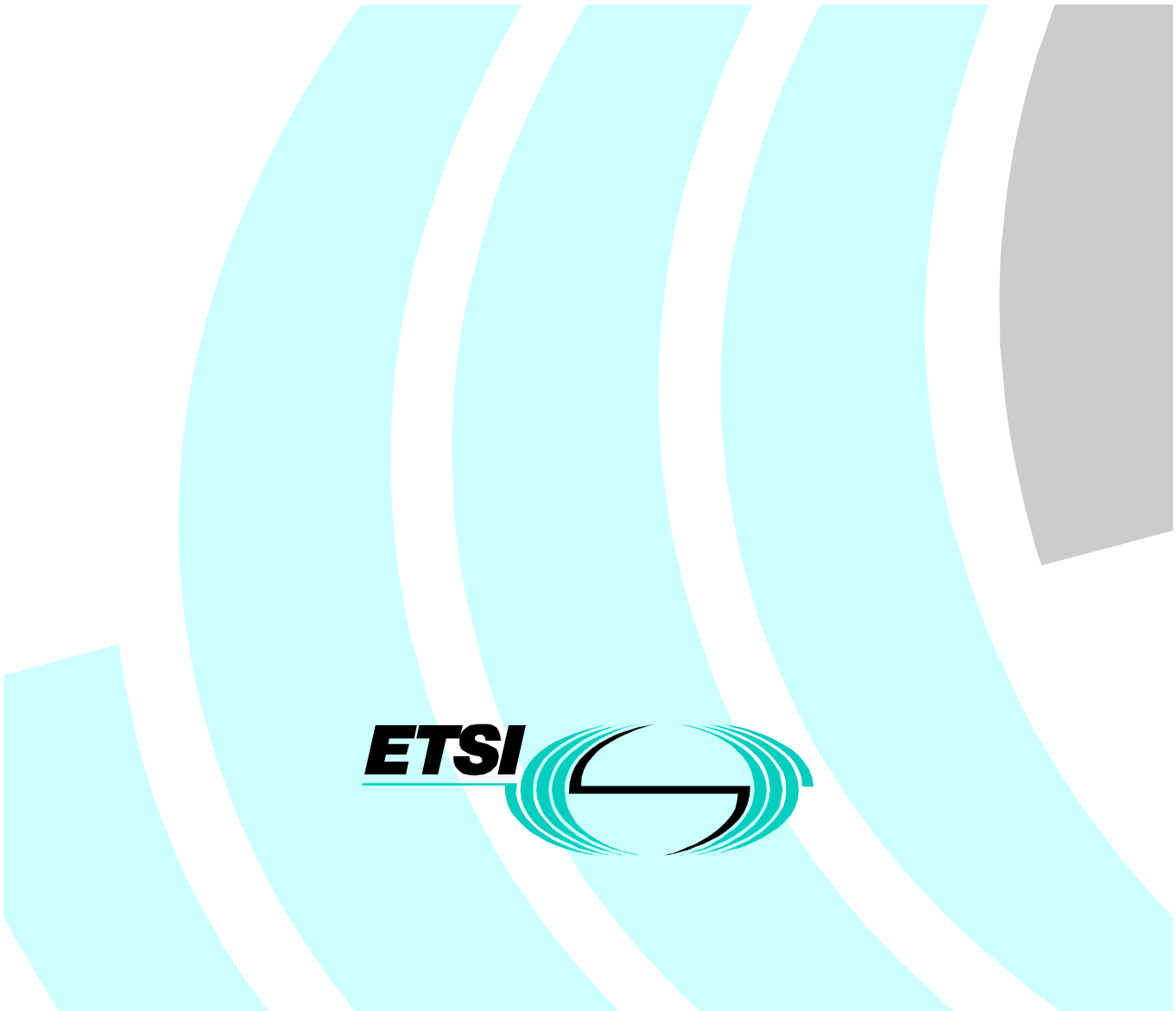
ETSI EN 301 848-1 V1.1.1 (2001-02)

European Standard (Telecommunications series)

Integrated Service Digital Network (ISDN)
Signalling System No.7 (SS7);
Bearer Independent Call Control (BICC);
Signalling procedures in an ATM/IP/.. backbone network;
Capability Set 1 (CS1);
Part 1: Protocol specification

[ITU-T Recommendations Q.1901 and Q.765.5, modified]



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Contents

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 1 of a multi-part deliverable covering the Integrated Service Digital Network (ISDN); Signalling System No.7 (SS7); Bearer Independent Call Control (BICC); Signalling procedures in an ATM/IP/.. backbone network; Capability Set 1 (CS1), as identified below:

Part 1: "Protocol specification [ITU-T Recommendations Q.1901 and Q.765.5, modified]".

Further parts may be produced in the future.

National transposition dates	
Date of adoption of this EN:	9 February 2001
Date of latest announcement of this EN (doa):	31 May 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 November 2001
Date of withdrawal of any conflicting National Standard (dow):	30 November 2001

1 Scope

The present document provides the ETSI endorsement of the ITU-T BICC Capability Set 1 protocol Recommendations Q.1901 [1] and Q.765.5 [2]

ITU-T Recommendation Q.1901 [1] describes the adaptation of the narrowband ISDN User Part (ISUP) for the support of narrowband ISDN services independent of the bearer technology and signalling message transport technology used, for the pan-European Integrated Services Digital Network (ISDN) as provided by the European public telecommunications operators.

ITU-T Recommendation Q.1901 [1] is written as a set of exceptions to the ISUP Recommendations.

The protocol defined by ITU-T Recommendation Q.1901 [1] is the call control protocol to be used between "Serving Nodes". This protocol is called the "Bearer Independent Call Control" protocol, (BICC). Between Serving Nodes the control of bearers is provided by other protocols - not specified by this Recommendation.

Three types of Serving Node (SN) are defined:

- Interface Serving Node (ISN) - this type of node provides an interface to circuit switched networks;
- Transit Serving Node (TSN) - this type of node provides transit functionality, for call and bearer, within one network using the BICC protocol;
- Gateway Serving Node (GSN) - this type of node provides inter-network gateway functionality, for call and bearer, using the BICC protocol.

ITU-T Recommendation Q.1901 [1] also contains an appendix that is relevant to a Call Mediation Node, where call control functions may reside, without any bearer control capability.

ITU-T Recommendation Q.765.5 [2] describes the extensions required for the transport of bearer related information associated with the BICC protocol. The BICC is used to manage the call control instance that has been separated from the bearer control instance. The BICC needs to transport bearer related information between call control instances. The Application Transport Mechanism is used for this purpose. ITU-T Recommendation Q.765.5 [2] specifies the APM-user to support the transport of the bearer related information for the BICC.

Formats, codes and procedures marked for national use are included for informative purposes for the international interface specification. If these items so marked are supported within a national network and operator's network, then it is proposed that they shall be supported in this manner.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

[1] ITU-T Recommendation Q.1901 (2000): "Bearer independent call control protocol".

[2] ITU-T Recommendation Q.765.5 (2000): "Application transport mechanism - Bearer independent call control (BICC)".

[3] ETSI EN 300 356-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 4 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (2000) modified]".

[4] ETSI EN 300 356-2: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 4 for the international interface; Part 2: ISDN supplementary services [ITU-T Recommendation Q.730 (2000) modified]".

[5] ETSI EN 301 069-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP); Application transport mechanism; Part 1: Protocol specification [ITU-T Recommendation Q.765, modified]".

[6] ETSI EN 300 008-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Message Transfer Part (MTP) to support international interconnection; Part 1: Protocol specification [ITU-T Recommendations Q.701, Q.702, Q.703, Q.704, Q.705, Q.706, Q.707 and Q.708 modified]".

[7] ETSI EN 301 004-1: "Broadband Integrated Services Digital Network (B-ISDN); Signalling System No.7; Message Transfer Part (MTP) level 3 functions and messages to support international interconnection; Part 1: Protocol specification [ITU-T Recommendation Q.2210 (1996), modified]".

[8] ETSI EN 300 436-1: "Broadband Integrated Services Digital Network (B-ISDN); Signalling ATM Adaptation Layer (SAAL); Service Specific Connection Oriented Protocol (SSCOP); Part 1: Protocol specification [ITU-T Recommendation Q.2110, modified]".

3 Definitions

For the purposes of the present document, the terms and definitions given in BICC reference specifications [1] and [2] apply.

4 Endorsement notice

4.1 Q.1901

The elements of ITU-T Recommendation Q.1901 [1] (2000) apply, with the following modifications:

Throughout the text of ITU-T Recommendation Q.1901 [1**]:**

Replace references as shown below.

Reference in ITU-T Recommendation Q.1901 [1]	Modified reference
ITU-T Recommendation Q.761	EN 300 356-1 [3]
ITU-T Recommendation Q.762	EN 300 356-1 [3]
ITU-T Recommendation Q.763	EN 300 356-1 [3]
ITU-T Recommendation Q.764	EN 300 356-1 [3]
ITU-T Recommendation Q.730	EN 300 356-2 [4]
ITU-T Recommendation Q.765.5 [2]	ITU-T Recommendation Q.765.5 [2] as modified by the present document
ITU-T Recommendation Q.765	EN 301 069-1 [5]
ITU-T Recommendation Q.701	EN 300 008-1 [6]
ITU-T Recommendation Q.704	EN 300 008-1 [6]
ITU-T Recommendation Q.2210	EN 301 004-1 [7]
ITU-T Recommendation Q.2110	EN 300 436-1 [8]

Appendix I

Appendix I has the status of an informative annex.

Appendix II

Appendix II has the status of an informative annex.

Appendix III

Appendix III has the status of an informative annex.

4.2 Q.765.5

The elements of ITU-T Recommendation Q.765.5 [2] (2000) apply, with the following modifications:

Throughout the text of ITU-T Recommendation Q.765.5 [2]:

Replace references as shown below.

Reference in ITU-T Recommendation Q.765.5 [2]	Modified reference
ITU-T Recommendation Q.765	EN 301 069-1 [5]
ITU-T Recommendation Q.1901 [1]	ITU-T Recommendation Q.1901 [1] as modified by the present document

History

Document history			
V1.1.1	October 2000	One-step Approval Procedure	OAP 20010209: 2000-10-11 to 2001-02-09
V1.1.1	February 2001	Publication	