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**ITU-T**

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OF ITU

**Q.2961 E**

(12/2000)

SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for  
access signalling

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**Digital subscriber signalling system No. 2  
(DSS2) – Additional traffic parameters:  
Test suite structure and test purposes  
(TSS & TP) for the network**

ITU-T Recommendation Q.2961 E

(Formerly CCITT Recommendation)

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ITU-T Q-SERIES RECOMMENDATIONS  
**SWITCHING AND SIGNALLING**

SIGNALLING IN THE INTERNATIONAL MANUAL SERVICE	Q.1–Q.3
INTERNATIONAL AUTOMATIC AND SEMI-AUTOMATIC WORKING	Q.4–Q.59
CLAUSES APPLICABLE TO ITU-T STANDARD SYSTEMS	Q.100–Q.119
SPECIFICATIONS OF SIGNALLING SYSTEMS No. 4 AND No. 5	Q.120–Q.249
SPECIFICATIONS OF SIGNALLING SYSTEM No. 6	Q.250–Q.309
SPECIFICATIONS OF SIGNALLING SYSTEM R1	Q.310–Q.399
SPECIFICATIONS OF SIGNALLING SYSTEM R2	Q.400–Q.499
DIGITAL EXCHANGES	Q.500–Q.599
INTERWORKING OF SIGNALLING SYSTEMS	Q.600–Q.699
SPECIFICATIONS OF SIGNALLING SYSTEM No. 7	Q.700–Q.849
DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 1	Q.850–Q.999
PUBLIC LAND MOBILE NETWORK	Q.1000–Q.1099
INTERWORKING WITH SATELLITE MOBILE SYSTEMS	Q.1100–Q.1199
INTELLIGENT NETWORK	Q.1200–Q.1699
SIGNALLING REQUIREMENTS AND PROTOCOLS FOR IMT-2000	Q.1700–Q.1799
BROADBAND ISDN	Q.2000–Q.2999
General aspects	Q.2000–Q.2099
Signalling ATM adaptation layer (SAAL)	Q.2100–Q.2199
Signalling network protocols	Q.2200–Q.2299
Common aspects of B-ISDN application protocols for access signalling and network signalling and interworking	Q.2600–Q.2699
B-ISDN application protocols for the network signalling	Q.2700–Q.2899
<b>B-ISDN application protocols for access signalling</b>	<b>Q.2900–Q.2999</b>

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

**Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters:  
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 [7]) of implementations conforming to the procedures for the handling of additional traffic parameters that may be used for basic call and connection control of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the Broadband Integrated Services Digital Network (B-ISDN), ITU-T Q.2961 [1], [2], [3], [4] and [5].

Other Recommendations of the Q.2961 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 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.2961 E was prepared 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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## CONTENTS

	<b>Page</b>
1 Scope .....	1
2 References.....	1
3 Endorsement.....	2
4 Coverage .....	2
5 Modifications .....	2
Appendix I – Bibliography .....	3

# ITU-T Recommendation Q.2961 E

## Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Test suite structure and test purposes (TSS & TP) for the network

### 1 Scope

This Recommendation specifies the Test Suite Structure and Test Purposes (TSS & TP) for the user attached to the  $T_B$  reference point or coincident  $S_B$  and  $T_B$  reference point (as defined in ITU-T I.413 [7]) of implementations conforming to the procedures for the handling of additional traffic parameters that may be used for basic call and connection control of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the Broadband Integrated Services Digital Network (B-ISDN), ITU-T Q.2961 [1], [2], [3], [4], [5] and [6].

Other Recommendations of the Q.2961 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 Recommendation.

This Recommendation is applicable to equipment, supporting capabilities for the indication of traffic parameters above of the peak cell rate at connection request time, 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 the 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 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 currently valid ITU-T Recommendations is regularly published.

- [1] ITU-T Q.2961.1 (1995), *Digital subscriber signalling system No. 2 – Additional traffic parameters: Additional signalling capabilities to support traffic parameters for the tagging option and the sustainable cell rate parameter set.*
- [2] ITU-T Q.2961.2 (1997), *Digital subscriber signalling system No. 2 – Additional traffic parameters: Support of ATM transfer capability in the broadband bearer capability information element.*
- [3] ITU-T Q.2961.3 (1997), *Digital subscriber signalling system No. 2 – Additional traffic parameters: Signalling capabilities to support traffic parameters for the available bit rate (ABR) ATM transfer capability.*
- [4] ITU-T Q.2961.4 (1997), *Digital subscriber signalling system No. 2 – Additional traffic parameters: Signalling capabilities to support traffic parameters for the ATM block transfer (ABT) ATM transfer capability.*
- [5] ITU-T Q.2961.5 (1999), *Digital subscriber signalling system No. 2 – Additional traffic parameters: Additional traffic parameters for cell delay variation tolerance indication.*

- [6] ITU-T Q.2961.6 (1998), Digital subscriber signalling system No. 2 – Additional traffic parameters: Additional signalling procedures for the support of the SBR2 and SBR3 ATM transfer capabilities.
- [7] ITU-T I.413 (1993), *B-ISDN user-network interface*.
- [8] ITU-T Q.2931 (1995), *Digital subscriber signalling system No. 2 – User-network interface (UNI) layer 3 specification for basic call/connection control*.
- [9] ITU-T Q.2961 B (2000), *Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Protocol implementation conformance statement (PICS) proforma*.
- [10] ETSI EN 301 068-5 V1.1.2 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 5: Test suite structure and test purposes (TSS&TP) specification for the network*.

### 3 Endorsement

The text of ETSI EN 301 068-5 [10] was approved by ITU-T as Recommendation Q.2961 E with agreed modifications as given below.

### 4 Coverage

This Recommendation covers ITU-T Q.2961.1 [1], Q.2961.2 [2], Q.2961.3 [3], Q.2961.4 [4] and Q.2961.6 [6].

NOTE – For testing of Q.2961.6, test groups for checking conformance to Q.2961.1 and Q.2961.2 shall be used with the exception of test groups 02 and 08 ("Traffic management option for support of tagging").

### 5 Modifications

Throughout the text of ETSI EN 301 068-5 [10] replace references as shown in the following table:

Reference in ETSI EN 301 068-5	Modified reference
EN 301 068-1	Q.2961-series Recommendations
EN 301 068-1 [1] (ITU-T Q.2961.1, modified)	ITU-T Q.2961.1 [1]
EN 301 068-1 [1] (ITU-T Q.2961.2, modified)	ITU-T Q.2961.2 [2]
EN 301 068-1 [1] (ITU-T Q.2961.3, modified)	ITU-T Q.2961.3 [3]
EN 301 068-1 [1] (ITU-T Q.2961.4, modified)	ITU-T Q.2961.4 [4]
EN 300 443-1 [7]	ITU-T Q.2931 [8]
EN 301 068-2 [2]	ITU-T Q.2961 B [9]
Standard	Recommendation

### Page 4, Intellectual Property Rights

Delete the whole section.

### Page 4, Foreword

Delete the whole Foreword.

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

## Page 5, Clause 1 Scope

Replace the whole clause with the following:

### "1 Scope

See clause 1, Scope of this Recommendation above."

## Page 17, Bibliography

Delete the whole clause, "Bibliography".

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

## Page 18, History

Delete the whole clause, "History".

## 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.*
- [B] ETSI EN 301 068-1 V1.2.4 (1998) *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 1: Protocol specification.*
- [C] ETSI EN 301 068-2 V1.1.3 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification.*
- [D] ETSI EN 301 068-3 V1.1.2 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 3: Test Suite Structure and Test Purposes (TSS & TP) specification for the user.*
- [E] ETSI EN 301 068-4 V1.1.1 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 4: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user.*
- [F] ETSI EN 301 068-6 V1.1.1 (2000), *Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM transfer capability and traffic parameter indication; Part 6: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network.*



- [G] ETSI EN 301 067-1 V1.1.3 (1999), Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Negotiation during call/connection establishment phase; Part 1: Protocol specification.
- [H] ISO/IEC 9646-3:1998, *Information technology – Open systems interconnection – Conformance testing methodology and framework – Part 3: The tree and tabular combined notation (TTCN)*.

## **SERIES OF ITU-T RECOMMENDATIONS**

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