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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 1: Protocol specification

[ITU-T Recommendation Q.2971 (1995), modified]

ETSI

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Foreword

This draft European Telecommunication Standard (ETS) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Public Enquiry phase of the ETSI standards approval procedure.

This ETS is part 1 of a multi-part standard covering the specification of the Broadband Integrated Services Digital Network (B-ISDN) user-network interface layer 3 protocol for point-to-multipoint call/bearer control of Digital Subscriber Signalling System No. two (DSS2) as described below:

Part 1: **"Protocol specification [ITU-T Recommendation Q.2971 (1995), modified]";**

Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";

Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";

Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";

Part 5: "TSS&TP specification for the network";

Part 6: "ATS and partial PIXIT proforma specification for the network".

NOTE: The final structure of the parts containing the test specifications is currently under study.

Proposed transposition dates	
Date of latest announcement of this ETS (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

Endorsement notice

The text of ITU-T Recommendation Q.2971 (1995) was approved by ETSI as an ETS 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.

Whilst every care has been taken in the preparation and publication of this document, errors in content, typographical or otherwise, may occur. If you have comments concerning its accuracy, please write to "ETSI Editing and Committee Support Dept." at the address shown on the title page.

Page 1, clause 1

Replace clause 1 by:

1   Scope

This European Telecommunication Standard (ETS) specifies the stage three of on-demand connection-oriented point-to-multipoint unidirectional single bearer connection Release 1 basic telecommunication services for the pan-European Broadband Integrated Services Digital Network (B-ISDN) as provided at the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [2]) by means of the Digital Subscriber Signalling System No. two (DSS2) protocol. Stage three identifies the protocol procedures and switching functions needed to support a telecommunication service (see CCITT Recommendation I.130 [1]).

In addition, this ETS specifies the protocol requirements at the T_B reference point where the service is provided to the user via a private B-ISDN.

> NOTE: Procedures at the T_B reference point, to support the access of a private B-ISDN to the public B-ISDN, are **not** explicitly identified in this ETS, however, some procedures are applicable only at the T_B reference point.

A basic telecommunication service is a service to which supplementary services may be added.

Further ETSs (or further parts of this ETS) provide the method of testing and detailed application specific requirements to determine conformance to this ETS.

This ETS is applicable to equipment supporting connection-oriented point-to-multipoint single connection basic B-ISDN telecommunication services, to be attached at either side of a T_B reference point or coincident S_B and T_B reference points when used as an access to the public B-ISDN.

The provision of this service to the leaves requires the support of the protocol for basic point-to-point call/bearer connection as defined in ETS 300 443-1 [4] (1996).

Page 1, clause 2

Replace clause 2 by:

2   Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

[1]   CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".

[2]   ITU-T Recommendation I.413 (1993): "B-ISDN user-network interfaces".

[3]   ETS 300 437-1: "Broadband Integrated Services Digital Network (B-ISDN); Signalling ATM Adaptation Layer (SAAL); Service Specific Co-ordination Function (SSCF) for support of signalling at the User-Network Interface (UNI); Part 1: Specification of SSCF at UNI [ITU-T Recommendation Q.2130 (1995), modified]".

[4]   ETS 300 443-1: "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]".

[5]   ETS 300 661-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Direct Dialling In (DDI) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 1 (1995), modified]".

[6]   ETS 300 662-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Multiple Subscriber Number (MSN) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 2 (1995), modified]".

[7]   ETS 300 663-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Calling Line Identification Presentation (CLIP) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 3 (1995), modified]".

[8]   ETS 300 664-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Calling Line Identification Restriction (CLIR) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 4 (1995), modified]".

[9]   ETS 300 665-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connected Line Identification Presentation (COLP) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 5 (1995), modified]".

[10]   ETS 300 666-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connected Line Identification Restriction (COLR) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 6 (1995), modified]".

[11]   ETS 300 667-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Subaddressing (SUB) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2951, clause 8 (1995), modified]".

[12]   ETS 300 668-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; User-to-User Signalling (UUS) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2957, clause 1 (1995), modified]".

[13]   ETS 300 770-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Closed User Group (CUG) supplementary service; Part 1: Protocol specification [ITU-T Recommendation Q.2955.1, modified]".

[14]   ETS 300 685-1: "Broadband Integrated Services Digital Network (B-ISDN); Usage of cause and location in Digital Subscriber Signalling System No. two (DSS2) and Signalling System No.7 B-ISDN User Part (B-ISUP) [ITU-T Recommendation Q.2610 (1995), modified]".

Throughout the text of ITU-T Recommendation Q.2971

Replace references as shown in the following table.

Reference in ITU-T Recommendation Q.2971	Modified reference
ITU-T Recommendation Q.2130	ITU-T Recommendation Q.2130 as modified by ETS 300 437-1 [3]
ITU-T Recommendation Q.2610	ITU-T Recommendation Q.2610 as modified by ETS 300 685 [14]
ITU-T Recommendation Q.2931	ITU-T Recommendation Q.2931 as modified by ETS 300 443-1 [4]
ITU-T Recommendation Q.2951.1	ITU-T Recommendation Q.2951.1 as modified by ETS 300 661-1 [5]
ITU-T Recommendation Q.2951.2	ITU-T Recommendation Q.2951.2 as modified by ETS 300 662-1 [6]
ITU-T Recommendation Q.2951.3	ITU-T Recommendation Q.2951.3 as modified by ETS 300 663-1 [7]
ITU-T Recommendation Q.2951.4	ITU-T Recommendation Q.2951.4 as modified by ETS 300 664-1 [8]
ITU-T Recommendation Q.2951.5	ITU-T Recommendation Q.2951.5 as modified by ETS 300 665-1 [9]
ITU-T Recommendation Q.2951.6	ITU-T Recommendation Q.2951.6 as modified by ETS 300 666-1 [10]
ITU-T Recommendation Q.2951.8	ITU-T Recommendation Q.2951.8 as modified by ETS 300 667-1 [11]
ITU-T Recommendation Q.2957.1	ITU-T Recommendation Q.2957.1 as modified by ETS 300 668-1 [12]

Page 2, clause 3

Add the following note:

> NOTE: ITU-T Recommendations frequently use the term "connection". ETSI has decided to use the term "bearer" instead (i.e. if this term is used in the context of a bearer for a connection-oriented bearer service).

Page 6, table 8-1/Q.2971

Modify table 8-1/Q.2971 as follows:

Message	Reference
ALERTING	8.1.1.1
CALL PROCEEDING	8.1.1.2
CONNECT	8.1.1.3
SETUP	8.1.1.4
STATUS	8.1.1.5
STATUS ENQUIRY	8.1.1.6
NOTIFY	8.1.1.7
RELEASE	8.1.1.8

Page 8, subclause 8.1.1.7

Add the following subclause 8.1.1.8 at the end of subclause 8.1.1.7:

8.1.1.8   RELEASE

This message is sent by the user to request the network to clear the end-to-end connection (if any) or is sent by the network to indicate that the end-to-end connection is cleared and that the receiving equipment release the connection identifier and prepare to release its call reference value after sending RELEASE COMPLETE. See table 8-8a for additions to the structure of this message shown in table 3-6/Q.2931.

Table 8-8a: RELEASE message content

Message type: RELEASE				
Significance: global				
Direction: both				
Information element	Reference	Direction	Type	Length
Endpoint reference	8.2.1	Both	O (Note)	4-7
NOTE – Mandatory if the Endpoint reference information element was included in the SETUP message. If the network receives this message with the Endpoint reference information element missing, the network shall apply the procedures of either 9.2 or 10.2.1, as appropriate.				

Page 35, clause 12

Add the following text:

Interaction with the CUG supplementary service:

ETS 300 770-1 [13] shall apply.

Page 36, annex A

Delete annex A. It does not form part of this ETS.

Page 37, annex B

Annex B has the status of a normative annex.

Page 37, annex C

Annex C has the status of a normative annex.

Page 46, annex D

Annex D has the status of a normative annex.

Page 51, annex E

Annex E has the status of a normative annex.

Page 53, annex F

Annex F has the status of an informative annex.

Page 86, Call-Control-N (sheet 29 of 39), state N11

The Release conf. primitive shall be sent to the AP process before the Call-Control-N process is terminated.

Page 87, Call-Control-N (sheet 30 of 39), state N12

The RELEASE COMPLETE message shall be added to the valid set of input signals.

Page 88, Call-Control-N (sheet 31 of 39), state N12

The Release conf. primitive shall be sent to the AP process before the Call-Control-N process is terminated.

Page 133, Party-Control-N (sheet 8 of 13), states PN1, PN3, PN4 and PN7

The Drop Party req. primitive shall be able to be received by a Party-Control-N process in any state except Null.

Page 134, Party-Control-N (sheet 9 of 13), states PN1, PN2, PN3, PN4, PN6 and PN7

The DROP PARTY message shall only be able to be received by a Party-Control-N process in the states PN2, PN3, PN7.

Page 135, Party-Control-N (sheet 10 of 13), state PN5

The DROP PARTY message for the valid input signal set shall be replaced by the DROP PARTY ACKNOWLEDGEMENT message, in order that the Party-Control-N process can be correctly terminated.

Page 141, Call-Control-U (sheet 28 of 39), state U11

The RELEASE COMPLETE message shall be added to the valid set of input signals.

Page 142, Call-Control-U (sheet 29 of 39), state U11

The Release conf. primitive shall be sent to the AP process before the Call-Control-U process is terminated.

Page 143, Call-Control-U (sheet 30 of 39), state U12

The Release conf. primitive shall be sent to the AP process before the Call-Control-U process is terminated.

Page 160, Party-Control-U (sheet 8 of 14), states PU1, PU3, PU4 and PU7

The Drop Party req. primitive shall be able to be received by a Party-Control-U process in any state except Null.

Page 161, Party-Control-U (sheet 9 of 13), states PU1, PU2, PU3, PU4, PU6 and PU7

The DROP PARTY message shall only be able to be received by a Party-Control-U process in the states PU1, PU4, PU7.

Page 162, Party-Control-U (sheet 10 of 13), state PU5

The DROP PARTY message for the valid input signal set shall be replaced by the DROP PARTY ACKNOWLEDGEMENT message, in order that the Party-Control-U process can be correctly terminated.

Page 167, appendix I

Appendix I has the status of an informative annex.

Page 170, appendix II

Appendix II has the status of an informative annex.

History

Document history			
October 1996	Public Enquiry	PE 116:	1996-10-21 to 1997-02-14