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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 41771.6-2025

**Field device integration - Part 6: Technology mapping
(English Translation)**

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Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms and Definitions
3.1 Terms and Definitions
3.2 Abbreviations
4 Runtime and Platform
4.1 Runtime
4.2 Platform
References

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 6 of GB/T 41771 Field Device Integration. GB/T 41771 has published the following parts.

- Part 1: Overview;
- Part 2: Client;
- Part 3: Server;
- Part 4: Package;
- Part 5: Information model;
- Part 6: Technology mapping;
- Part 7: Communications equipment.

This document is equivalent to IEC 62769-6:2023 "Field Device Integration (FDI) Part 6: FDI Technology Mapping".

The following minimal editorial changes were made to this document.

- To be consistent with the standard system, the standard name is changed to "Field

Device Integration Part 6: Technology Mapping";

---UML is deleted from the abbreviations and is not used in the text.

Introduction

The field equipment integration series of standards is an important technical standard to guide industrial process measurement and control and other related activities. GB/T 41771 aims to Establishes normative criteria applicable to equipment integration, which is planned to consist of 15 parts.

--- Part 1: Overview. The purpose is to specify basic concepts such as the architecture of field device integration.

--- Part 2: Client. The purpose is to specify the device access services, host services, user interface plug-ins and other related services of the field device integration client.

Requirements for software and user interface description.

--- Part 3: Server. The purpose is to specify the information model of the field device integration server, OPC UA services, communications and other related Require.

--- Part 4: Package. The purpose is to build a field device integration package model and provide a way to integrate devices, network components and communication servers into all the elements needed for the system.

--- Part 5: Information model. The purpose is to specify the topology of the automation system, used to describe the equipment and communication of the automation system Connect to the Internet.

--- Part 6: Technology mapping. The purpose is to specify the technology mapping of the concepts described in field device integration.

--- Part 7: Communication equipment. The purpose is to specify the elements that implement communication capabilities.

--- Part 8: General protocol for industry regulations. The purpose is to specify the communication servers, gateways and devices required for field device integration packages Details of the general protocol.

--- Part 9: Profile for Foundation Fieldbus H1.The purpose is to specify the integrated communication of field devices using H1 fieldbus technology Industry rules.

--- Part 10: Profile for FOUNDATION Fieldbus HSE. The purpose is to specify the field device integration communication of HSE fieldbus technology.

Believe in the rules.

--- Part 11: Profile PROFIBUS. The purpose is to specify the field device integration

communication profile of PROFIBUS technology.

--- Part 12: Profile PROFINET. The purpose is to specify the field device integration communication profile of PROFINET technology.

--- Part 13: Profiles HART and WirelessHART. The purpose is to specify the HART and WirelessHART technologies Communication profile for field device integration.

--- Part 14: Profile Modbus-RTU. The purpose is to specify the field device integration communication profile of Modbus-RTU technology.

--- Part 15: Profile ISA100. The purpose is to specify the field device integration communication profile of ISA100 technology.

Field device integration Part 6: Technology mapping

1 Scope

This document specifies a technical mapping of the concepts described in the Field Device Integration (FDI) standard. The focus of this technical mapping is on Implement FDI clients and users in the specified technologies of WORKSTATION platform and MOBILE platform defined in IEC 62769-4 User Interface Plugin (UIP). There are separate subsections to support current.NET and HTML5 technologies.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

IEC 62769-1 Field Device Integration (FDI) - Part 1: Overview Overview] Note. GB/T 41771.1.2022 Field device integration Part 1: Overview (IEC 62769-1:2021, IDT) IEC 62769-6-100 Field Device Integration (FDI) Part 6-100. Technology Mapping.NET [FieldDevice Integration(FDI)-Part 6-100. Technologymapping-.NET] IEC 62769-6-200 Field Device Integration (FDI) Part 6-200. Technology Mapping HTML5 [FieldDevice Integration(FDI)-Part 6-200. Technologymapping-HTML5] FCGTS10099 Field Device Integration (FDI) Technology Management agement

3.1 Terms and Definitions

For the purposes of this document, the terms and definitions defined in IEC 62769-1 apply.

The terminology databases used for standardization maintained by ISO and IEC are located at.

3.2 Abbreviations

The following abbreviations apply to this document.

CLR. Common Language Run-time

4.1.1 NET Framework

UIP based on .NET runtime should be built on the Microsoft .NET framework and executed under the .NET CLR.