

Draft **ETSI EN 300 356-3** V4.1.1 (2000-09)

European Standard (Telecommunications series)

**Integrated Services Digital Network (ISDN);
Signalling System No.7;
ISDN User Part (ISUP) version 4 for the international interface;
Part 3: Calling Line Identification Presentation (CLIP)
supplementary service**

[ITU-T Recommendation Q.731, clause 3 (1993) modified]



Reference

REN/SPAN-01082-03

Keywords

ISDN, ISUP, SS7, supplementary service, CLIP

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN), and is now submitted for the Public Enquiry phase of the ETSI standards Two-step Approval Procedure.

The present document is part 3 of a multi-part deliverable covering the ISDN User Part (ISUP) version 4 for the international interface, as identified below:

- Part 1: "Basic services [ITU-T Recommendations Q.761 to Q.764 (2000) modified]";
- Part 2: "ISDN supplementary services [ITU-T Recommendation Q.730 (2000) modified]";
- Part 3: "Calling Line Identification Presentation (CLIP) supplementary service [ITU-T Recommendation Q.731, clause 3 (1993) modified]";**
- Part 4: "Calling Line Identification Restriction (CLIR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993) modified]";
- Part 5: "Connected Line Identification Presentation (COLP) supplementary service [ITU-T Recommendation Q.731, clause 5 (1993) modified]";
- Part 6: "Connected Line Identification Restriction (COLR) supplementary service [ITU-T Recommendation Q.731, clause 6 (1993) modified]";
- Part 7: "Terminal Portability (TP) supplementary service [ITU-T Recommendation Q.733, clause 4 (1993) modified]";
- Part 8: "User-to-User Signalling (UUS) supplementary service [ITU-T Recommendation Q.737, clause 1 (1997) modified]";
- Part 9: "Closed User Group (CUG) supplementary service [ITU-T Recommendation Q.735, clause 1 (1993) modified]";
- Part 10: "Subaddressing (SUB) supplementary service [ITU-T Recommendation Q.731, clause 8 (1992) modified]";
- Part 11: "Malicious Call Identification (MCID) supplementary service [ITU-T Recommendation Q.731, clause 7 (1997) modified]";
- Part 12: "Conference Call, add-on (CONF) supplementary service [ITU-T Recommendation Q.734, clause 1 (1993) and implementors guide (1998) modified]";
- Part 14: "Explicit Call Transfer (ECT) supplementary service [ITU-T Recommendation Q.732, clause 7 (1996) and implementors guide (1998) modified]";
- Part 15: "Diversion supplementary services [ITU-T Recommendation Q.732, clauses 2 to 5 (2000) modified]";
- Part 16: "Call Hold (HOLD) supplementary service [ITU-T Recommendation Q.733, clause 2 (1993) modified]";

- Part 17: "Call Waiting (CW) supplementary service [ITU-T Recommendation Q.733, clause 1 (1992) modified]";
- Part 18: "Completion of Calls to Busy Subscriber (CCBS) supplementary service [ITU-T Recommendation Q.733, clause 3 (1997) modified]";
- Part 19: "Three-Party (3PTY) supplementary service [ITU-T Recommendation Q.734, clause 2 (1996) and implementors guide (1998) modified]";
- Part 20: "Completion of Calls on No Reply (CCNR) supplementary service [ITU-T recommendation Q.733, clause 5 (2000) modified]";
- Part 21: "Anonymous Call Rejection (ACR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993)]";
- 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 [1], 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.

The present document details the stage three aspects (signalling system protocols and switching functions) needed to support the Calling Line Identification Presentation (CLIP) supplementary service. The stage 1 and stage 2 aspects are detailed in EN 300 089 [2] and ETS 300 091 [3], respectively.

Proposed national transposition dates	
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

Endorsement notice

The elements of ITU-T Recommendation Q.731, clause 3 (1993) apply, with the following modifications

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

Global modifications to ITU-T Recommendation Q.731, clause 3

Insert the following two clauses (Scope and References) at the start of clause 3:

1 Scope

The present document specifies the stage three of the Calling Line Identification Presentation (CLIP) 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 does not specify the additional protocol requirements where the service is provided to the user via a telecommunications network that is not an ISDN.

The present document does not specify the additional protocol requirements for the national signalling interface.

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.

The CLIP supplementary service provides the called party with the possibility to receive the identification of the calling party.

The CLIP supplementary service is applicable to all telecommunication services.

In addition to ITU-T Recommendation Q.731, clause 3, procedures are provided for the handling of network restricted numbers. This refers to situations where a default number, that is not presentable to the called party, is inserted within the public network, for e.g. calls not to be rejected by the Anonymous Call Rejection (ACR) supplementary service [9] and [10].

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, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, 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] ETSI EN 300 089: "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".

- [3] ETSI ETS 300 091 (1992): "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) and Calling Line Identification Restriction (CLIR) supplementary services; Functional capabilities and information flows".
- [4] ETSI EN 300 092-1 (V1.2.4): "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [5] ETSI 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)".
- [6] 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]".
- [7] 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]".
- [8] ETSI EN 300 403-1 (V1.3.2): "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]".
- [9] ETSI EN 301 798: "Service and Protocols for Advanced Networks (SPAN); Anonymous Call Rejection (ACR) Supplementary Service; Service description".
- [10] ETSI EN 300 356-21: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 4 for the international interface; Part 21: Anonymous Call Rejection (ACR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993)]".

Throughout the text of ITU-T Recommendation Q.731, clause 3

Replace references as shown in table 1.

Table 1

Reference in ITU-T Recommendation Q.731, clause 3	Modified reference
CCITT Recommendation I.251.3	EN 300 089 [2]
CCITT Recommendation Q.81, clause 3	ETS 300 091 [3]
ITU-T Recommendation Q.730	ITU-T Recommendation Q.730 as modified by EN 300 356-2 [7]
ITU-T Recommendation Q.761	ITU-T Recommendation Q.761 as modified by EN 300 356-1 [6]
ITU-T Recommendation Q.762	ITU-T Recommendation Q.762 as modified by EN 300 356-1 [6]
ITU-T Recommendation Q.763	ITU-T Recommendation Q.763 as modified by EN 300 356-1 [6]
ITU-T Recommendation Q.764	ITU-T Recommendation Q.764 as modified by EN 300 356-1 [6]
ITU-T Recommendation Q.767	ETS 300 121 [5]
ITU-T Recommendation Q.931	ITU-T Recommendation Q.931 as modified by EN 300 403-1 [8]
ITU-T Recommendation Q.951, clause 3	ETS 300 092-1 [4]

Subclause 3.2.1, 1st paragraph

Replace the 1-st paragraph by:

"The CLIP supplementary service is a supplementary service offered to the called user. It presents the calling user's number, with additional address information (e.g. the calling party sub-address) if any, to the called user. When provided the facility applies to all incoming calls except for when the calling user has activated the calling line identification restriction (CLIR) supplementary service (see 4) or the network inserts a default number not presentable to the called user or the complete number of the calling user is not available at the destination exchange."

Subclause 3.5.2.1.1, last but one paragraph

Replace the last but one paragraph by:

"The address presentation restricted indicators of the calling party number and the generic number parameter shall both be set to the value "presentation allowed" or "presentation restricted" as received from the access signalling system with the following exception:

- In case the value "presentation allowed" is received from the access and the originating local exchange enters the default number in the calling party number parameter, the address presentation restricted indicator of this parameter may be set to "presentation restricted by network". This refers to situations where a default number, that is not presentable to the called user, is inserted within the public network, for e.g. calls not to be rejected by the Anonymous Call Rejection (ACR) supplementary service [9] and [10]. The address presentation restricted indicator of the generic number parameter (when generated) shall be set to "presentation allowed" as received from the access signalling system."

Table 3-1/Q.731, note b)

Delete note b).

Table 3-1/Q.731, additional note to entries "Default number" in 4-th column

Add the following note to the entries of "Default number" in the 4-th column:

"In case the default is not presentable to the called party, the presentation restricted indicator of the calling party number parameter may be set to "presentation restricted by network" following the exception statement to subclause 3.5.2.1.1."

Subclause 3.5.2.3.1, 1-st paragraph

Replace the 1-st paragraph by:

"If the address presentation restricted indicator of the received calling party number parameter is set to "presentation restricted", the outgoing international gateway exchange shall act according to the bilateral agreement between the two networks (see 4.2.1/I.251 and 4.5/I.251). If the address presentation restricted indicator of the received calling party number parameter is set to "presentation restricted by network" or "address not available", then the calling party number parameter shall be omitted from the initial address message. If the calling party number parameter is not sent across the international section, then the generic number parameter shall be omitted from the initial address message if its number qualifier indicates "additional calling party number"."

EDITOR'S NOTE During the final approval process of the document via the SPAN1_GEN_FULLL email list, the principle was envisaged that the outgoing international gateway exchange may either act according to the description above, or handle numbers marked as "presentation restricted by network" the same as numbers marked as "presentation restricted" in order to enable the transfer of such numbers between networks. The exact description of this option will require elaborated text proposals to be submitted as comments during Public Enquiry. This option may also require text changes in related standards (e.g. ISUP v4 standard for CLIP and the CLIP/CLIR service descriptions).

Subclause 3.5.2.3.1, note 2

Replace note 2 by:

"The address presentation restricted indicator in both the calling party number and generic number parameters are set to the same value. They can have the values "presentation allowed" or "presentation restricted" (based on the bilateral agreement). In addition, the presentation restricted indicator in the calling party number may be set to "presentation restricted by network" following the exception statement to subclause 3.5.2.1.1."

Subclause 3.5.2.4.2, 2-nd paragraph

Replace the 2-nd paragraph by:

"If the address presentation restricted indicator of the received calling party number parameter is set to "presentation restricted by network" or "address not available", then this value shall be passed on transparently. The screening indicator shall be set to "network provided"."

Subclause 3.5.2.5.1, 3-rd paragraph

Replace the 3-rd paragraph by:

"If the generic number parameter with a number qualifier set to "additional calling party number" is provided, then the information conveyed in this parameter shall be presented first to the access signalling system. The information conveyed in the calling party number parameter shall be sent to the access signalling system immediately following the information of the generic number parameter.

In case the presentation restriction indicator of the calling party number indicates "presentation restricted by network", then the access signalling system shall ensure that the information is not presented to the called party and the indication "address not available" is given."

Subclause 3.5.2.5.1, 4-th paragraph

Replace the 4-th paragraph by:

"Where the generic number parameter is not provided but the calling party number parameter is present, then the information conveyed in the calling party number parameter shall be sent to the access signalling system. In case the presentation restriction indicator of the calling party number indicates "presentation restricted by network", then the access signalling system shall ensure that the information is not presented to the called party and the indication "address not available" is given."

Figure 3-1/Q.731, additional note to setting of presentation restriction indicator

Add the following note to the setting of the presentation restriction indicator before sending of the IAM:

"With inclusion of the exception statement to subclause 3.5.2.1.1 for the setting of the presentation restriction indicator in the calling party number parameter for network restricted numbers."

Annex ZA (informative): Coding of the compatibility information

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

a) Nth upgraded parameter:

1100 0000 generic number 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;

1 discard parameter;

bits GF: Pass on not possible indicator;

10 discard parameter;

bits JI: Broadband/narrowband interworking indicator;

00 pass on.

History

Document history		
Edition 1	February 1995	Publication as ETS 300 356-3
V3.1.3	August 1998	Publication
V4.1.1	September 2000	Public Enquiry PE 20010126: 2000-09-27 to 2001-01-26