

International Telecommunication Union

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**Z.166**

(10/2019)

SERIES Z: LANGUAGES AND GENERAL SOFTWARE  
ASPECTS FOR TELECOMMUNICATION SYSTEMS

Formal description techniques (FDT) – Testing and Test  
Control Notation (TTCN)

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**Testing and Test Control Notation version 3:  
TTCN-3 control interface (TCI)**

Recommendation ITU-T Z.166

ITU-T



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# Recommendation ITU-T Z.166

## Testing and Test Control Notation version 3: TTCN-3 control interface (TCI)

### Summary

Recommendation ITU-T Z.166 specifies the control interfaces for Testing and Test Control Notation 3 (TTCN-3) test system implementations. The TTCN-3 control interfaces (TCIs) provide a standardized adaptation for management, test component handling and encoding/decoding of a test system to a particular test platform. This Recommendation defines the interfaces as a set of operations independent of a target language.

The interfaces are defined to be compatible with the TTCN-3 standards (see clause 2 of ETSI ES 201 873-6 V4.11.1). The interface definition uses the Common Object Request Broker Architecture (CORBA) Interface Definition Language (IDL) to specify the TCI completely. Clauses 8, 9 and 9.7 of ETSI ES 201 873-6 V4.11.1 present language mappings for this abstract specification to the target languages Java and ANSI C.

This revision of the Recommendation contains amendments, clarifications, corrigenda and editorial corrections.

### History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T Z.145	2006-03-16	17	<a href="http://handle.itu.int/11.1002/1000/8645">11.1002/1000/8645</a>
2.0	ITU-T Z.166	2007-11-13	17	<a href="http://handle.itu.int/11.1002/1000/9282">11.1002/1000/9282</a>
3.0	ITU-T Z.166	2011-03-16	17	<a href="http://handle.itu.int/11.1002/1000/11068">11.1002/1000/11068</a>
4.0	ITU-T Z.166	2012-05-29	17	<a href="http://handle.itu.int/11.1002/1000/11601">11.1002/1000/11601</a>
5.0	ITU-T Z.166	2013-07-14	17	<a href="http://handle.itu.int/11.1002/1000/11963">11.1002/1000/11963</a>
6.0	ITU-T Z.166	2014-11-13	17	<a href="http://handle.itu.int/11.1002/1000/12336">11.1002/1000/12336</a>
7.0	ITU-T Z.166	2015-10-29	17	<a href="http://handle.itu.int/11.1002/1000/12603">11.1002/1000/12603</a>
8.0	ITU-T Z.166	2016-10-14	17	<a href="http://handle.itu.int/11.1002/1000/13046">11.1002/1000/13046</a>
9.0	ITU-T Z.166	2017-10-14	17	<a href="http://handle.itu.int/11.1002/1000/13377">11.1002/1000/13377</a>
10.0	ITU-T Z.166	2018-10-14	17	<a href="http://handle.itu.int/11.1002/1000/13707">11.1002/1000/13707</a>
11.0	ITU-T Z.166	2019-10-14	17	<a href="http://handle.itu.int/11.1002/1000/14063">11.1002/1000/14063</a>

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\* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

## FOREWORD

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The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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# Recommendation ITU-T Z.166

## Testing and Test Control Notation version 3: TTCN-3 control interface (TCI)

### 1 Scope

Recommendation ITU-T Z.166 specifies the control interfaces for TTCN-3 test system implementations. The TTCN-3 control interfaces provide a standardized adaptation for management, test component handling and encoding/decoding of a test system to a particular test platform. The present document defines the interfaces as a set of operations independent of a target language.

The interfaces are defined to be compatible with the TTCN-3 standard (see clause 2 of [ETSI ES 201 873-6 V4.11.1]). The interface definition uses the CORBA interface definition language (IDL) to specify the TCI completely. Clauses 8, 9, and 9.7 of [ETSI ES 201 873-6 V4.11.1] present language mappings for this abstract specification to the target languages Java, ANSI C, and C++.

### 2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

[ETSI ES 201 873-6 V4.11.1] ETSI ES 201 873-6 V4.11.1 (2019), *Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 6: TTCN-3 Control Interface (TCI)*.

### 3 Definitions

#### 3.1 Terms defined elsewhere

None.

#### 3.2 Terms defined in this Recommendation

None.

### 4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

CORBA	Common Object Request Broker Architecture
IDL	Interface Definition Language
TCI	TTCN-3 Control Interfaces
TTCN	Testing and Test Control Notation

## **5 Conventions**

None.

## **6 Endorsement**

[ETSI ES 201 873-6 V4.11.1] was approved by ITU-T as the basis for Recommendation ITU-T Z.166.



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