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## Field Device Tool (FDT) Interface Specification - Part 2: Concepts and detailed Description

## ESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 62453-2:2017 sisaldb Euroopa standardi EN 62453-2:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 62453-2:2017 consists of the English text of the European standard EN 62453-2:2017.
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ICS 25.040.40, 35.100.05, 35.110

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English Version

**Field Device Tool (FDT) Interface Specification - Part 2:  
Concepts and detailed Description  
(IEC 62453-2:2016)**

Spécification des interfaces des outils des dispositifs de  
terrain (FDT) - Partie 2: Concepts et description détaillée  
(IEC 62453-2:2016)

Field Device Tool (FDT)-Schnittstellenspezifikation - Teil 2:  
Konzept und grundlegende Beschreibung  
(IEC 62453-2:2016)

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## European foreword

The text of document 65E/334/CDV, future edition 2 of IEC 62453-2, prepared by SC 65E "Devices and integration in enterprise systems" of IEC/TC 65 "Industrial process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62453-2:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-10-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-01-20

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC/TR 62453-41

NOTE Harmonized as CLC/TR 62453-41

**Annex ZA**  
(normative)

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

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.

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>
	series			series
IEC 61131	series	Programmable controllers	EN 61131	
IEC 62453-1	2016	Field Device Tool (FDT) interface specification -- Part 1: Overview and guidance	FprEN 62453-1	2013
IEC 62453-3xy	series	Field device tool (FDT) interface specification	EN 62453-3xy	series
IEC/TR 62390	2005	Common automation device - Profile guideline	-	-

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## INTRODUCTION

This part of IEC 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 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 created according to this standard is called Device Type Manager (DTM). It integrates all device-specific data, functions and business rules into the system via the FDT services defined herein.

The FDT/DTM approach is open for all kind of fieldbuses and enables integration variety of devices into heterogeneous systems.

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

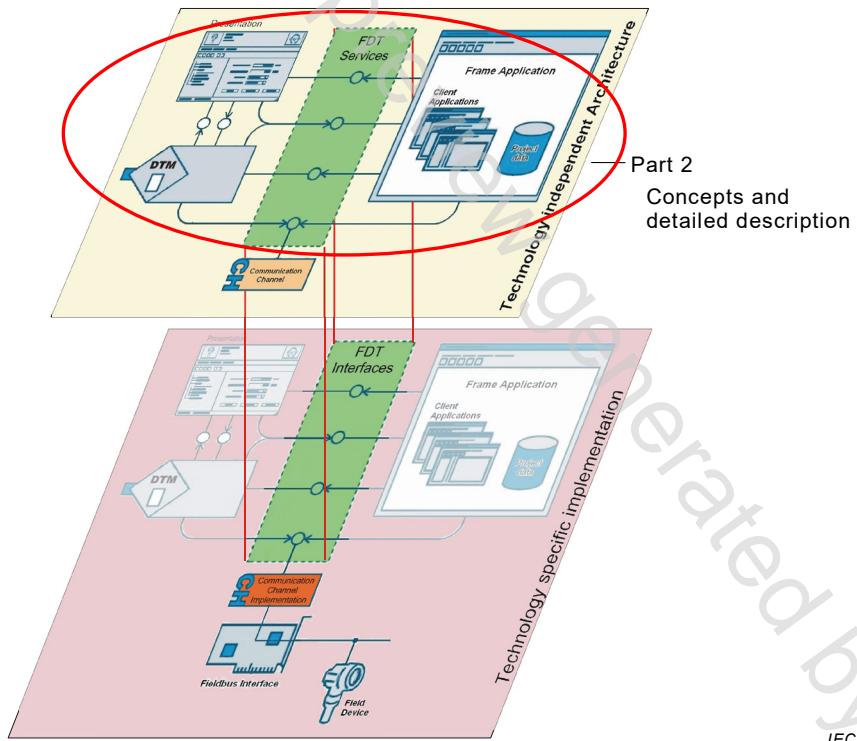


Figure 1 – Part 2 of the IEC 62453 series