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Field Device Integration (FDI®) – Part 7: Communication Devices

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FIELD DEVICE INTEGRATION (FDI®) –

Part 7: Communication Devices

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IEC 62769-7 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 ScanExtended Method.

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

Draft	Report on voting
65E/859/CDV	65E/916/RVC

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

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The IEC 62769 series has the general title *Field Device Integration (FDI)* and the following parts:

- 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 7: Communication Devices

1 Scope

This part of IEC 62769 specifies the elements implementing communication capabilities called Communication Devices ~~(IEC 62769-5)~~.

The overall FDI®[1] architecture is illustrated in Figure 1. The architectural components that are within the scope of this document have been highlighted in this illustration. The document scope with respect to FDI® Packages is limited to Communication Devices. The Communication Server shown in Figure 1 is an example of a specific Communication Device.

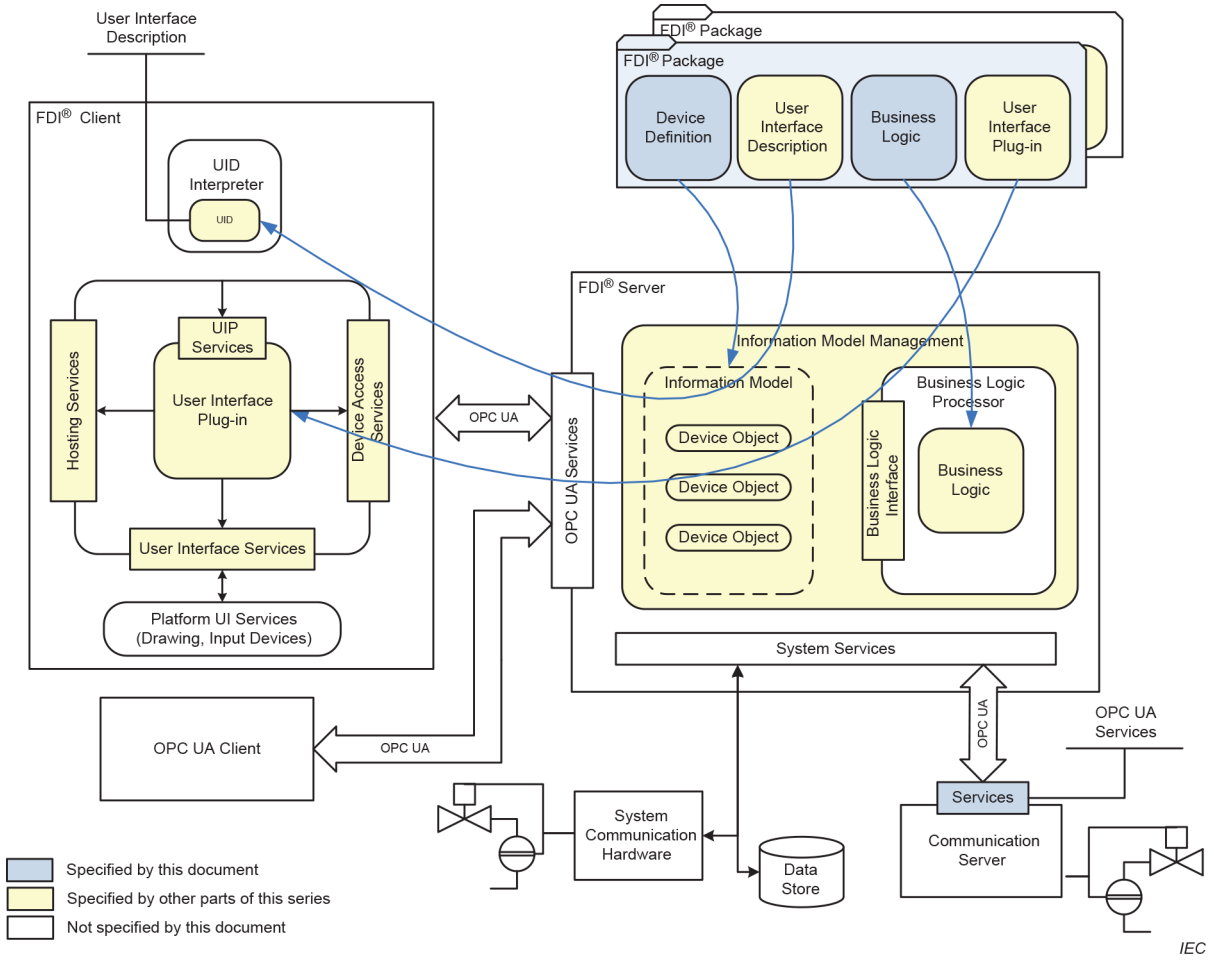


Figure 1 – FDI® architecture diagram

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

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IEC 62541-6, *OPC Unified Architecture – Part 6: Mappings*

IEC 62541-7, *OPC unified architecture – Part 7: Profiles*

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

IEC 62769-4:~~2020~~2023, *Field Device Integration (FDI®) – Part 4: FDI® Packages*

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

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Field Device Integration (FDI®) – Part 7: Communication Devices

Intégration des appareils de terrain (FDI®) – Partie 7: Appareils de Communication



IEC 62769-7:2023-04(en-fr)

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Part 7: Communication Devices

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Part 7: Communication Devices

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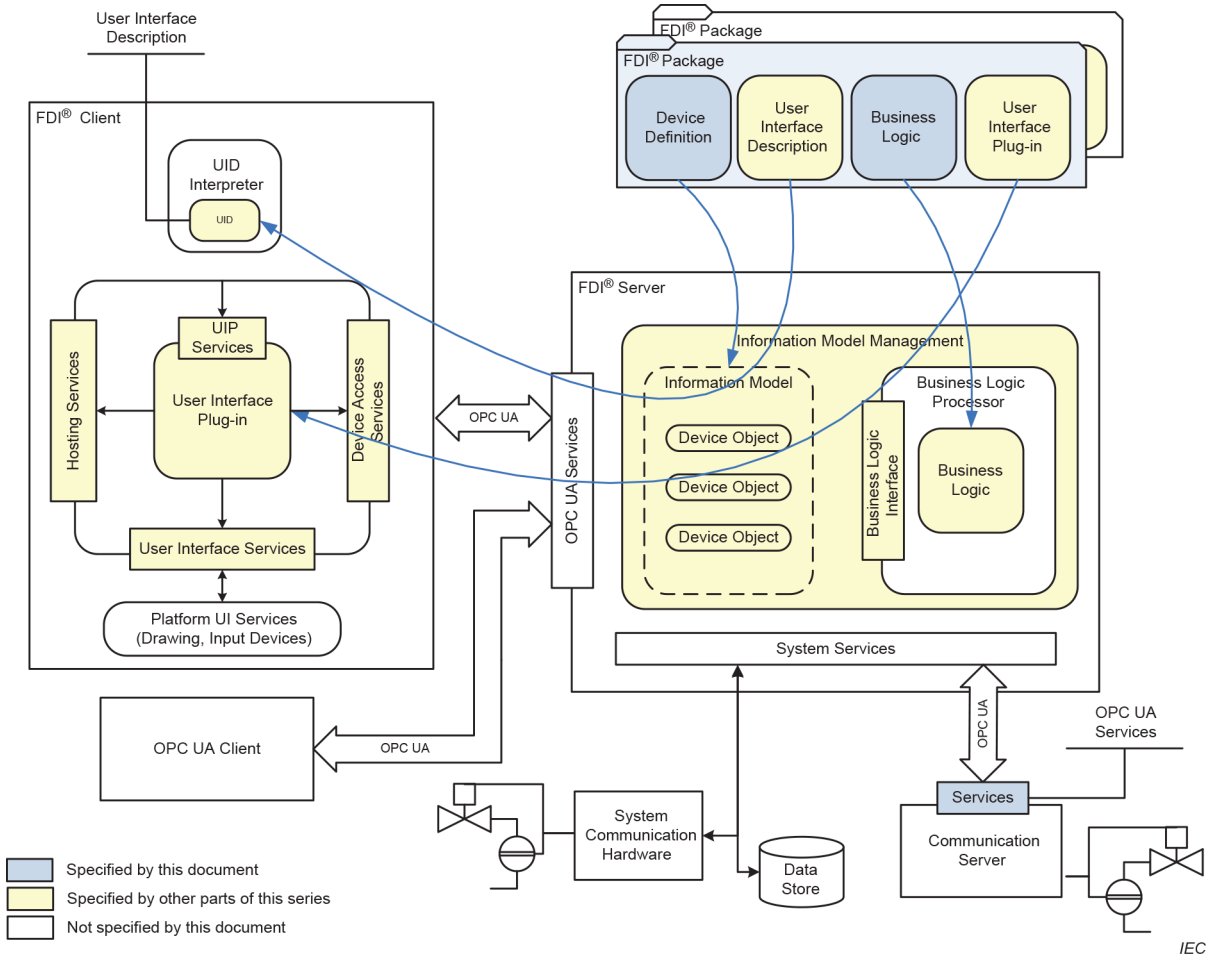


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IEC 62769-5, *Field Device Integration (FDI®) – Part 5: FDI® Information Model*

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INTÉGRATION DES APPAREILS DE TERRAIN (FDI®) –

Partie 7: Appareils de Communication

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Cette troisième édition annule et remplace la deuxième édition parue en 2021. Cette édition constitue une révision technique.

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

a) ajout de la Méthode ScanExtended.

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

Projet	Rapport de vote
65E/859/CDV	65E/916/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

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INTÉGRATION DES APPAREILS DE TERRAIN (FDI®) –

Partie 7: Appareils de Communication

1 Domaine d'application

La présente partie de l'IEC 62769 spécifie les éléments de mise en œuvre des fonctions de communication, appelés Appareils de Communication.

L'architecture FDI®[1] complète est représentée à la Figure 1. Les composants architecturaux qui relèvent du domaine d'application du présent document ont été mis en évidence dans cette représentation. Le domaine d'application du document relatif aux Paquetages FDI® est limité aux Appareils de Communication. Le Serveur de Communication représenté à la Figure 1 est un exemple d'Appareil de Communication spécifique.

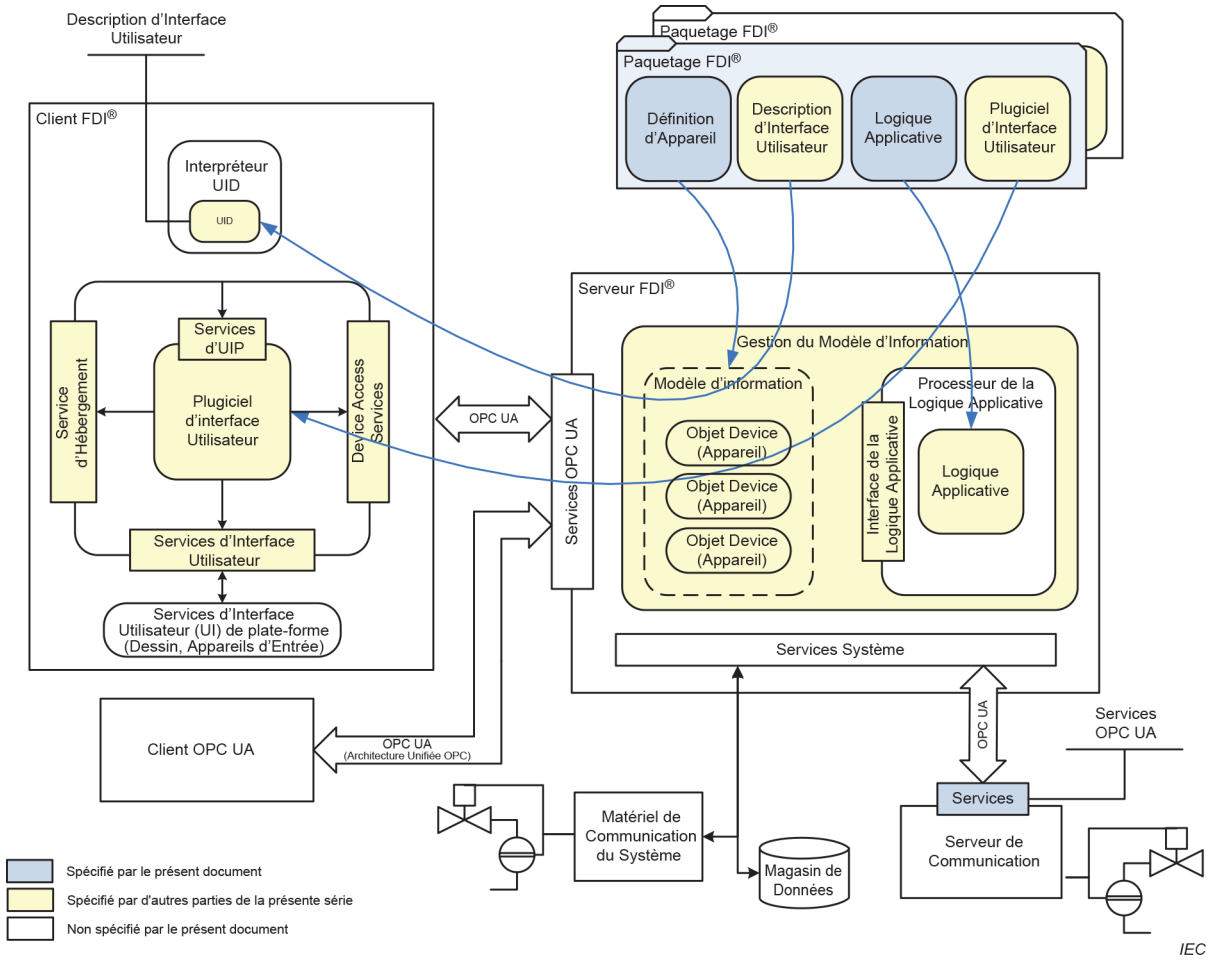


Figure 1 – Diagramme de l'architecture FDI®

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IEC 61804-3, *Les dispositifs et leur intégration dans les systèmes de l'entreprise – Blocs fonctionnels (FB) pour les procédés industriels et le langage de description électronique de produit (EDDL) – Partie 3: Sémantique et syntaxe EDDL*

IEC 61804-4, *Les dispositifs et leur intégration dans les systèmes de l'entreprise – Blocs fonctionnels (FB) pour les procédés industriels et le langage de description électronique de produit (EDDL) – Partie 4: Interprétation EDD*

IEC TR 62541-1, *OPC Unified Architecture – Part 1: Overview and concepts* (disponible en anglais seulement)

IEC 62541-4, *Architecture unifiée OPC – Partie 4: Services*

IEC 62541-6, *Architecture unifiée OPC – Partie 6: Mappings*

IEC 62541-7, *Architecture unifiée OPC – Partie 7: Profils*

IEC 62541-100, *Architecture unifiée OPC – Partie 100: Interface d'appareils*

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*

IEC 62769-3, *Intégration des appareils de terrain (FDI®) – Partie 3: Serveur*

IEC 62769-4:2023, *Intégration des appareils de terrain (FDI®) – Partie 4: Paquetages FDI®*

IEC 62769-5, *Intégration des appareils de terrain (FDI®) – Partie 5: Modèle d'Information FDI®*