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SERIES I: INTEGRATED SERVICES DIGITAL
NETWORK (ISDN)

Service capabilities – Supplementary services in ISDN

**NUMBER IDENTIFICATION SUPPLEMENTARY
SERVICES: CONNECTED LINE IDENTIFICATION
PRESENTATION**

Reedition of CCITT Recommendation I.251.5 published in
the Blue Book, Fascicle III.7 (1988)

NOTES

1 CCITT Recommendation I.251.5 was published in Fascicle III.7 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation I.251.5

NUMBER IDENTIFICATION SUPPLEMENTARY SERVICES: CONNECTED LINE IDENTIFICATION PRESENTATION

(Melbourne, 1988)

5 I.251.5 – Connected Line Identification Presentation

5.1 *Definition*

Connected Line Identification Presentation (COLP) is a supplementary service offered to the calling party which provides the connected party's ISDN-number to the calling party.

5.2 *Description*

5.2.1 *General description*

When COLP is applicable and activated, the network provides the calling party with the number of the connected party when the connected party answers the incoming call. The network should be capable of transmitting at least 15 digits (maximum length of an ISDN number).

Note – The possibility of enhancing this service to provide the called party number before the called party answers the call is for further study.

5.2.2 *Specific terminology*

None identified.

5.2.3 *Qualifications on the applicability to telecommunication services*

This supplementary service is applicable to all telecommunication services.

It is to be noted that in the Telematic services an exchange of Terminal Identification (TID) occurs at a higher layer subsequent to a successful call establishment.

For Telematic services this supplementary service shall consist only of the access number of the connected party and this shall be provided by the network. For other non-voice services this supplementary service is for further study. The presentation of the connected party's ISDN number by Telematic terminals and by other non-voice terminals is for further study.

5.3 *Procedures*

5.3.1 *Provision/withdrawal*

The COLP supplementary service may be provided on a subscription basis or be generally available.

COLP may be withdrawn at the request of the subscriber or by the network provider for administrative reasons.

5.3.2 *Normal procedures*

5.3.2.1 *Activation/deactivation/registration*

COLP is activated on provision and deactivated on withdrawal.

No information needs to be registered with the network for this supplementary service.

5.3.2.2 *Invocation and operation*

The number presented shall unambiguously identify the access of the connected party. The number presented is either:

- i) completely provided by the network;
- ii) completely provided by the connected party; or
- iii) partially provided by the network with the rest provided by the connected party (e.g. the access number is provided by the network and the additional digits to make the number complete by the connected party).

Where either the complete connected number, or part of the connected number is initially provided by the connected party, the network shall check its validity. If this check is successful then this number is used by the network.

5.3.3 *Exceptional procedures*

5.3.3.1 *Activation/deactivation/registration*

None identified.

5.3.3.2 *Invocation and operation*

There are two cases where the connected party number is not presented to the calling party:

- i) when the connected party has an arrangement whereby presentation of his number is not allowed (see definition of Connected Line Identification Restriction); or
- ii) when the connected party number is not available (e.g. due to interworking with the analogue telephone network (PSTN)).

In such cases the calling party shall be given a number unavailable indication.

If the network check on the connected party provided number is unsuccessful, the network default number will be used instead.

5.3.4 *Alternative procedures*

5.3.4.1 *Activation/deactivation/registration*

None identified.

5.3.4.2 *Invocation and operation*

In some cases where a connected party has an arrangement such that presentation of his number is not allowed, there may be certain categories of calling party that have the ability to override this restriction and have the connected number presented. This function is a national matter.

Problems may occur when the connected party does not belong to the same network as the calling party and in the connected party's network the override category does not exist, while in the calling party's network, it does exist. A problem occurs when a connected party who restricts presentation and assumes that his number is *never* presented, receives a call from a calling party who is in the override category.

The cases where the override category is applied is a national matter. Depending on bilateral agreement about the application of the override category in country A, and the presentation not allowed arrangement of the connected party in country B, country B may or may not deliver the connected line identification to country A. Agreements are also needed with any transit network.

5.4 *Network capabilities for charging*

This Recommendation does not cover charging principles. Future Recommendations in the D-Series are expected to contain that information.

It shall be possible to charge the subscriber accurately for the service.

5.5 *Interworking requirements*

On calls destined to some non-ISDN networks, the connected number may be delivered to the originating ISDN without the ability to indicate whether presentation is allowed or not. How the ISDN should behave in this case is for further study.

On calls destined to some other non-ISDN networks, no connected party number may be available to the ISDN and therefore the full number of the connected party cannot be given to the calling party who has been provided with COLP. In this situation a partial number shall be given unless no information is available whereupon a "number unavailable indication" is given to the calling party.

5.6 *Interaction with other supplementary services*

5.6.1 *Call Waiting*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.2 *Call Transfer*

Assume the situation where a user A has an established call with a user B and wishes to transfer this call with user B to a user C.

Except in the case where user C prohibits the presentation of his number, user C's number shall be presented:

- to user B upon successful completion of the transfer to user C (independent of the type of transfer procedure invoked by user A) provided that user B has subscribed to COLP;
- to user A when user A is using normal or explicit transfer procedures and has subscribed to COLP. The connected party's number will not be presented to user A if user A invokes the single step Call Transfer procedure.

Note – The connected number presentation may not be possible if interworking with a non-ISDN network is invoked in the call transfer.

5.6.3 *Connected Line Identification Presentation*

Not applicable.

5.6.4 *Connected Line Identification Restriction*

The connected line identification will not be presented if the connected user has subscribed to COLR.

5.6.5 *Calling Line Identification Presentation*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.6 *Calling Line Identification Restriction*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.7 *Closed User Group*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.8 *Conference Calling*

A conference controller who has also subscribed to COLP should be presented with the connected party's number when that party is either part of the initial activation of the conference or is added as a new conferee to an existing conference.

Conferees in an existing conference who have subscribed to COLP will not receive a new party's number whenever a conference controller adds a new party to the conference.

5.6.9 *Direct-Dialling-In*

For further study.

5.6.10 *Call Diversion (i.e. Call Forwarding) services*

5.6.10.1 *Call Forwarding Busy (CFB)*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

Assume a calling user A, who has subscribed to COLP, places a call to a user B who is busy and this call is forwarded to a user C. If user B has also subscribed to a notification option with his CFB service, calling user A may receive the forwarded-to user C's number with the notification of the forwarding. In any event, assuming user C answers the call, user C's number will be returned to user A unless user C has subscribed to COLR.

5.6.10.2 *Call Forwarding No Reply (CFNR)*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

Assume a calling user A, who has subscribed to COLP, places a call to a user B who has subscribed to the CFNR service, and who does not reply to the call within the subscribed time interval. If user B has also subscribed to a notification option with his CFNR service, calling user A may receive the forwarded-to user C's number with the notification of the forwarding. In any event, assuming user C answers the call, user C's number will be returned to user A unless user C has subscribed to COLR.

5.6.10.3 *Call Forwarding Unconditional (CFU)*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

Assume a calling user A, who has subscribed to COLP, places a call to a user B who has subscribed to the CFU service. This call to user B would then be forwarded to user C. If user B has also subscribed to a notification option with his CFU service, calling user A may receive the forwarded-to user C's number with the notification of the forwarding. In any event, assuming user C answers the call, user C's number will be returned to user A unless user C has subscribed to COLR.

5.6.11 *Line Hunting*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.12 *Three-Party Service*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.13 *User-to-User Signalling*

No impact, i.e. neither supplementary service affects the the other supplementary service.

5.6.14 *Multiple Subscriber Number*

Assume user A, who has subscribed to COLP, places a call to a user B to whom the network is applying the MSN service. Assuming user B answers the call, the connected number at B (which may be identical to the called number) will be returned to user A unless user B has subscribed to COLR. Other interactions are for further study.

5.6.15 *Call Hold*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.6.16 *Advice of charge*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

5.7 *Dynamic description*

The dynamic description for this service is shown in Figure 2/I.251.

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