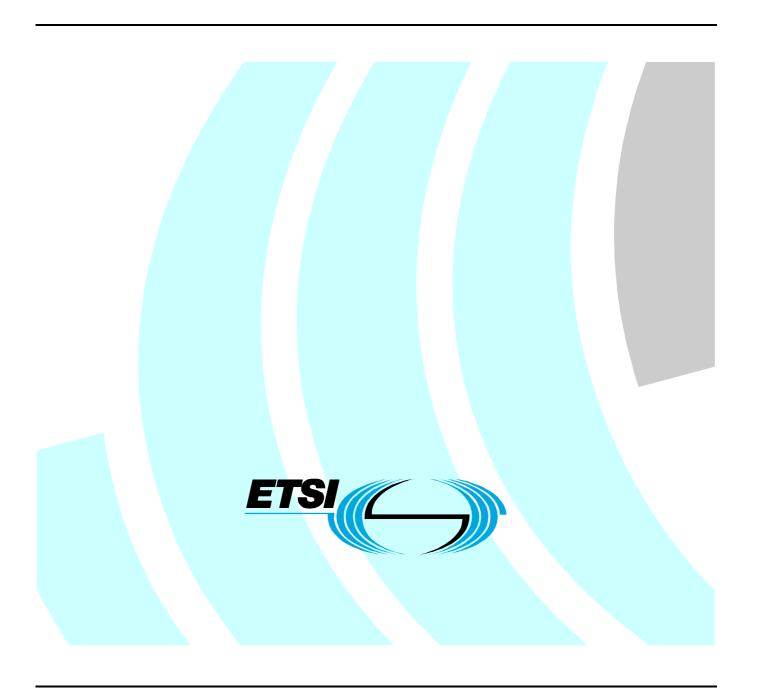
ETSI EN 302 213 V1.1.2 (2004-01)

European Standard (Telecommunications series)

Services and Protocols for Advanced Networks (SPAN); Bearer Independent Call Control (BICC) Capability Set 2 (CS2); Protocol specification

[ITU-T Recommendations Q.1902.1, Q.1902.2, Q.1902.3, Q.1902.4, Q.1902.5, Q.1902.6, Q.765.5 Amendment 1, Q.1912.1, Q.1912.2, Q.1912.3, Q.1912.4, Q.1922.2, Q.1950, Q.1970, Q.1990, Q.2150.0, Q.2150.1, Q.2150.2, Q.2150.3, modified]



Reference

DEN/SPAN-130261

Keywords

APM, ATM, BICC, CS2, endorsement, interworking, IP, ISDN, SS7

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Foreword

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

National transposition dates			
Date of adoption of this EN:	19 December 2003		
Date of latest announcement of this EN (doa):	31 March 2004		
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 September 2004		
Date of withdrawal of any conflicting National Standard (dow):	30 September 2004		

1 Scope

The present document provides the ETSI endorsement of the ITU-T Bearer Independent Call Control (BICC) Capability Set 2 protocol Recommendations Q.1902.1 [1], Q.1902.2 [2], Q.1902.3 [3], Q.1902.4 [4], Q.1902.5 [5], Q.1902.6 [6], Q.765.5 [7] Amendment 1 [8],Q.1912.1 [9], Q.1912.2 [10], Q.1912.3 [11], Q.1912.4 [12], Q.1922.2 [13], Q.1950 [14], Q.1970 [15], Q.1990 [16], Q.2150.0 [17], Q.2150.1 [18], Q.2150.2 [19], Q.2150.3 [20].

Formats, codes and procedures marked for national use or as network option 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.

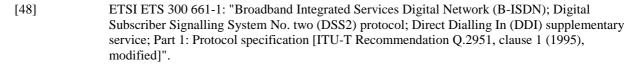
- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

[1]	ITU-T Recommendation Q.1902.1: "Bearer Independent Call Control protocol (Capability Set 2): Functional description".
[2]	ITU-T Recommendation Q.1902.2: "Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No. 7 ISDN user part: General functions of messages and parameters".
[3]	ITU-T Recommendation Q.1902.3: "Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No. 7 ISDN user part: Formats and codes".
[4]	ITU-T Recommendation Q.1902.4: "Bearer Independent Call Control protocol (Capability Set 2): Basic call procedures".
[5]	ITU-T Recommendation Q.1902.5: "Bearer Independent Call Control protocol (Capability Set 2): Exceptions to the application transport mechanism in the context of BICC".
[6]	ITU-T Recommendation Q.1902.6: "Bearer Independent Call Control protocol (Capability Set 2): Generic signalling procedures for the support of the ISDN user part supplementary services and for bearer redirection".
[7]	ITU-T Recommendation Q.765.5: "Signalling system No. 7 - Application transport mechanism: Bearer Independent Call Control (BICC)".
[8]	ITU-T Recommendation Q.765.5 Amendment 1: "Bearer Independent Call Control Capability Set 2".
[9]	ITU-T Recommendation Q.1912.1: "Interworking between Signalling System No. 7 ISDN user part and the Bearer Independent Call Control protocol".
[10]	ITU-T Recommendation Q.1912.2: "Interworking between selected signalling systems (PSTN access, DSS1, C5, R1, R2, TUP) and the Bearer Independent Call Control protocol".
[11]	ITU-T Recommendation Q.1912.3: "Interworking between H.323 and the Bearer Independent Call Control protocol".

- [12] ITU-T Recommendation Q.1912.4: "Interworking between Digital Subscriber Signalling System No. 2 and the Bearer Independent Call Control protocol".
- [13] ITU-T Recommendation Q.1922.2: "Interaction between the Intelligent Network application protocol Capability set 2 and the Bearer independent call control protocol".
- [14] ITU-T Recommendation Q.1950: "Bearer independent call bearer control protocol".
- [15] ITU-T Recommendation Q.1970: "BICC IP Bearer control protocol".
- [16] ITU-T Recommendation Q.1990: "BICC Bearer Control Tunnelling Protocol".
- [17] ITU-T Recommendation Q.2150.0: "Generic signalling transport service".
- [18] ITU-T Recommendation Q.2150.1: "Signalling Transport Converter on MTP3 and MTP3b".
- [19] ITU-T Recommendation Q.2150.2: "Signalling transport converter on SSCOP and SSCOPMCE".
- [20] ITU-T Recommendation Q.2150.3: "Signalling transport converter on SCTP".
- [21] ETSI EN 301 069-1: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP); Application transport mechanism; Part 1: Protocol specification [ITU-T Recommendation Q.765, modified]".
- [22] ETSI EN 300 485: "Integrated Services Digital Network (ISDN); Definition and usage of cause and location in Digital Subscriber Signalling System No. one (DSS1) and Signalling System No. 7 (SS7) ISDN User Part (ISUP) [ITU-T Recommendation Q.850 (1998) with addendum modified]".
- [23] ETSI EN 300 356-2: "Integrated Services Digital Network (ISDN); Signalling System No. 7 (SS7); ISDN User Part (ISUP) version 4 for the international interface; Part 2: ISDN supplementary service [ITU-T Recommendation Q.730 (1999) modified]".
- [24] ETSI EN 300 356-1: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (1999) modified]".
- [25] ETSI EN 302 097: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP); Enhancement for support of Number Portability (NP) [ITU-T Recommendation Q.769.1 (2000), modified]".
- [26] ETSI EN 301 848-1: "Integrated Services 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]".
- [27] 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]".
- [28] 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]".
- [29] 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]".
- [30] ETSI EN 301 062-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Support of Virtual Private Network (VPN) applications with Private network Q reference point Signalling System number 1 (PSS1) information flows; Part 1: Protocol specification [ITU-T Recommendations Q.765.1 and Q.699.1, modified]".
- [31] ETSI ETS 300 374-1: "Intelligent Network (IN); Intelligent Network Capability Set 1 (CS1); Core Intelligent Network Application Protocol (INAP); Part 1: Protocol specification".

- [32] ETSI EN 301 140-1: "Intelligent Network (IN); Intelligent Network Application Protocol (INAP); Capability Set 2 (CS2); Part 1: Protocol specification".
- [33] ETSI ETS 300 656: "Broadband Integrated Services Digital Network (B-ISDN); Signalling System No.7; B-ISDN User Part (B-ISUP) Capability Set 1 (CS1); Basic services [ITU-T Recommendations Q.2761 to Q.2764 (1995), modified]".
- [34] ETSI EN 300 403-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".
- [35] ETSI EN 300 403-2: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 2: Specification and Description Language (SDL) diagrams".
- [36] ETSI EN 300 196-1: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [37] ETSI EN 300 121: "Integrated Services Digital Network (ISDN); Application of the ISDN User Part (ISUP) of ITU-T Signalling System No. 7 (SS7) for international ISDN interconnections (ISUP version 1) Amendment 1: International Emergency Preference Scheme (IEPS) service [ITU-T Recommendation Q.767 Amendment 1 (2002), modified]".
- [38] ETSI EN 300 356 (all parts): "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface".
- [39] ETSI EN 301 850-1: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP); Application transport mechanism; Support of the generic addressing and transport protocol; Part 1: Protocol specification [ITU-T Recommendation Q.765.4, modified)".
- [40] ETSI EN 300 899-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Interworking between ISDN User Part (ISUP) version 2 and Digital Subscriber Signalling System No. one (DSS1); Part 1: Protocol specification [ITU-T Recommendation Q.699, modified]".
- [41] ETSI TS 101 341: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Protocol Implementation Conformance Statement (PICS) proforma for the support of supplementary services in H.323; Support of H.450.2: Call transfer supplementary services for H.323".
- [42] ETSI TS 101 342: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Protocol Implementation Conformance Statement (PICS) proforma for the support of supplementary services in H.323; Support of H.450.3: Call diversion supplementary services for H.323".
- [43] ETSI ETS 300 495: "Broadband Integrated Services Digital Network (B-ISDN); Signalling System No.7; Interworking between Broadband ISDN User Part (B-ISUP) and Digital Subscriber Signalling System No. two (DSS2) [ITU-T Recommendation Q.2650 (1995), modified]".
- [44] ETSI ETS 300 496: "Broadband Integrated Services Digital Network (B-ISDN); Signalling System No.7; Interworking between Broadband ISDN User Part (B-ISUP) and narrowband ISDN User Part (ISUP) [ITU-T Recommendation Q.2660 (1995), modified]".
- [45] ETSI ETS 300 657: "Broadband Integrated Services Digital Network (B-ISDN); Signalling System No.7; B-ISDN User Part (B-ISUP) Capability Set 1 (CS1); Supplementary services [ITU-T Recommendation Q.2730 (1995), modified]".
- [46] ETSI EN 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]".
- [47] ETSI ETS 300 796-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Generic functional protocol; Core aspects; Part 1: Protocol specification [ITU-T Recommendation Q.2932.1 (1996), modified]".



- [49] ETSI 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]".
- [50] ETSI 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]".
- [51] ETSI 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]".
- [52] ETSI 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]".
- [53] ETSI 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]".
- [54] ETSI 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]".
- [55] ETSI EN 301 485-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Support of ATM end system addressing format by Number identification supplementary services; Part 1: Protocol specification [ITU-T Recommendation Q.2951.9 (1999) modified]".
- [56] ETSI 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]".
- [57] ETSI EN 301 464: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 interactions with the Intelligent Network Application Part (INAP); Part 1: Protocol specification [ITU-T Recommendation Q.1601 (1999), modified]".
- [58] IETF RFC 2327: "SDP: Session Description Protocol".

3 Definitions and abbreviations

For the purposes of the present document, the terms, definitions and abbreviations given in the reference specifications [1] to [20] apply.

4 Endorsement notice

4.1 Q.1902.1

The elements of ITU-T Recommendation Q.1902.1 [1] apply, with the following modifications.

Reference in ITU-T Recommendation Q.1902.1 [1]	Modified reference
ITU-T Recommendation Q.850	EN 300 485 [22]
ITU-T Recommendation Q.730	EN 300 356-2 [23]
ITU-T Recommendation Q.761	EN 300 356-1 [24]
ITU-T Recommendation Q.762	EN 300 356-1 [24]
ITU-T Recommendation Q.763	EN 300 356-1 [24]
ITU-T Recommendation Q.764	EN 300 356-1 [24]
ITU-T Recommendation Q.765	EN 301 069-1 [21]
ITU-T Recommendation Q.769.1	EN 302 097 [25]
ITU-T Recommendation Q.1901	EN 301 848-1 [26]
ITU-T Recommendation Q.1902.2	ITU-T Recommendation Q.1902.2 [2] as modified by the
Tro Trocommondation Q. 1002.2	present document
ITU-T Recommendation Q.1902.3	ITU-T Recommendation Q.1902.3 [3] as modified by the
Tro Trocommondation Q.1002.0	present document
ITU-T Recommendation Q.1902.4	ITU-T Recommendation Q.1902.4 [4] as modified by the
Tro Trocommondation Q.1002.1	present document
ITU-T Recommendation Q.1902.5	ITU-T Recommendation Q.1902.5 [5] as modified by the
	present document
ITU-T Recommendation Q.1902.6	ITU-T Recommendation Q.1902.6 [6] as modified by the
	present document
ITU-T Recommendation Q.1912.1	ITU-T Recommendation Q.1912.1 [9] as modified by the
	present document
ITU-T Recommendation Q.701	EN 300 008-1 [27]
ITU-T Recommendation Q.704	EN 300 008-1 [27]
ITU-T Recommendation Q.2210	EN 301 004-1 [28]
ITU-T Recommendation Q.2110	EN 300 436-1 [29]
ITU-T Recommendation Q.2111	FFS (For Further Study) (SSCOPMCE)
ITU-T Recommendation Q.765.1	EN 301 062-1 [30]
ITU-T Recommendation Q.765.4	EN 301 850-1 [39] (APM user GAT)
ITU-T Recommendation Q.765.5	ITU-T Recommendation Q.765.5 [7] as modified by the
	present document
ITU-T Recommendation Q.765.5 Amd. 1	ITU-T Recommendation Q.765.5 Amendment 1 [8] as
	modified by the present document
ITU-T Recommendation Q.1218	ETS 300 374-1 [31]
ITU-T Recommendation Q.1228	EN 301 140-1 [32]
ITU-T Recommendation Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by the
	present document
ITU-T Recommendation E.412	FFS (For Further Study) (Network management controls)
ITU-T Recommendation Q.703	EN 300 008-1 [27]
ITU-T Recommendation Q.2763	ETS 300 656 [33]
ITU-T Recommendation G.711	FFS (For Further Study) (PCM)
ITU-T Recommendation Q.115	FFS (For Further Study) (Echo control logic)
ITU-T Recommendation Q.542	FFS (For Further Study) (Operations and maintenance)
ITU-T Recommendation Q.706	EN 300 008-1 [27]
ITU-T Recommendation Q.931	EN 300 403-1 [34] and EN 300 403-2 [35]
ITU-T Recommendation Q.932	EN 300 196-1 [36]
ITU-T Recommendation G.732	FFS (For Further Study) (Characteristics of 2 048 kbits/s PCM)
ITU-T Recommendation G.744	FFS (For Further Study) (Second order 8 448 kbit/s PCM)
ITU-T Recommendation Q.1950	ITU-T Recommendation Q.1950 [14] as modified by the
	present document
ITU-T Recommendation Q.1990	ITU-T Recommendation Q.1990 [16] as modified by the
	present document
ITU-T Recommendation Q.2150.1	ITU-T Recommendation Q.2150.1 [18] as modified by the
	present document

Replace Table 1/Q.1902.1 by the following table 2)

Basic Call			
Function/service	National use according to ITU-T	International use according to ITU-T	International use according to ETSI
Speech/3,1 kHz audio	+	+	+
64 kbit/s unrestricted	+	+	+
Multirate connection types (note 1)	+	+	+
Nx64 kbit/s connection types	+	+	-
En-bloc address signalling	+	+	+
Overlap address signalling	+	+	+
Transit network selection	+	-	-
Continuity indication	+	+	+
Forward transfer	-	+	+
Signalling procedures for connection type allowing fallback capability	+	+	+
Compatibility procedure (BICC and BAT APM user application)	+	+	+
Simple segmentation	+	+	+
Tones and announcements	+	+	+
Propagation delay determination procedure	+	+	+
Simplified echo control signalling procedures	+	+	+
Automatic repeat attempt	+	+	+
Blocking and unblocking	+	+	+
CIC group query	+	-	· -
Dual seizure	+	+	+
Reset	+	+	+
Receipt of unreasonable signalling information	+	+	+
Access delivery information	+	+	+
Transportation of user teleservice information	+	+	+
Suspend and resume	+	+	+
ISDN user part signalling congestion control	note 2	note 2	note 2
Automatic congestion control	+	+	+
Interaction with INAP	+	+	+
Unequipped CIC	+	-	-
ISDN user part availability control	note 3	note 3	note 3
MTP pause and resume	note 2	note 2	note 2
Overlength messages	+	+	+
Temporary Alternative Routing (TAR)	+	+	+
Hop counter procedure	+	+	+
Collect call request procedure	+	+	+
Hard-to Reach	+	+	<u> </u>
Calling Geodetic location procedure	+	+	+
Carrier Selection Information	+		· -
Inter-nodal traffic group identification	<u> </u>	+	+
Codec negotiation and modification procedures	+	+	+
Joint BIWF support	+	+	+
Global Call Reference procedure	+	+	+
Out of band transport of DTMF tones and information	+	+	+
Key: + required	Т Т	Т	т

Key:

requirednot required

NOTE 1: Multirate connection types are 2 × 64 kbit/s, 384 kbit/s, 1 536 kbit/s and 1 920 kbit/s.

NOTE 2: If BICC is deployed on an MTP3 or MTP3b signalling transport service, these functions are provided by the STC sublayer as described in ITU-T Recommendation Q.2150.1 [18] as modified by the present document.

NOTE 3: If BICC is deployed on an MTP3 or MTP3b signalling transport service, an equivalent procedure is provided by the STC sublayer as described in ITU-T Recommendation Q.2150.1 [18] as modified by the present document.

3) Replace Table 2/Q.1902.1 by the following table

Generic signalling proce	National	International	International
Function/service			
Function/service	use according to ITU-T	use according to ITU-T	use according to ETSI
Generic signalling procedures			
Generic number transfer	+	+	+
Generic digit transfer	+	-	-
Generic notification procedure	+	+	+
Service activation .	+	+	+
Remote operations service (ROSE) capability	+	-	-
Network specific facilities	+	-	-
Pre-release Information transport	+	+	+
APplication transport Mechanism (APM)	+	+	+
Redirection	+	<u>-</u>	_
Pivot Routeing	+	+	_
Bearer Redirection	+	+	+
Supplementary services		·	
DDI	+	+	+
MSN	+	+	+
CLIP/CLIR	+	+	+
COLP/COLR	+	+	+
MCID	+	+	+
SUB	+	+	+
TP	+	+	+
CFU, CFB, CFNR	+	+	+
CD	+	+	+
CW	+	+	+
HOLD	+	+	+
CONF	+	+	+
3PTY	+	+	+
CUG	+	+	+
MLPP	note 1	note 1	note 1
UUS, service 1 (implicit)	+	+	+
UUS, service 1 (explicit)	+	+	+
UUS, service 2	· +	+	+
UUS, service 3	, +	+	+
ECT	+	+	+
CCBS	+	+	+
CCNR	· +	+	+
MWI	<u>'</u>	<u>'</u>	+
ITCC	+	+	<u> </u>
GVNS	<u> </u>	+	note 2
REV	'	_ _	- 1016 2
ACR	+		+
Additional functions/services	I		т т
VPN	+	+	+
NP			
Support of GAT protocol	++	_ _	
	т	+	+
Key: + required			
 not required NOTE 1: Only transiting of MLPP information is supp 			

NOTE 2: GVNS is not required as an ETSI service, but the ITU-T parameters can still be used in conjunction with Core INAP CS2.

4) Appendix I

Appendix I to Q.1902.1 has the status of an informative annex.

4.2 Q.1902.2

The elements of ITU-T Recommendation Q.1902.2 [2] apply, with the following modifications.

- 1) Any information in Q.1902.2 [2] on ISUP is outside the scope of the present document. The scope of the present document is BICC CS2 only.
- 2) Replace references as shown below

Reference in ITU-T Recommendation Q.1902.2 [2]	Modified reference	
ITU-T Recommendation Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by	
	the present document	

3) Exceptions

Paragraph in Q.1902.2 [2]	Comment
5.36, Release message	Delete the sentence: "Where the call is to be redirected the message will also
	carry the redirection number".
7.2, Address Presentation Restricted	Add the following to the last sentence: "It may also be used to indicate that
indicator	the address cannot be ascertained, and in the case of the Calling Party
	Number only, to indicate that the number may not be presented to a user for
	reasons other than invocation of the CLIR service ("Presentation Restricted
	by network")".

4.3 Q.1902.3

The elements of ITU-T Recommendation Q.1902.3 [3] apply, with the following modifications.

- 1) Any information in Q.1902.3 [3] on ISUP is outside the scope of the present document. The scope of the present document is BICC CS2 only.
- 2) Replace reference as shown below

Reference in ITU-T Recommendation Q.1902.3 [3]	Modified reference
ITU-T Recommendation Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by the
	present document

3) Exceptions

Paragraph in Q.1902.3 [3]	Comment
5.1, Format of BICC messages	From a BICC peer-to-peer protocol point of view, it is not necessary to check the parameter values of the parameters that are not under control of the BICC peer-to-peer protocol (e.g. User service information, User service information prime, User teleservice information).
5.16, Meaning of "spare" and "reserved codes"	Replace the word "ITU-T" by "ETSI" in the three instances of the word in the clause.
New clause 5.17 (not existing in Q.1902.3)	Insert a new clause 5.17 Number Lengths: "For the international interface the number lengths to be supported by BICC are restricted by the limits defined by E.164. This applies to the called party number, whether signalled by the en bloc or overlap methods, and all the other number types transferred by BICC, e.g. Calling Party Number, etc. However, within national networks, it is acknowledged that the E.164 number length is too restrictive for some applications, and specifically various national requirements for the extension of the called party number are known. The following remarks are made with regard to extension of number lengths for use within national networks: Interworking/Interoperability problems can be foreseen with interworking to versions of ISUP which may only support the parameter lengths indicated in previous versions of ISUP. Gateway exchanges between networks using extended number lengths and the
	international network have to ensure that only E.164 number lengths are passed to the international network".
Table 2/Q.1902.3, Parameter names	Modify table 2/Q.1902.3 [3] as follows: Backward GVNS (not required) Forward GVNS (not required) MLPP precedence (not required) Pivot capability (not required) Pivot routeing indicators (not required) HTR information (not required) Pivot counter (not required) Pivot routeing forward information (not required) Pivot routeing backward information (not required) 0100 0001 reserved for national use
6.7, Backward GVNS 6.20, Calling party number	Not required. Modify the code definition of Address Presentation Restricted indicator as follows:
6.22, Carrier selection information (national use)	11 reserved for restriction by the network Presentation restricted by the network The format and codes as specified in EN 300 356-1 [24] apply. NOTE: The parameter as such is existing in Q.1902.3 [3], but the format and codes differ from the ETSI definition.
6.44, Forward GVNS	Not required.
6.50, HTR information	Not required.
6.60, MLPP precedence	Not required.
6.66, Optional backward call indicators	Add "(Not Required)" to the value 1 (MLPP user) of the "MLPP user indicator".
6.72, Pivot capability	Not required.
6.73, Pivot counter	Not required.
6.74, Pivot routeing backward information	Not required.
6.75, Pivot routeing forward information	Not required.
6.76, Pivot routeing indicators	Not required.

requirement The field 0000 0000 0000 0000 0000 0000 0000 0		codes are used in the transmission medium requirement parameter speech spare 64 kbit/s unrestricted 3,1 kHz audio reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare reserved for 3 × 64 kbit/s unrestricted
field 0000 0000 0000 0000 0000 0000 0000 0	d: 00 0000 00 0001 00 0010 00 0011 00 0100 rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1011 to 00 1111 01 0000	speech spare 64 kbit/s unrestricted 3,1 kHz audio reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 000 000 000 000 (set 000 000 000 000 000 000	00 0000 00 0001 00 0010 00 0011 00 0100 rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1001 to 00 1111 01 0000	spare 64 kbit/s unrestricted 3,1 kHz audio reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare spare
000 000 000 000 (ser 000 000 000 000 000 000	00 0001 00 0010 00 0011 00 0100 rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1011 to }	spare 64 kbit/s unrestricted 3,1 kHz audio reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare spare
000 000 000 (ser 000 000 000 000 000 000 000	00 0010 00 0011 00 0100 rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1011 to }	64 kbit/s unrestricted 3,1 kHz audio reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare spare
000 000 (ser 000 000 000 000 000 000 000 000 000	00 0011 00 0100 rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1001 to }	3,1 kHz audio reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 (ser 000 (ser 000 000 000 000 000 000 000 000	00 0100 rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1001 to 00 1111 01 0000	reserved for alternate speech (service 2)/64 kbit/s unrestricted reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare spare
(ser 0000 (ser 0000 0000 0000 0000 0000 0000 0000 0	rvice 1) 00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1001 00 1011 to 00 1111 01 0000	reserved for alternate 64 kbit/s unrestricted (service 1)/speech 64 kbit/s preferred 2 × 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 (ser 000 000 000 000 000 000	00 0101 rvice 2) 00 0110 00 0111 00 1000 00 1001 00 1010 to }	64 kbit/s preferred 2 x 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
(ser 000 000 000 000 000 000 000 000	rvice 2) 00 0110 00 0111 00 1000 00 1001 00 1010 00 1011 to 00 1111 01 0000	64 kbit/s preferred 2 x 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 000 000 000 000 000 000 000	00 0110 00 0111 00 1000 00 1001 00 1010 to }	2 x 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 000 000 000 000 000 000	00 0111 00 1000 00 1001 00 1010 00 1011 to }	2 x 64 kbit/s unrestricted 384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 000 000 000 000 000 000	00 1000 00 1001 00 1010 00 1011 to }	384 kbit/s unrestricted 1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 000 000 000 000 000	00 1001 00 1010 00 1011 to } 00 1111 01 0000	1 536 kbit/s unrestricted 1 920 kbit/s unrestricted spare
000 000 000 000 000	00 1010 00 1011 to } 00 1111	1 920 kbit/s unrestricted spare
000 000 000 000	00 1011 to } 00 1111 01 0000	spare
000 000 000	to } 00 1111 01 0000	
000 000 000	00 1111	
000	01 0000	recovered for 3 × 64 khit/s unrestricted
000		recorned for 2 × 64 kbit/s uprestricted
	11 0001	
1000		reserved for 4 x 64 kbit/s unrestricted
	01 0010	reserved for 5 x 64 kbit/s unrestricted
	01 0011	spare
	01 0100	reserved for 7 × 64 kbit/s unrestricted
	01 0101	reserved for 8 × 64 kbit/s unrestricted
	01 0110	reserved for 9 x 64 kbit/s unrestricted
	01 0111	reserved for 10 × 64 kbit/s unrestricted
	01 1000	reserved for 11 × 64 kbit/s unrestricted
	01 1001	reserved for 12 x 64 kbit/s unrestricted
)1 1010)1 1011	reserved for 13 × 64 kbit/s unrestricted reserved for 14 × 64 kbit/s unrestricted
	01 1100	reserved for 15 × 64 kbit/s unrestricted
	01 1100	reserved for 16 × 64 kbit/s unrestricted
	01 1110	reserved for 17 × 64 kbit/s unrestricted
)1 1111	reserved for 18 × 64 kbit/s unrestricted
	10 0000	reserved for 19 x 64 kbit/s unrestricted
	10 0001	reserved for 20 × 64 kbit/s unrestricted
	10 0010	reserved for 21 × 64 kbit/s unrestricted
	10 0011	reserved for 22 x 64 kbit/s unrestricted
	10 0100	reserved for 23 x 64 kbit/s unrestricted
	10 0101	spare
	10 0110	reserved for 25 × 64 kbit/s unrestricted
	10 0111	reserved for 26 × 64 kbit/s unrestricted
	10 1000	reserved for 27 × 64 kbit/s unrestricted
	10 1001	reserved for 28 x 64 kbit/s unrestricted
	10 1010	reserved for 29 x 64 kbit/s unrestricted
001	10 1011	
	to }	spare
111	11 1111	j
		the status of a normative annex.
unrecognized parameter values		
	nex B has	the status of an informative annex.
component encoding rules		

4.4 Q.1902.4

The elements of ITU-T Recommendation Q.1902.4 [4] apply, with the following modifications.

1) Replace reference as shown below

Reference in ITU-T Recommendation Q.1902.4 [4]	Modified reference	
ITU-T Recommendation Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by the	
	present document	

2) Exceptions

Paragraph in Q.1902.4 [4]	Comment
7.1, Introduction	Add the following sentence to the beginning of clause 7.1:
	"The number of digits supported for a call shall be independent of whether
	en bloc or overlap operation is used".
7.2.1.1, Outgoing selection	Modify as follows:
	The connection types allowed are:
	- speech;
	- 3,1 kHz audio;
	- 64 kbit/s unrestricted;
	- 64 kbit/s unrestricted preferred;
	- 2 x 64 kbit/s unrestricted; multirate connection types
	- 384 kbit/s unrestricted; multirate connection types
	- 1 536 kbit/s unrestricted; multirate connection types
	- 1 920 kbit/s unrestricted; multirate connection types
	Nx64 kbit/s unrestricted (N = 2 - 30).
8.8, Support for Temporary Alternative	Insert the following at the end of the clause:
Routeing	"An outgoing gateway shall set the Temporary Alternative Routing (TAR)
	indicator to 0 (no indication) independent of the value received from the
	national network. An incoming gateway shall set the Temporary Alternative
	Routing (TAR) indicator to 0 (no indication) independent of the value
	received from the intermediate network".
8.17, Carrier selection information	The text as specified in EN 300 356-1 [24] applies.
(national use)	
12.7, Support for Hard to Reach	Not supported.
Network Management functions	
12.9, Signalling transport out-of-service	Add at the end of b):
and in-service indications	"Or as a national option this CSF shall remain locally blocked, a non-call
	control message requiring a response shall be sent to the distant BICC. On
	receipt of the response message (or any other signalling message) from the
	distant BICC the local blocking resulting from the previously received
	OUT-OF-SERVICE primitive shall be removed.
	Normal call release procedures that may have started during the period of
	signalling isolation continue and as such will ensure that affected calls are
10.1.5	returned to the idle state".
13.4, Receipt of unreasonable	Delete the paragraph: "The degree of applicability () is for further study".
signalling information	
Annex A, Timers	Annex A has the status of a normative annex.
Annex B, Procedures for reuse of idle	Annex B has the status of an informative annex.
bearers (network option)	
Annex C, Test calls	Annex C has the status of an informative annex.
Annex D, Start-up procedures	Annex D has the status of a normative annex.
Annex E, Procedures for use of	Annex E has the status of an informative annex.
Structured AAL1 bearers (network	
option)	
Appendix I, Message flow examples	Appendix I has the status of an informative annex.
Appendix II, Generic BCF functions	Appendix II has the status of an informative annex.

4.5 Q.1902.5

The elements of ITU-T Recommendation Q.1902.5 [5] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1902.5 [5]	Modified reference
ITU-T Recommendation Q.765	EN 301 069-1 [21]
ITU-T Recommendation Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by the present document
ITU-T Recommendation Q.1902.3	ITU-T Recommendation Q.1902.3 [3] as modified by the present document
ITU-T Recommendation Q.1902.4	ITU-T Recommendation Q.1902.4 [4] as modified by the present document
ITU-T Recommendation Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by the present document
ITU-T Recommendation Q.2150.1	ITU-T Recommendation Q.2150.1 [18] as modified by the present document
ITU-T Recommendation Q.2150.2	ITU-T Recommendation Q.2150.2 [19] as modified by the present document
ITU-T Recommendation Q.2150.3	ITU-T Recommendation Q.2150.3 [20] as modified by the present document

4.6 Q.1902.6

The elements of ITU-T Recommendation Q.1902.6 [6] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1902.6 [6]	Modified reference
ITU-T Q.73x-series	EN 300 356 (all parts) - series for the individual
	supplementary services [38]
ITU-T Q.761 to Q.764	EN 300 356-1 [24]
ITU-T Recommendation Q.767	EN 300 121 [37]
ITU-T Q.1902.1 to Q.1902.4	ITU-T Recommendation Q.1902.1 [1] as modified by the
	present document
	ITU-T Recommendation Q.1902.2 [2] as modified by the
	present document
	ITU-T Recommendation Q.1902.3 [3] as modified by the
	present document
	ITU-T Recommendation Q.1902.4 [4] as modified by the
	present document
ITU-T Recommendation Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by
	the present document
ITU-T Recommendation Q.2150.1	ITU-T Recommendation Q.2150.1 [18] as modified by
	the present document
ITU-T Recommendation Q.765.5 and its Amendment	ITU-T Recommendation Q.765.5 [7] as modified by the
	present document
	ITU-T Recommendation Q.765.5 Amendment 1 [8] as
	modified by the present document

4.7 Q.765.5

The elements of ITU-T Recommendation Q.765.5 [7] apply, with the following modifications.

Reference in ITU-T Recommendation Q.765.5 [7]	Modified reference
ITU-T Recommendation Q.765	EN 301 069-1 [21]
ITU-T Recommendation Q.1901	EN 301 848-1 [26]

4.8 Q.765.5 Amendment 1

The elements of ITU-T Recommendation Q.765.5 Amendment 1 [8] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.765.5 Amendment 1 [8]	Modified reference
ITU-T Recommendation Q.1902.5	ITU-T Recommendation Q.1902.5 [5] as modified by the present document
ITU-T Recommendation Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by the present document
ITU-T Recommendation Q.1990	ITU-T Recommendation Q.1990 [16] as modified by the present document

4.9 Q.1912.1

The elements of ITU-T Recommendation Q.1912.1 [9] apply, with the following modifications.

Reference in ITU-T Recommendation Q.1912.1 [9]	Modified reference
ITU-T Recommendation Q.761	EN 300 356-1 [24]
ITU-T Recommendation Q.762	EN 300 356-1 [24]
ITU-T Recommendation Q.763	EN 300 356-1 [24]
ITU-T Recommendation Q.764	EN 300 356-1 [24]
ITU-T Recommendation Q.730	EN 300 356-2 [23]
ITU-T Recommendation Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by
	the present document
ITU-T Recommendation Q.1902.2	ITU-T Recommendation Q.1902.2 [2] as modified by
	the present document
ITU-T Recommendation Q.1902.3	ITU-T Recommendation Q.1902.3 [3] as modified by
	the present document
ITU-T Recommendation Q.1902.4	ITU-T Recommendation Q.1902.4 [4] as modified by
	the present document
ITU-T Recommendation Q.767	EN 300 121 [37]

4.10 Q.1912.2

The elements of ITU-T Recommendation Q.1912.2 [10] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1912.2 [10]	Modified reference
ITU-T G.964	FFS (For Further Study)
ITU-T G.965	FFS (For Further Study)
ITU-T G.995.1	FFS (For Further Study)
ITU-T Q.118	FFS (For Further Study)
ITU-T Q.140 to Q.164	Not applicable
ITU-T Q.310 to Q.332	Not applicable
ITU-T Q.400 to Q.490	Not applicable
ITU-T Q.543	FFS (For Further Study)
ITU-T Q.617	EN 300 356-1 [24]
ITU-T Q.627	EN 300 356-1 [24]
ITU-T Q.646	Not applicable
ITU-T Q.667	Not applicable
ITU-T Q.675	Not applicable
ITU-T Q.686	Not applicable
ITU-T Q.690	Not applicable
ITU-T Q.692	Not applicable
ITU-T Q.694	Not applicable
ITU-T Q.695	Not applicable
ITU-T Q.699	EN 300 899-1 [40]
ITU-T Q.721 to Q.725	Not applicable
ITU-T Q.761 to Q.764	EN 300 356-1 [24]
ITU-T Q.931	EN 300 403-1 [34] and EN 300 403-2 [35]
ITU-T Q.1902.1 to Q.1902.4	ITU-T Recommendation Q.1902.1 [1] as modified by
	the present document
	ITU-T Recommendation Q.1902.2 [2] as modified by
	the present document
	ITU-T Recommendation Q.1902.3 [3] as modified by
	the present document
	ITU-T Recommendation Q.1902.4 [4] as modified by
ITH T O 4040 4	the present document
ITU-T Q.1912.1	ITU-T Recommendation Q.1912.1 [9] as modified by
	the present document

2) Exceptions

Paragraph in Q.1912.2 [10]	Comment
7, Interworking with network signalling systems	Not supported.
NOTE: This means interworking with R1, R2,	C5, TUP is not supported.

4.11 Q.1912.3

The elements of ITU-T Recommendation Q.1912.3 [11] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1912.3 [11]	Modified reference
ITU-T H.225.0,	TS 101 521
ITU-T H.246,	FFS (For Further Study)
ITU-T H.323,	TS 101 520
ITU-T H.450.x-family, Implementors Guide (2001) for	TS 101 341 [41] and TS 101 342 [42]
ITU-T H.323,	
ITU-T H.245,	TS 101 522
ITU-T H.283,	FFS (For Further Study)
ITU-T H.235,	FFS (For Further Study)
ITU-T H.341 Recommendations	FFS (For Further Study)
ITU-T Q.761 to Q.764	EN 300 356-1 [24]
ITU-T Q.1902.1 to Q.1902.4	ITU-T Recommendation Q.1902.1 [1] as modified by
	the present document
	ITU-T Recommendation Q.1902.2 [2] as modified by
	the present document
	ITU-T Recommendation Q.1902.3 [3] as modified by
	the present document
	ITU-T Recommendation Q.1902.4 [4] as modified by
	the present document
ITU-T Q.1912.1	ITU-T Recommendation Q.1912.1 [9] as modified by
	the present document

2) Appendix I

Appendix I to Q.1912.3 [11], Guidelines BICC/H.323 interworking for end-to-end codec negotiation, has the status of an informative annex.

4.12 Q.1912.4

The elements of ITU-T Recommendation Q.1912.4 [12] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1912.4 [12]	Modified reference
ITU-T Q.617	EN 300 356-1 [24]
ITU-T Q.627	EN 300 356-1 [24]
ITU-T Q.699	EN 300 899-1 [40]
ITU-T Q.761 to Q.764	EN 300 356-1 [24]
ITU-T Q.931	EN 300 403-1 [34] and EN 300 403-2 [35]
ITU-T Q.1902.1 to Q.1902.4	ITU-T Recommendation Q.1902.1 [1] as modified by
	the present document
	ITU-T Recommendation Q.1902.2 [2] as modified by
	the present document
	ITU-T Recommendation Q.1902.3 [3] as modified by
	the present document
	ITU-T Recommendation Q.1902.4 [4] as modified by
	the present document
ITU-T Q.1912.1	ITU-T Recommendation Q.1912.1 [9] as modified by
	the present document
ITU-T Q.118,	FFS (For Further Study)
ITU-T Q.543,	FFS (For Further Study)
ITU-T Q.2650,	ETS 300 495 [43]
ITU-T Q.2660,	ETS 300 496 [44]
ITU-T Q.2730,	ETS 300 657 [45]
ITU-T Q.2735.1,	FFS (For Further Study)
ITU-T Q.2761-Q.2764,	ETS 300 656 [33]
ITU-T Q.2931,	EN 300 443-1 [46]
ITU-T Q.2931 Amendment 2,	FFS (For Further Study)
ITU-T Q.2932.1,	ETS 300 796-1 [47]
ITU-T Q.2951.1-8,	ETS 300 661-1 [48], ETS 300 662-1 [49],
	ETS 300 663-1 [50], ETS 300 664-1 [51],
	ETS 300 665-1 [52], ETS 300 666-1 [53],
ITU-T Q.2951.9,	ETS 300 667-1 [54]
ITU-T Q.2951.9,	EN 301 485-1 [55] ETS 300 668-1 [56]
= -: -: /	• •
ITU-T Q.2941.2	FFS (For Further Study)

4.13 Q.1922.2

The elements of ITU-T Recommendation Q.1922.2 [13] apply, with the following modifications.

Reference in ITU-T Recommendation Q.1922.2 [13]	Modified reference
ITU-T Q.761 to Q.764	EN 300 356-1 [24]
ITU-T Q.1228	EN 301 140-1 [32]
ITU-T Q.1601	EN 301 464 [57]
ITU-T Q.1902.1 to Q.1902.4	ITU-T Recommendation Q.1902.1 [1] as modified by the present document ITU-T Recommendation Q.1902.2 [2] as modified by the present document ITU-T Recommendation Q.1902.3 [3] as modified by the present document ITU-T Recommendation Q.1902.4 [4] as modified by the present document
ITU-T Q.1912.1	ITU-T Recommendation Q.1912.1 [9] as modified by the present document

4.14 Q.1950

The elements of ITU-T Recommendation Q.1950 [14] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1950 [14]	Modified reference
ITU-T Recommendation H.248, H.248 Annex K	FFS (For Further Study)
ITU-T Recommendation I.230	FFS (For Further Study)
ITU-T Recommendation Q.765.5	ITU-T Recommendation Q.765.5 [7] as modified by
	the present document
ITU-T Recommendation Q.1902.3	ITU-T Recommendation Q.1902.3 [3] as modified by
	the present document
ITU-T Recommendation Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by
	the present document

2) Annex A

Annex A to Q.1950 [14], Q.1950 packages, has the status of a normative annex.

4.15 Q.1970

The elements of ITU-T Recommendation Q.1970 [15] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1970 [15]	Modified reference	
ITU-T Q.1901	EN 301 848-1 [26]	
ITU-T Q.1902.1	ITU-T Recommendation Q.1902.1 [1] as modified by	
	the present document	
ITU-T Q.1902.2	ITU-T Recommendation Q.1902.2 [2] as modified by	
	the present document	
ITU-T Q.1902.3	ITU-T Recommendation Q.1902.3 [3] as modified by	
	the present document	
ITU-T Q.1902.4	ITU-T Recommendation Q.1902.4 [4] as modified by	
	the present document	
ITU-T Q.1902.5	ITU-T Recommendation Q.1902.5 [5] as modified by	
	the present document	
ITU-T Q.1902.6	ITU-T Recommendation Q.1902.6 [6] as modified by	
	the present document	

2) Exceptions

Paragraph in Q.1970 [15]	Comment
6.2, IPBCP message fields	Modify item 7), Media Announcement as follows:
	"The "fmt list" is limited to only one payload type. For further details see
	RFC 2327 [58]".

4.16 Q.1990

The elements of ITU-T Recommendation Q.1990 [16] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.1990 [16]	Modified reference	
ITU-T Q.765.5	ITU-T Recommendation Q.765.5 [7] as modified by the	
	present document	
ITU-T Q.1902.1 to Q.1902.4	ITU-T Recommendation Q.1902.1 [1] as modified by	
	the present document	
	ITU-T Recommendation Q.1902.2 [2] as modified by	
	the present document	
	ITU-T Recommendation Q.1902.3 [3] as modified by	
	the present document	
	ITU-T Recommendation Q.1902.4 [4] as modified by	
	the present document	
ITU-T Q.1950	ITU-T Recommendation Q.1950 [14] as modified by the	
	present document	
ITU-T Q.1970	ITU-T Recommendation Q.1970 [15] as modified by the	
	present document	

4.17 Q.2150.0

The elements of ITU-T Recommendation Q.2150.0 [17] apply.

4.18 Q.2150.1

The elements of ITU-T Recommendation Q.2150.1 [18] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.2150.1 [18]	Modified reference	
ITU-T Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by	
	the present document	
ITU-T Q.701	EN 300 008-1 [27]	
ITU-T Q.703	EN 300 008-1 [27]	
ITU-T Q.704	EN 300 008-1 [27]	
ITU-T Q.764	EN 300 356-1 [24]	
ITU-T Q.2210	EN 301 004-1 [28]	

2) Appendix I

Appendix I to Q.2150.1 [18], Protocol Implementation Conformance Statement (PICS) Proforma, has the status of an informative annex.

4.19 Q.2150.2

The elements of ITU-T Recommendation Q.2150.2 [19] apply, with the following modifications.

Reference in ITU-T Recommendation Q.2150.2 [19]	Modified reference	
ITU-T Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by	
	the present document	
ITU-T Q.2110	EN 300 436-1 [29]	
ITU-T Q.2111	FFS (For Further Study)	

2) Appendix I, Appendix II

Appendix I to Q.2150.2 [19], Signalling Transport Converter on SSCF-UNI for AAL type 2 signalling, has the status of an informative annex.

Appendix II to Q.2150.2 [19], Protocol Implementation Conformance Statement (PICS) Proforma, has the status of an informative annex.

4.20 Q.2150.3

The elements of ITU-T Recommendation Q.2150.3 [20] apply, with the following modifications.

1) Replace references as shown below

Reference in ITU-T Recommendation Q.2150.3 [20]	Modified reference	
ITU-T Q.2150.0	ITU-T Recommendation Q.2150.0 [17] as modified by the	
	present document	

2) Appendix I

Appendix I to Q.2150.3 [20], Protocol Implementation Conformance Statement (PICS) Proforma, has the status of an informative annex.

Annex ZA (informative): Coding of the compatibility information for basic call procedures

It is recommended that annex ZA (informative) of EN 300 356-1 [24] applies equally to the present document.

Annex ZB (informative): Bibliography

ETSI TS 101 520: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Implementation Conformance Statement (ICS) proforma for the support of packet based multimedia communications systems; Support of ITU-T Recommendation H.323".

ETSI TS 101 521: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Protocol Implementation Conformance Statement (PICS) proforma for the support of call signalling protocols and media stream packetization for packet-based multimedia communication systems; Support of ITU-T Recommendation H.225.0".

ETSI TS 101 522: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Protocol Implementation Conformance Statement (PICS) proforma for the support of control protocol for multimedia communication; Support of ITU-T Recommendation H.245".

History

		Document history		
V1.1.1	May 2003	Public Enquiry	PE 20030926:	2003-05-28 to 2003-09-26
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