INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.2961 D

(12/2000)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for access signalling

Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the user

ITU-T Recommendation Q.2961 D

(Formerly CCITT Recommendation)

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ITU-T Recommendation Q.2961 D

Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the user

Summary

This Recommendation specifies Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma 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 [9]) 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 Test Suite Structure and Test Purposes (TSS & TP) 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 D 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.

CONTENTS

ITU-T Recommendation Q.2961 D

Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the user

1 Scope

This Recommendation specifies Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma 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 [9]) 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 Test Suite Structure and Test Purposes (TSS & TP) 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 ATS realizes test purposes identified in the TSS & TP part of the Recommendation and groups them according to the test suite structure given in the TSS & TP. Test purposes defined in the TSS & TP part but not testable are identified in this Recommendation.

The supplier of a protocol implementation that is claimed to conform to capabilities defined in a Q.2961-series Recommendation is required to complete a copy of the PICS proforma and the PIXIT proforma provided by the testlab. The PIXIT proforma shall contain the tables identified in the partial PIXIT proforma part of this Recommendation and may contain additional information required by the testlab to be able to appropriately execute the test campaign.

NOTE – No conformance test service can be provided and therefore no PICS and PIXIT proforma is required to be completed for implementation capabilities not covered by this Recommendation. For coverage of capabilities refer to clause 4.

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 Recommandations 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 Recommandations 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 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 Q.2931 (1995), *Digital subscriber signalling system No. 2 – User-network interface (UNI) layer 3 specification for basic call/connection control.*

[8] ITU-T Q.2961 B (2000), *Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Protocol implementation conformance statement (PICS) proforma.*

[9] ITU-T I.413 (1993), *B-ISDN user-network interface.*

[10] 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.*

[11] 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.*

3 Endorsement

The text of ETSI EN 301 068-4 [11] was approved by ITU-T as Recommendation Q.2961 D with agreed modifications as given below.

NOTE 1 – Underlining and/or strike-out is used to highlight new or deleted text where detailed indication of modifications is necessary.

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"). All the signalled parameters (valid and invalid B-BC values, valid and invalid ATM traffic descriptor values, etc.) necessary for testing Q.2961.6 requirements are entered via relevant PIXIT values.

5 Modifications

5.1 General modifications

Throughout the text of ETSI EN 301 068-4 [11] replace references and text as shown in the following table:

Reference in ETSI EN 301 068-4	Modified reference
EN 300 443-1	ITU-T Q.2931
EN 300 443-2	ITU-T Q.2931 B
EN 301 068-1	Q.2961-series Recommendations
EN 301 068-2 [4]	ITU-T Q.2961 B [8]
EN 301 068-4	ITU-T Q.2961 D
Standard	Recommendation

Page 4, Intellectual Property Rights

Delete the whole clause.

Page 4, Foreword

Delete the whole clause.

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 20, Bibliography

Delete the whole clause.

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

Page 21, History

Delete the whole clause.

5.2 Technical modifications

NOTE – Modifications in the TTCN part of this Recommendation are described in terms of changes in the TTCN.GR representation.

5.2.1 AAL parameters IE

In the TTCN, Declarations Part, Test Suite Type Definitions, ASN.1 Type Definitions alter definition for the type "AAL_contents" as below:

"OCTET STRING(SIZE(1.. ~~17~~20))".

NOTE – This limitation may be removed in later versions of the TTCN part.

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 301 068-5 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.*

[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 ETS 300 406 (1995), *Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology.*

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