

# Recommendation

## **ITU-T Z.171 (10/2023)**

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: Using JSON with TTCN-3**

# ITU-T Z-SERIES RECOMMENDATIONS

## Languages and general software aspects for telecommunication systems

FORMAL DESCRIPTION TECHNIQUES (FDT)	Z.100-Z.199
Specification and Description Language (SDL)	Z.100-Z.109
Application of formal description techniques	Z.110-Z.119
Message Sequence Chart (MSC)	Z.120-Z.129
User Requirements Notation (URN)	Z.150-Z.159
<b>Testing and Test Control Notation (TTCN)</b>	<b>Z.160-Z.179</b>
PROGRAMMING LANGUAGES	Z.200-Z.299
MAN-MACHINE LANGUAGE	Z.300-Z.399
QUALITY	Z.400-Z.499
METHODS	Z.500-Z.599
MIDDLEWARE	Z.600-Z.699

*For further details, please refer to the list of ITU-T Recommendations.*

# Recommendation ITU-T Z.171

## Testing and Test Control Notation version 3: Using JSON with TTCN-3

### Summary

Recommendation ITU-T Z.171 specifies the rules to define schemas for JSON data structures in TTCN 3, to enable testing of JSON-based systems, interfaces and protocols, and the conversion rules between TTCN-3 and JSON to enable exchanging TTCN 3 data in JSON format between different systems.

### History \*

Edition	Recommendation	Approval	Study Group	Unique ID
1.0	ITU-T Z.171	2017-10-14	17	11.1002/1000/13382
2.0	ITU-T Z.171	2018-10-14	17	11.1002/1000/13710
3.0	ITU-T Z.171	2021-10-14	17	11.1002/1000/14789
4.0	ITU-T Z.171	2023-10-29	17	11.1002/1000/15704

### Keywords

Control notation, interoperability testing, protocol testing, protocols, service testing, testing, tools, TTCN-3.

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\* To access the Recommendation, type the URL <https://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID.

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# **Recommendation ITU-T Z.171**

## **Testing and Test Control Notation version 3: Using JSON with TTCN-3**

### **1 Scope**

This Recommendation specifies the rules to define schemas for JSON data structures in TTCN 3, to enable testing of JSON-based systems, interfaces and protocols, and the conversion rules between TTCN-3 and JSON to enable exchanging TTCN 3 data in JSON format between different systems.

### **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 201 873-11 V4.10.1]      ETSI ES 201 873-11 V4.10.1 (2023-05), *Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3: Using JSON with TTCN-3*.

### **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:

JSON      JavaScript Object Notation

TTCN      Testing and Test Control Notation

### **5 Conventions**

None.

### **6 Endorsement**

[ETSI ES 201 873-11 V4.10.1] was approved by ITU-T as the basis for Recommendation ITU-T Z.171.





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