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SERIES Q: SWITCHING AND SIGNALLING

Broadband ISDN – B-ISDN application protocols for access signalling

Digital Subscriber Signalling System No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

ITU-T Recommendation Q.2971 F

(Formerly CCITT Recommendation)

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

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ITU-T Recommendation Q.2971 F

Digital Subscriber Signalling System No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract test suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

Summary

This ITU-T Recommendation specifies Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proformas for the network at the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [3]) of implementations conforming to the procedures for the support of point-to-multipoint switched virtual channel connections, between a root and multiple leaves of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the Broadband Integrated Services Digital Network (B-ISDN), ITU-T Recommendation Q.2971 [1].

Further parts of this ITU-T Recommendation specify the Protocol Implementation Conformance Statement (PICS) proforma and Test Suite Structure and Test Purposes (TSS & TP) proformas based on this ITU-T Recommendation.

Source

ITU-T Recommendation Q.2971 F was prepared by ITU-T Study Group 11 (1997-2000) and approved under the WTSC Resolution 1 procedure on 3 December 1999.

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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 Conference (WTSC), 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 WTSC 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.

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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.2971 F[1]

Digital Subscriber Signalling System No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract test suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

1 Scope

This ITU-T Recommendation specifies Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proformas for the network at the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [3]) of implementations conforming to the procedures for the support of point-to-multipoint switched virtual channel connections, between a root and multiple leaves of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the Broadband Integrated Services Digital Network (B-ISDN), ITU-T Recommendation Q.2971 [1].

Further parts of this ITU-T Recommendation specify the Protocol Implementation Conformance Statement (PICS) proforma and Test Suite Structure and Test Purposes (TSS & TP) proformas based on this ITU-T Recommendation.

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.

This Recommendation is applicable to equipment, supporting point-to-multipoint 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 supplier of a protocol implementation that is claimed to conform to Q.2971 [1] is required to complete a copy of the PIXIT proforma provided by the testlab. The PIXIT proforma shall contain the tables defined in the partial PIXIT proforma part of this Recommendation and contains additional questions 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 Recommendation Q.2971 (1995), *Digital Subscriber Signalling System No. 2 (DSS2) – User-network interface layer 3 specification for point-to-multipoint call/connection control.*

[2] ITU-T Recommendation Q.2931 (1995), *Digital Subscriber Signalling System No. 2 (DSS2) – User-Network Interface (UNI) layer 3 specification for basic call/connection control.*

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

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[1] ITU-T Recommendation Q.2971 F was previously numbered as Q.2971 *sexies* during the approval process.

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[4] ETSI ETS 300 771-6 (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 point-to-multipoint 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 ETS 300 771-6 [4] was approved by ITU-T as Recommendation Q.2971 F with agreed modifications as given below.

NOTE – New or modified text is indicated using sidebars. In addition, underlining and/or strike-out are used to highlight detailed modifications where necessary.

4 Coverage

This part of the Recommendation covers Q.2971 [1] as modified by Q.2971 Corrigendum 1.

Recommendation Q.2971 specifies extensions of coding and procedures given in Recommendation Q.2931 [2] needed to handle point-to-multipoint calls/connections. The purpose of test cases in this Recommendation is to check compliance to procedures of Q.2971 but the TTCN part also built upon coding and procedures of Q.2931 as amended by Amendment 1 (06/97), Amendment 2 (03/99) and Amendment 3 (03/99).

5 Modifications

Throughout the text of ETSI ETS 300 771-6 [4], replace references and expressions as shown in the following table:

Reference in ETS 300 771-6	Modified reference
ETS 300 771	Recommendation of the Q.2971 series
ETS 300 771-1	ITU-T Recommendation Q.2971 (10/95)
ETS 300 771-6	ITU-T Recommendation Q.2971 F
ETS	Recommendation
standard	Recommendation

5.1 Other modifications in the document part

Page 5, Foreword

Delete the whole Foreword.

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

Page 7, clause 1 Scope

Replace the whole clause 1 with the following:

"1 Scope

See Clause 1, Scope, of this Recommendation above."

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