

AMERICAN NATIONAL STANDARD

ANSI/ISA-62453-306 (103.00.07)-2011

***Field device tool (FDT) interface specification –
Part 306: Communication profile integration
– IEC 61784 CPF 6***

Approved 31 May 2011

ANSI/ISA-62453-306 (103.00.07)-2011, *FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION – Part 306: Communication profile integration – IEC 61784 CPF 6*

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INTRODUCTION

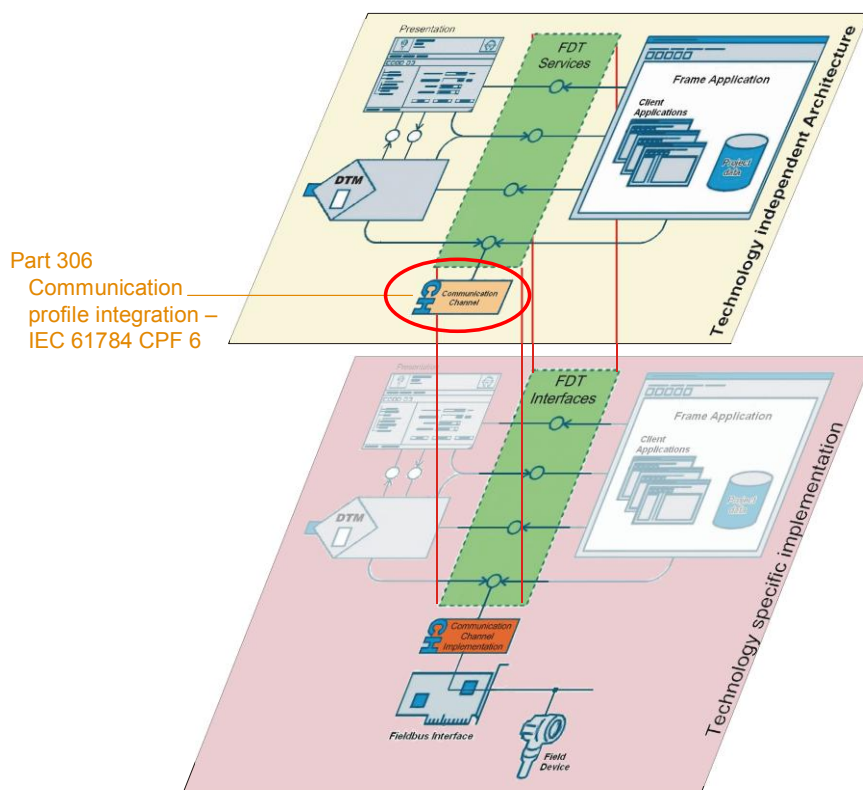
This part of ~~IEC~~ ISA-62453 is an interface specification for developers of FDT (Field Device Tool) components for function control and data access within a client/server architecture. The specification is a result of an analysis and design process to develop standard interfaces to facilitate the development of servers and clients by multiple vendors that need to interoperate seamlessly.

With the integration of fieldbusses into control systems, there are a few other tasks which need to be performed. In addition to fieldbus-

and device-specific tools, there is a need to integrate these tools into higher-level system-wide planning- or engineering tools. In particular, for use in extensive and heterogeneous control systems, typically in the area of the process industry, the unambiguous definition of engineering interfaces that are easy to use for all those involved is of great importance.

A device-specific software component, called DTM (Device Type Manager), is supplied by the field device manufacturer with its device. The DTM is integrated into engineering tools via the FDT interfaces defined in this standard. The approach to integration is in general open for all kind of fieldbusses and thus meets the requirements for integrating different kinds of devices into heterogeneous control systems.

Figure 1 shows how ~~IEC~~ ISA-62453-306(103.00.07) is aligned in the structure of the ~~IEC~~ ISA-62453 series.



IEC 1133/09

Figure 1 – Part 306 of the IEC ISA-62453 series

FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION – Part 306: Communication profile integration – IEC 61784 CPF 6

1 Scope

Communication Profile Family 6 (commonly known as INTERBUS®¹) defines communication profiles based on IEC 61158-2 Type 8, IEC 61158-3-8, IEC 61158-4-8, IEC 61158-5-8, and IEC 61158-6-8. The basic profiles CP 6/1 (INTERBUS) and CP 6/3 (INTERBUS minimal subset) are defined in IEC 61784-1.

This part of IEC ISA-62453 provides information for integrating the INTERBUS® technology into the FDT standard (IEC ISA-62453-2 [103.00.02]).

This part of the IEC ISA-62453 specifies communication and other services.

This standard neither contains the FDT specification nor modifies it.

2 Normative references

The following referenced documents are indispensable for the application of this specification. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies

IEC 61158-2, *Industrial communication networks – Fieldbus specifications – Part 2: Physical layer specification and service definition*

IEC 61158-3-8, *Industrial communication networks – Fieldbus specifications – Part 3-8: Data-link layer service definition – Type 8 elements*

IEC 61158-4-8, *Industrial communication networks – Fieldbus specifications – Part 4-8: Data-link layer protocol specification – Type 8 elements*

IEC 61158-5-8, *Industrial communication networks – Fieldbus specifications – Part 5-8: Application layer service definition – Type 8 elements*

IEC 61158-6-8, *Industrial communication networks – Fieldbus specifications – Part 6-8: Application layer protocol specification – Type 8 elements*

IEC 61784-1, *Industrial communication networks – Profiles – Part 1: Fieldbus profiles*

IEC 62453-1:2009, *Field Device Tool (FDT) interface specification – Part 1: Overview and guidance*

¹ INTERBUS ® is the trade name of Phoenix Contact GmbH & Co. KG., control of trade name use is given to the non-profit organisation INTERBUS Club. This information is given for the convenience of users of this International Standard and does not constitute an endorsement by IEC of the trademark holder or any of its products. Compliance to this profile does not require use of the trade name INTERBUS. Use of the trade name INTERBUS requires permission of the INTERBUS Club.