

International Telecommunication Union

**ITU-T**

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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



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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 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. 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 V4.5.1). 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 V4.5.1 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
1.0	ITU-T Z.145	2006-03-16	17
2.0	ITU-T Z.166	2007-11-13	17
3.0	ITU-T Z.166	2011-03-16	17
4.0	ITU-T Z.166	2012-05-29	17
5.0	ITU-T Z.166	2013-07-14	17

## FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

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.

## NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

## INTELLECTUAL PROPERTY RIGHTS

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

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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 V4.5.1]). 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 V4.5.1] present language mappings for this abstract specification to the target languages Java™, ANSIC, 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 V4.5.1] ETSI ES 201 873-6 V4.5.1 (2013-04), *Methods for Testing and Specification (MTS); Testing and Test Control Notation version 3: TTCN-3 control interface (TCI)*.

### 3 Definitions

#### 3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

None.

#### 3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

None.

### 4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

TTCN Testing and Test Control Notation

### 5 Conventions

None.

## **6 Endorsement**

[ETSI ES 201 873-6 V4.5.1] was approved by ITU-T as the basis for Recommendation ITU-T Z.166.



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