



INTERNATIONAL TELECOMMUNICATION UNION

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

# Q.2931 E

(12/2000)

SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for  
access signalling

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**Broadband integrated services digital network  
(B-ISDN) – Digital subscriber signalling system  
No. 2 (DSS2) – User-network interface (UNI)  
layer 3 specification for basic call/connection  
control: Test suite structure and test purposes  
(TSS & TP) for the network**

ITU-T Recommendation Q.2931 E

(Formerly CCITT Recommendation)

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**Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Test suite structure and test purposes (TSS & TP) for the network**

**Summary**

This Recommendation specifies the Test Suite Structure and Test Purposes (TSS & TP) for the network at the  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point (as defined in ITU-T I.413 [3]) of implementations conforming to the procedures for the support of point-to-point release 1 switched virtual channel connections between the calling party and the called party of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the Broadband Integrated Services Digital Network (B-ISDN), ITU-T Q.2931 [1].

Other ITU-T Recommendations of the Q.2931 family specify the Protocol Implementation Conformance Statement (PICS) proforma and Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on this ITU-T Recommendation.

NOTE – This Recommendation related to protocol conformance is published only in English; it is based on an external SDO's standard published in English.

**Source**

ITU-T Recommendation Q.2931 E was revised by ITU-T Study Group 11 (2001-2004) and approved under the WTSA Resolution 1 procedure on 6 December 2000.

## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

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.

## INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

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, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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## ITU-T Recommendation Q.2931 E

### **Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Test suite structure and test purposes (TSS & TP) for the network**

## 1 Scope

This Recommendation specifies Test Suite Structure and Test Purposes (TSS & TP) for the network at the  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point (as defined in ITU-T I.413 [3]) of implementations conforming to the procedures for the support of point-to-point release 1 switched virtual channel connections between the calling party and the called party of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the Broadband Integrated Services Digital Network (B-ISDN), ITU-T Q.2931 [1].

Other ITU-T Recommendations of the Q.2931 family specify the Protocol Implementation Conformance Statement (PICS) proforma and Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on this ITU-T Recommendation.

This Recommendation is applicable to equipment, supporting point-to-point B-ISDN release 1 calls/connections, to be attached at either side of a  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point when used as an access to the public B-ISDN.

The test suite structure provides the grouping of tests in the test suite, the test purposes part is a list of test purposes realized in the ATS part of this Recommendation. Test purposes are generated from the protocol specification, refer to observable events only but give no guarantee that each test purpose defined is testable. Untestable test purposes are identified in the ATS part.

## 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.

- [1] ITU-T Q.2931 (1995), *Digital Subscriber Signalling System No. 2 (DSS2) – User-Network Interface (UNI) layer 3 specification for basic call/connection control*.
- [2] ITU-T Q.2931 B (2000), *Broadband Integrated Services Digital Network (B-ISDN) – Digital Subscriber Signalling System No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/bearer control: Protocol Implementation Conformance Statement (PICS) proforma*.
- [3] ITU-T I.413 (1993), *B-ISDN user-network interface*.
- [4] ETSI EN 300 443-5 V1.2.1 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 5: Test Suite Structure and Test Purposes (TSS&TP) specification for the network*.

### 3 Endorsement

The text of ETSI EN 300 443-5 [4] was approved by ITU-T as Recommendation Q.2931 E with agreed modifications as given below.

### 4 Coverage

This Recommendation covers ITU-T Q.2931 [1] as modified by Amendment 1 (06/97), Amendment 2 (03/99) and Amendment 3 (03/99).

### 5 Modifications

#### 5.1 General

Throughout the text of ETSI Standard EN 300 443-5 [4] replace references as shown in the following table:

Reference in ETSI EN 300 443-5	Modified reference
EN 300 443-1	ITU-T Q.2931
EN 300 443-2	ITU-T Q.2931 B
Standard	Recommendation

#### Page 5, Intellectual Property Rights

Delete the whole section.

#### Page 5, Foreword

Delete the whole Foreword.

NOTE 1 – It is replaced by the Foreword of this Recommendation.

#### Page 6, clause 1 Scope

Replace the whole clause with the following:

##### "1 Scope

See clause 1 Scope of this Recommendation above."

#### Page 57, Bibliography

Delete the whole clause "Bibliography".

NOTE 2 – It is replaced by Appendix I "Bibliography" of this Recommendation.

#### Page 58, History

Delete the whole clause "History".

#### 5.2 Technical modifications

##### 5.2.1 QoS selection procedures

Delete test purpose LBN\_04\_01.

## APPENDIX I

### Bibliography

- [A] ETSI EN 300 443-1 V1.3.5 (1998), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification*. [ITU-T Recommendation Q.2931 (1995), modified.]
- [B] ETSI EN 300 443-2 V1.2.3 (1999), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification*.
- [C] ETSI EN 300 443-3 V1.1.3 (1999), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user*.
- [D] ETSI EN 300 443-4 V1.1.2 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 4: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user*.
- [E] ETSI EN 300 443-6 V1.2.1 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 6: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network*.
- [F] ISO/IEC 9646-3:1998, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 3: The Tree and Tabular Combined Notation (TTCN)*.



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