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Q.2931 F
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SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for access signalling

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: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

ITU-T Recommendation Q.2931 F

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

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

ITU-T Recommendation Q.2931 F

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: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

Summary

This Recommendation specifies Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma 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 [4]) 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 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 one language, English.

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

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1   Scope

This Recommendation specifies Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma 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 [4]) 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].

Further parts of the series 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 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 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 part of the Recommendation.

The supplier of a protocol implementation that is claimed to conform to ITU-T Q.2931 [1] 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.

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; all 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 – 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 layer 3 specification for basic call/connection control: Protocol implementation conformance statement (PICS) proforma.*

[3]   ITU-T Q.2931 E (2000), *Broadband integrated services digital network (B-ISDN) − Digital subscriber signalling system No. 2 (DSS2) − User-network interface layer 3 specification*

for basic call/bearer control: Test Suite Structure and Test Purposes (TSS&TP) for the Network.

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

[5]   ETSI EN 300 443-6 V1.2.1 (2000-10), *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 for the network.*

3   Endorsement

The text of ETSI Standard EN 300 443-6 [5] was approved by ITU-T as Recommendation Q.2931 F with agreed modifications as given below.

NOTE – 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.2931 [1] as modified by Amendment 1 (1997), Amendment 2 (1999) and Amendment 3 (1999).

5   Modifications

5.1   General modifications

Throughout the text of ETSI Standard EN 300 443-6 [5] replace references and text as shown in the following table:

Reference in EN 300 443-6	Modified reference
EN 300 443-1	ITU-T Q.2931
EN 300 443-2	ITU-T Q.2931 B
EN 300 443-5	ITU-T Q.2931 E
EN 300 443	Q.2931 series of ITU-T Recommendations
EN 300 443-6	ITU-T Q.2931 F
Standard	Recommendation

Page 5, Intellectual Property Rights

Delete the whole section.

Page 5, Foreword

Delete the whole Foreword.

NOTE – 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 30, History

Delete the whole clause "History".

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..20~~17~~))".

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

5.2.2   QoS selection procedures

In the document part, on page 13, in clause A.6 "Test Campaign Report", delete test case LBN_04_01 from the table.

In the document part, on page 27, in clause B.6.5 "Parameter Values", delete the row "Quality of service" and PIXIT item 4.14 from table B.4 "Parameter values".

In the TTCN, Declarations Part, delete from the table "Test Suite Parameter Declarations" the following parameters:

PX_QOS_NOT_PROV_EXISTS
PX_QOS_NOT_PROVIDED

In the TTCN, Declarations Part, add the following new constant to table "Test Suite Constant Declarations":

Constant Name	Type	Value Reference	Comments
PX_QOS_NOT_PROV_EXISTS	BOOLEAN	FALSE	Automatically deselects LBN_04_01

NOTE – The same effect can be achieved by leaving the TTCN untouched and setting the PIXIT value "PX_QOS_NOT_PROV_EXISTS" to FALSE at runtime.

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 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 for the network.*

[E]   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.*

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