8.7 Traitement des exceptions .....	45
4.8.8 Interfaces de type sûr (type safe) .....	46
4.8.9 Globalisation et localisation .....	46
4.8.10 Traitement de contrôle WPF .....	47
4.8.11 Traitement des formes de Windows .....	47
4.9 Sécurité .....	47
4.9.1 Généralités .....	47
4.9.2 Permissions d'accès .....	47
4.9.3 Concept d'identité de code .....	48
5 Définition d'interface .....	48
Figure 1 – Structure de la Bibliothèque de Types FDI .....	36

Figure 2 – Processus de substitution .NET.....	38
Figure 3 – Identification de la version exécutable.....	38
Figure 4 – Exemple d'exécution d'un service asynchrone fondé sur IAsyncPattern.....	43
Figure 5 – Exemple d'exécution d'un service de blocage avec le modèle fondé sur IAsyncResult.....	43
Figure 6 – Exemple de séquence de traitement du service "Cancel" .....	44
Figure 7 – Source d'exception.....	46
Tableau 1 – Référence de l'édition de technologie .....	35
Tableau 2 – Services de Propriété de Base .....	49
Tableau 3 – Services de Modèle d'Appareil.....	49
Tableau 4 – Services de Contrôle d'Accès .....	49
Tableau 5 – Services d'Accès Direct .....	49
Tableau 6 – Services d'Hébergement.....	50
Tableau 7 – Services d'UIP .....	51
Tableau 8 – Types de données de base.....	52
Tableau 9 – Types particuliers .....	52

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#### Partie 6: Mapping de technologies

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Cette deuxième édition annule et remplace la première édition parue en 2015. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) redéfinition du concept de sécurité pour l'exécution de l'UIP.

Le texte de cette Norme internationale est issu des documents suivants:

FDIS	Rapport de vote
65E/763/FDIS	65E/773/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Une liste de toutes les parties de la série IEC 62769, publiées sous le titre général *Intégration des appareils de terrain (FDI)*, peut être consultée sur le site web de l'IEC.

Le comité a décidé que le contenu de ce document ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous "<http://webstore.iec.ch>" dans les données relatives au document recherché. À cette date, le document sera

- reconduit,
- supprimé,
- remplacé par une édition révisée, ou
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## INTRODUCTION

La série IEC 62769 est publiée sous le titre général "*Intégration des appareils de terrain (FDI)*" et comporte les parties suivantes:

- Partie 1: Vue d'ensemble
- Partie 2: Client FDI
- Partie 3: Serveur FDI
- Partie 4: Paquetages FDI
- Partie 5: Modèle d'Information FDI
- Partie 6: Mapping de technologies FDI
- Partie 7: Appareils de Communication FDI
- Partie 100: Profils – Extensions de protocoles génériques
- Partie 101-1: Profils – Foundation Fieldbus H1
- Partie 101-2: Profils – Foundation Fieldbus HSE
- Partie 103-1: Profils – PROFIBUS
- Partie 103-4: Profils – PROFINET
- Partie 109-1: Profils – HART et WirelessHART
- Partie 115-2: Profils – Définitions spécifiques au protocole pour Modbus-RTU
- Partie 150-1: Profils – ISA 100.11a

## INTÉGRATION DES APPAREILS DE TERRAIN (FDI) –

### Partie 6: Mapping de technologies

#### 1 Domaine d'application

La présente partie de l'IEC 62769 spécifie le mapping de technologies pour les concepts décrits dans la norme d'intégration des appareils de terrain (FDI). Le mapping de technologies porte essentiellement sur la mise en œuvre relative aux composants: Client FDI et Plugiciel d'Interface Utilisateur (UIP) qui ne sont spécifiques qu'à la plate-forme WORKSTATION (Poste de travail)/.NET telle que définie dans l'IEC 62769-4.

#### 2 Références normatives

Les documents ci-après, dans leur intégralité ou non, sont des références normatives indispensables à l'application du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61804 (toutes les parties), *Blocs fonctionnels (FB) pour les procédés industriels et le Langage de Description Electronique de Produit (EDDL)*

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

IEC 62769-2, *Intégration des appareils de terrain (FDI) – Partie 2: Client FDI*

IEC 62769-4, *Intégration des appareils de terrain (FDI) – Partie 4: Paquetages FDI*

IEC 62541 (toutes les parties), *Architecture unifiée OPC*

ISO/IEC 19505-1, *Information technology – Object Management Group Unified Modeling Language (OMG UML) – Part 1: Infrastructure* (disponible en anglais seulement)

ISO/IEC 29500 (toutes les parties), *Information technology – Document description and processing languages – Office Open XML File Formats* (disponible en anglais seulement)