

**Integrated Services Digital Network (ISDN);  
Signalling System No.7;  
ISDN User Part (ISUP) version 3 for the international interface;  
Part 18: Completion of Calls to Busy Subscriber (CCBS)  
supplementary service**

[ITU-T Recommendation Q.733, clause 3 (1997), modified]

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**Reference**

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**Keywords**

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## Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS), and is now submitted for the Voting phase of the ETSI standards Two-step Approval Procedure.

The present document is part 18 of a multi-part EN covering the ISDN User Part (ISUP) version 3 for the international interface, as identified below:

- Part 1: "Basic services";
- Part 2: "ISDN supplementary services";
- Part 3: "Calling Line Identification Presentation (CLIP) supplementary service";
- Part 4: "Calling Line Identification Restriction (CLIR) supplementary service";
- Part 5: "Connected Line Identification Presentation (COLP) supplementary service";
- Part 6: "Connected Line Identification Restriction (COLR) supplementary service";
- Part 7: "Terminal Portability (TP) supplementary service";
- Part 8: "User-to-User Signalling (UUS) supplementary service";
- Part 9: "Closed User Group (CUG) supplementary service";
- Part 10: "Subaddressing (SUB) supplementary service";
- Part 11: "Malicious Call Identification (MCID) supplementary service";
- Part 12: "Conference Call, add-on (CONF) supplementary service";
- Part 14: "Explicit Call Transfer (ECT) supplementary service";
- Part 15: "Diversion supplementary services";
- Part 16: "Call Hold (HOLD) supplementary service";
- Part 17: "Call Waiting (CW) supplementary service";
- Part 18: "Completion of Calls to Busy Subscriber (CCBS) supplementary service";**
- Part 19: "Three party (3PTY) supplementary service".
- Part 20: "Completion of Calls on No Reply (CCNR) supplementary service";
- Part 31: "Protocol Implementation Conformance Statement (PICS) proforma specification for basic services"
- Part 32: "Test Suite Structure and Test Purposes (TSS&TP) specification for basic services"
- Part 33: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for basic services"
- Part 34: "Protocol Implementation Conformance Statement (PICS) proforma specification for supplementary services"
- Part 35: "Test Suite Structure and Test Purposes (TSS&TP) specification for supplementary services"
- Part 36: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for supplementary services"

NOTE: Part 13 has not been issued.

In accordance with CCITT Recommendation I.130, the following three level structure is used to describe the supplementary telecommunication services as provided by European public telecommunications operators under the pan-European Integrated Services Digital Network (ISDN):

- Stage 1: is an overall service description, from the user's stand-point;
- Stage 2: identifies the functional capabilities and information flows needed to support the service described in stage 1; and
- Stage 3: defines the signalling system protocols and switching functions needed to implement the service described in stage 1.

This EN details the stage three aspects (signalling system protocols and switching functions) needed to support the Completion of Calls to Busy Subscriber (CCBS) supplementary service. The stage 1 and stage 2 aspects are detailed in ETS 300 357 and ETS 300 358, respectively.

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

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## Endorsement notice

The text of ITU-T Recommendation Q.733, clause 3 (1997), was approved by ETSI as an EN 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.

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# Global modifications to ITU-T Recommendation Q.733, clause 3

Replace the two clauses (Scope and References) with the following two clauses:

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## 1 Scope

This eighteenth part of EN 300 356 specifies the stage three of the Completion of Calls to Busy Subscriber (CCBS) supplementary service for the pan-European Integrated Services Digital Network (ISDN) as provided by the European public telecommunications operators by means of the Signalling System No.7 protocol for the ISDN User Part (ISUP). Stage three identifies the protocol procedures and switching functions needed to support a telecommunication service (see CCITT Recommendation I.130 [1]).

The present document specifies the additional requirements where the service is provided to the user via an intermediate ISDN.

The present document does not specify the additional requirements where the service is provided to the user via a telecommunications network that is not an ISDN.

Although the present document applies only to the international interconnection, the specification of functions, formats and codes of messages and signals, and actions performed at originating and destination local exchanges are retained.

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.

NOTE: In the case where a national signalling system behaves differently, the international gateway exchange is to support both the concerned national and international network.

Charging aspects are outside the scope of the present document.

The CCBS supplementary service enables user A, encountering a busy destination B, to have the call completed without having to make a new call attempt when the destination B becomes not busy.

The CCBS supplementary service is applicable to all circuit-switched basic services.

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## 2 Normative references

References may be made to:

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case the latest version applies.

A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

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

- [2] ETS 300 121 (1992): "Integrated Services Digital Network (ISDN); Application of the ISDN User Part (ISUP) of CCITT Signalling System No.7 for international ISDN interconnections (ISUP version 1)".
- [3] EN 300 356-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (1997), modified]".
- [4] EN 300 356-2: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 2: ISDN supplementary services [ITU-T Recommendation Q.730 (1997), modified]".
- [5] ETS 300 357: "Integrated Service Digital Network (ISDN); Completion of Calls to Busy Subscribers (CCBS) supplementary service; Service description".
- [6] ETS 300 358: "Integrated Service Digital Network (ISDN); Completion of Calls to Busy Subscribers (CCBS) supplementary service; Functional capabilities and information flows".
- [7] 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]".

Throughout the text of ITU-T Recommendation Q.733, clause 3

Replace references as shown in table 1.

**Table 1**

<b>Reference in ITU-T Recommendation Q.733, clause 3</b>	<b>Modified reference</b>
ITU-T Recommendation Q.730	ITU-T Recommendation Q.730 as modified by EN 300 356-2 [4]
ITU-T Recommendation Q.761	ITU-T Recommendation Q.761 as modified by EN 300 356-1 [3]
ITU-T Recommendation Q.762	ITU-T Recommendation Q.762 as modified by EN 300 356-1 [3]
ITU-T Recommendation Q.763	ITU-T Recommendation Q.763 as modified by EN 300 356-1 [3]
ITU-T Recommendation Q.764	ITU-T Recommendation Q.764 as modified by EN 300 356-1 [3]
ITU-T Recommendation Q.767	ETS 300 121 [2]
ITU-T Recommendation Q.931	ITU-T Recommendation Q.931 as modified by EN 300 403-1 [7]

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## Annex ZA (informative): Coding of the compatibility information

It is recommended that the parameter compatibility information for the CCSS parameter should be coded as follows:

a) N<sup>th</sup> upgraded parameter:

0100 1011    CCSS parameter.

b) Instruction indicators:

bit    A:    Transit at intermediate exchange indicator;

0       transit interpretation;

bit    B:    Release call indicator;

0       do not release call;

bit    C:    Send notification indicator;

0       do not send notification;

bit    D:    Discard message indicator;

0       do not discard message (pass on);

bit    E:    Discard parameter indicator;

0       do not discard parameter (pass on);

bits   GF:   Pass on not possible indicator;

10       discard parameter;

bits   JI:    Broadband/narrowband interworking indicator;

00       pass on.

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# History

Document history		
Edition 1	February 1995	Publication as ETS 300 356-18
V3.1.1	October 1997	Public Enquiry PE 9809: 1997-10-31 to 1998-02-27
V3.1.2	May 1998	Vote V 9830: 1998-05-18 to 1998-07-31