

**SLOVENSKI STANDARD**  
**kSIST-TP CLC/prTR 62453-51-60:2018**  
**01-november-2018**

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**Specifikacija vmesnika orodja procesne naprave - 51-60. del: Implementacija komunikacije za skupni model objekta - IEC 61784 CPF 6**

Field device tool (FDT) interface specification - Part 51-60: Communication implementation for common object model - IEC 61784 CPF 6

Field Device Tool (FDT)-Schnittstellenspezifikation - Teil 51-60: Kommunikationsimplementierung mit dem allgemeinen Objektmodell (COM) - Kommunikationsprofilfamilie (CPF) 6 nach IEC 61784

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**Ta slovenski standard je istoveten z: CLC/prTR 62453-51-60**

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**ICS:**

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.240.50	Uporabniške rešitve IT v industriji	IT applications in industry

**kSIST-TP CLC/prTR 62453-51-60:2018 en,fr,de**



TECHNICAL REPORT  
RAPPORT TECHNIQUE  
TECHNISCHER BERICHT

**FINAL DRAFT**  
**CLC/prTR 62453-51-60**

September 2018

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ICS 25.040.40; 35.110.05; 35.110

English Version

Field device tool (FDT) interface specification - Part 51-60:  
Communication implementation for common object model - IEC  
61784 CPF 6  
(IEC/TR 62453-51-60:2017)

To be completed  
(IEC/TR 62453-51-60:2017)

Field Device Tool (FDT)-Schnittstellenspezifikation - Teil  
51-60: Kommunikationsimplementierung mit dem  
allgemeinen Objektmodell (COM) -  
Kommunikationsprofilfamilie (CPF) 6 nach IEC 6178  
(IEC/TR 62453-51-60:2017)

This draft Technical Report is submitted to CENELEC members for vote by correspondence.  
Deadline for CENELEC: 2018-11-30.

The text of this draft consists of the text of IEC/TR 62453-51-60:2017.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

CLC/FprTR 62453-51-60:2018 (E)

## European foreword

This document (*CLC/FprTR 62453-51-60:2018*) consists of the text of the IEC/TR 62453-51-60:2017 prepared by IEC/TC 65 "Industrial-process measurement, control and automation".

This document is currently submitted to voting in accordance with the Internal Regulations, Part 2, Subclause 11.4.3 (simple majority) for acceptance as a CENELEC Technical Report.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC TR 62453-41	2016	Field device tool (FDT) interface specification - Part 41: Object model integration profile - Common object mode	-	-
IEC 61784-1	2014	Industrial communication networks - Profiles - Part 1: Fieldbus profiles	EN 61784-1	2014
IEC 62453-1	2016	Field device tool (FDT) interface specification - Part 1: Overview and guidance	EN 62453-1	2017
IEC 62453-2	2016	Field device tool (FDT) interface specification - Part 2: Concepts and detailed description	EN 62453-2	2017
IEC 62453-306	2009	Field device tool (FDT) interface specification - Part 306: Communication profile integration - IEC 61784 CPF 6	EN 62453-306	2009

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# IEC TR 62453-51-60

Edition 1.0 2017-06

## TECHNICAL REPORT



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**Field device tool (FDT) interface specification –  
Part 51-60: Communication implementation for common object model –  
IEC 61784 CPF 6**

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ICS 25.040.40; 35.110.05; 35.110

ISBN 978-2-8322-4327-5

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

**Part 51-60: Communication implementation for common object model –  
IEC 61784 CPF 6**

## FOREWORD

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IEC TR 62453-51-60, which is a technical report, has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process management, control and automation.

This document cancels and replaces IEC TR 62453-506 published in 2009. This edition constitutes a technical revision. The main changes consist in updates of the schemas.

Each part of the IEC 62453-51-xy series is intended to be read in conjunction with its corresponding part in the IEC 62453-3xy series. This document corresponds to IEC 62453-306.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
65E/440/DTR	65E/514/RVC

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The list of all parts of the IEC 62453 series, under the general title *Field device tool (FDT) interface specification*, 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,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

## INTRODUCTION

This part of IEC 62453 is an interface specification for developers of Field Device Tool (FDT) 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 fieldbuses 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 Device Type Manager (DTM), is supplied by the field device manufacturer with its device. The DTM is integrated into engineering tools via the FDT interfaces defined in this specification. The approach to integration is in general open for all kind of fieldbuses and thus meets the requirements for integrating different kinds of devices into heterogeneous control systems.

Figure 1 shows how this part of the IEC 62453-51-xy series is aligned in the structure of IEC 62453 series.

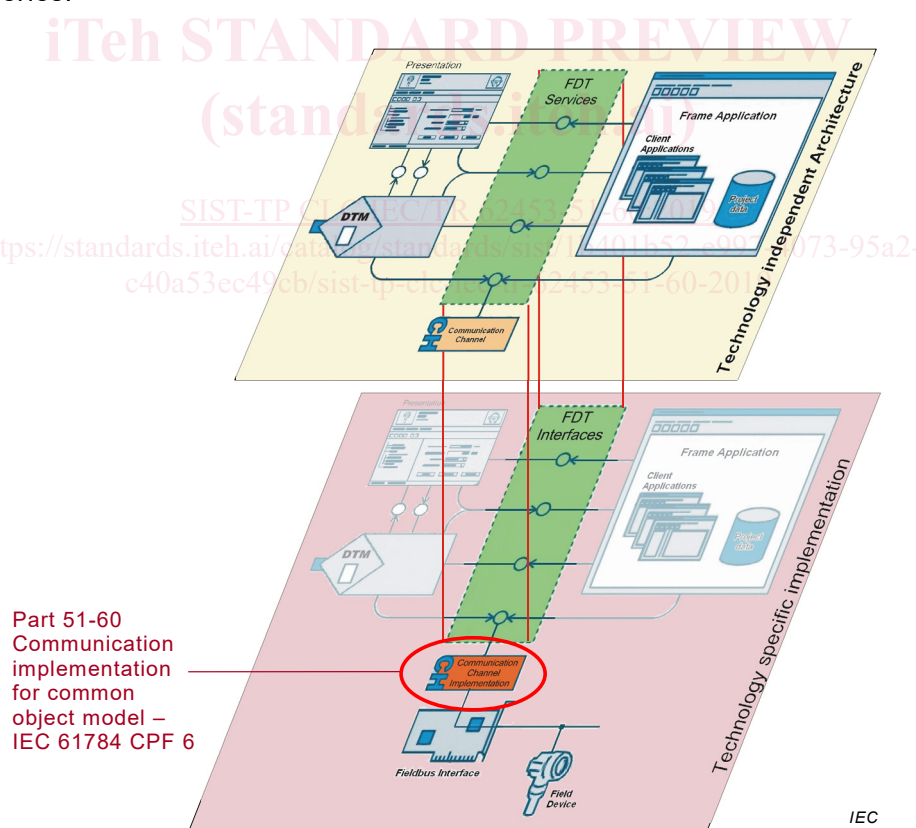


Figure 1 – Part 51-60 of the IEC 62453 series

## FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

### Part 51-60: Communication implementation for common object model – IEC 61784 CPF 6

#### 1 Scope

This part of the IEC 62453-51-xy series, which is a Technical Report, provides information for integrating the INTERBUS®<sup>1</sup> technology into the COM-based implementation of FDT interface specification (IEC TR 62453-41).

This part of IEC 62453 specifies implementation of communication and other services based on IEC 62453-306.

This document neither contains the FDT specification nor modifies it.

#### 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 61784-1:2014, *Industrial communication networks – Profiles – Part 1: Fieldbus profiles*

IEC 62453-1:2016, *Field device tool (FDT) interface specification – Part 1: Overview and guidance*

IEC 62453-2:2016, *Field device tool (FDT) interface specification – Part 2: Concepts and detailed description*

IEC TR 62453-41:2016, *Field device tool (FDT) interface specification – Part 41: Object model integration profile – Common object model*

IEC 62453-306:2009, *Field device tool (FDT) interface specification – Part 306: Communication profile integration – IEC 61784 CPF 6*

#### 3 Terms, definitions, symbols, abbreviated terms and conventions

##### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62453-1 and IEC 62453-2 apply.

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

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

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