



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 095

January 1992

Source: ETSI TC-NA

Reference: T/NA1(89)10

ICS: 33.080

Key words: ISDN, supplementary service

**Integrated Services Digital Network (ISDN);
Connected Line Identification Restriction (COLR)
supplementary service
Service description**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Network Aspects (NA) Technical Committee of the European Telecommunications Standards Institute (ETSI), and was adopted having passed through the ETSI standards approval procedure.

In accordance with CCITT Recommendation I.130 [1], the following three level structure is used to describe the supplementary telecommunications 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 standpoint;
- 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 ETS details the stage 1 aspects (overall service description) for the Connected Line Identification Restriction (COLR) supplementary service. The stage two and stage three aspects are detailed in ETS 300 096 (1992) and ETS 300 098 (1992), respectively.

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1 Scope

This standard defines the stage one of the Connected Line Identification Restriction (COLR) supplementary service for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators. Stage one is an overall service description from the user's point of view (see CCITT Recommendation I.130 [1]), but does not deal with the details of the human interface itself.

This standard defines the interworking requirements of private ISDNs with the public ISDN.

In addition this standard specifies the base functionality where the service is provided to the user via a private ISDN.

This standard does not specify the additional requirements where the service is provided to the user via a telecommunications network that is not an ISDN but does include interworking requirements of other networks with the public ISDN.

Interactions with supplementary services not listed in Clause 8 are outside the scope of this standard.

Charging principles are outside the scope of this standard.

The COLR supplementary service enables the connected party to prevent presentation of its ISDN number to the calling party.

The COLR supplementary service is applicable to all telecommunications services.

This standard is applicable to the stage two and stage three standards for the ISDN COLR supplementary service. The terms "stage two" and "stage three" are also defined in CCITT Recommendation I.130 [1]. Where the text indicates the status of a requirement, (i.e. as strict command or prohibition, as authorisation leaving freedom, or as a capability or possibility), this shall be reflected in the text of the relevant stage two and stage three standards.

Furthermore, conformance to this standard is met by conforming to the stage three standards with the field of application appropriate to the equipment being implemented. Therefore no method of testing is provided for this standard.

2 Normative references

This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] CCITT Recommendation I.130 (1988): "Method for the characterisation of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [2] CCITT Recommendation I.112 (1988): "Vocabulary of terms for ISDNs".
- [3] CCITT Recommendation E.164 (1988): "Numbering plan for the ISDN era".
- [4] CCITT Recommendation I.210 (1988): "Principles of telecommunication services supported by an ISDN and the means to describe them".
- [5] ETS 300 094 (1992): "Integrated Services Digital Network (ISDN); Connected Line Identification Presentation (COLP) supplementary service; Service Description".
- [6] CCITT Recommendation Q.9 (1988): "Vocabulary of switching and signalling terms".

3 Definitions

For the purposes of this standard, the following definitions apply:

Integrated Services Digital Network (ISDN): see CCITT Recommendation I.112 [2], § 2.3, definition 308.

Service; telecommunications service: see CCITT Recommendation I.112 [2], § 2.2, definition 201.

Supplementary service: see CCITT Recommendation I.210 [4], § 2.4.

ISDN number: a number conforming to the numbering plan and structure specified in CCITT Recommendation E.164 [3].

Subaddress: see CCITT Recommendation E.164 [3], § 11.2.

Temporary mode: in this mode, the COLR supplementary service is invoked on a per call basis.

Permanent mode: in this mode, the COLR supplementary service is invoked automatically by the network on all calls.

Override category: this allows a special category of users (e.g. police) to override the COLR supplementary service in order to receive the connected line identity. This is a national matter, the operation of which is beyond the scope of this standard.

Basic access: see CCITT Recommendation Q.9 [6], § 1, definition 1551.

Primary rate access: see CCITT Recommendation Q.9 [6], § 1, definition 1552.

4 Symbols and abbreviations

COLP	Connected Line Identification Presentation
COLR	Connected Line Identification Restriction
ISDN	Integrated Services Digital Network

5 Description

The COLR supplementary service shall apply to the basic access and to the primary rate access.

The COLR supplementary service is a supplementary service offered to the connected party to prevent presentation of the connected party's ISDN number and subaddress information (if any), to the calling party. In the case where the calling party has an override category, see subclause 6.2.3.

6 Procedures

6.1 Provision and withdrawal

The COLR supplementary service, temporary mode, may be provided on a subscription basis or be generally available.

The COLR supplementary service, permanent mode, shall be provided on a subscription basis.

As a network option, the COLR supplementary service can be offered with several subscription options. A network providing the COLR supplementary service shall support temporary mode as a minimum. Subscription options are summarised in table 1.

Table 1

Subscription option	Values
Mode	<ul style="list-style-type: none"> - permanent mode (active for all calls) - temporary mode (specified by the user per call)
Temporary mode default	<ul style="list-style-type: none"> - presentation restricted - presentation not restricted

6.2 Normal procedures

6.2.1 Activation, deactivation and registration

The COLR supplementary service shall be activated on provision and deactivated on withdrawal. This supplementary service requires no registration.

6.2.2 Erasure

Not applicable.

6.2.3 Invocation and operation

6.2.3.1 Called user side

If the called party has subscribed to the COLR supplementary service in the permanent mode, then the network shall automatically invoke the COLR supplementary service for each incoming call.

If the called party has subscribed to the COLR supplementary service in the temporary mode with default value "presentation restricted", then the network shall automatically invoke the COLR supplementary service for each incoming call unless the default value is overridden by subscriber request at the time of answer.

If the called party has subscribed to the COLR supplementary service in the temporary mode with default value "presentation not restricted", then the network shall only invoke the COLR supplementary service if requested by the subscriber on answer.

6.2.3.2 Calling user side

If the calling party subscribes to the COLP supplementary service (see ETS 300 094 [5]) and the COLR supplementary service has been invoked, then the calling party shall receive an indication that the connected party number is not available due to restriction.

NOTE 1: If an ISDN supports the override category, then depending on national regulations, some networks may define categories of subscribers that have the ability to override the presentation restriction and have the connected party's ISDN number and subaddress information (if any) presented (e.g. the police). The ability to have such an override category is a national matter.

NOTE 2: In the case of the override category applying to a calling user on a call which originates in one ISDN and terminates in another ISDN, and if the COLR supplementary service is invoked, then the rules and regulations of the originating network apply.

6.2.4 Interrogation

Not applicable.

6.3 Exceptional procedures

6.3.1 Activation, deactivation and registration

Not applicable.

6.3.2 Erasure

Not applicable.

6.3.3 Invocation and operation

Not applicable.

6.3.4 Interrogation

Not applicable.

7 Intercommunication considerations

For calls between public ISDNs, when the COLR supplementary service is invoked, the destination network shall provide the originating network with a notification that the ISDN number of the connected party and the subaddress information (if any) is not allowed to be presented to the calling party.

NOTE 1: When the COLR supplementary service is invoked, some network providers may not send the connected line identity to other network providers.

NOTE 2: It is assumed that a network able to carry a connected line identity is also able to carry the connected line restriction indication.

7.1 Interworking with non-ISDNs

As a network option the destination network can restrict any information identifying the connected party from being returned to the originating network when the COLR supplementary service has been invoked.

7.2 Interworking with private ISDNs

On calls from the private ISDN to the public ISDN, the public ISDN can restrict any information identifying the connected party from being sent to the private ISDN when the COLR supplementary service has been invoked.

On calls from the public ISDN, the private ISDN can indicate that the COLR supplementary service has been invoked.

8 Interactions with other supplementary services

8.1 Advice of charge

8.1.1 Charging information at call set-up time

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

8.1.2 Charging information during the call

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

8.1.3 Charging information at the end of the call

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

8.2 Call waiting

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

8.3 Call hold

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

8.4 Call transfer

8.4.1 Explicit call transfer

A connected user's restriction requirements from the original call shall be used in order to restrict the presentation of that user's address to the other user in a transferred call.

8.4.2 Single step call transfer

A connected user's restriction requirements from the original call shall be used in order to restrict the presentation of that user's address to the transferred-to user.

A transferred-to user's restriction requirements shall be used in order to restrict the presentation of that user's address to the other user in a transferred call.

8.5 Number identification services

8.5.1 Calling line identification presentation

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

8.5.2 Calling line identification restriction

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

8.5.3 Connected line identification presentation

The COLR supplementary service shall normally take precedence over the COLP supplementary service.

The COLP supplementary service can take precedence over the COLR supplementary service when the calling user has an override category. This is a national matter, the operation of which is outside the scope of this standard.

8.5.4 Connected line identification restriction

Not applicable.

8.6 Closed user group

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

8.7 Completion of calls to busy subscriber

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

8.8 Conference services

8.8.1 Conference call, add-on

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

8.8.2 Meet me conference

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

8.9 Direct dialling in

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

8.10 Diversion services

8.10.1 Call forwarding unconditional

If a forwarded-to user subscribes to the COLR supplementary service "permanent mode", then the forwarded-to user's number shall not be provided with the notification that the call has been forwarded.

If a forwarded-to user subscribes to the COLR supplementary service "temporary mode", then the forwarded-to user's number shall not be provided until negotiation with the user has taken place and a positive indication from the user has been received (i.e. the default value will not be used). Note that the forwarded-to user's number can still be released on answer, after confirmation, or using the default.

In each of the above situations, a calling user that subscribes to the COLP supplementary service and who has override capability will not receive the forwarded-to user's number as part of the diverting notification information, but can use the override capability in order to receive the connected line identity when the call is answered.

8.10.2 Call forwarding busy

If a forwarded-to user subscribes to the COLR supplementary service "permanent mode", then the forwarded-to user's number shall not be provided with the notification that the call has been forwarded.

If a forwarded-to user subscribes to the COLR supplementary service "temporary mode", then the forwarded-to user's number shall not be provided until negotiation with the user has taken place and a positive indication from the user has been received (i.e. the default value will not be used). Note that the forwarded-to user's number can still be released on answer, after confirmation, or using the default.

In each of the above situations, a calling user that subscribes to the COLP supplementary service and who has override capability will not receive the forwarded-to user's number as part of the diverting notification information, but can use the override capability in order to receive the connected line identity when the call is answered.

8.10.3 Call forwarding no reply

If a forwarded-to user subscribes to the COLR supplementary service "permanent mode", then the forwarded-to user's number shall not be provided with the notification that the call has been forwarded.

If a forwarded-to user subscribes to the COLR supplementary service "temporary mode", then the forwarded-to user's number shall not be provided until negotiation with the user has taken place and a positive indication from the user has been received (i.e. the default value will not be used). Note that the forwarded-to user's number can still be released on answer, after confirmation, or using the default.

In each of the above situations, a calling user that subscribes to the COLP supplementary service and who has override capability will not receive the forwarded-to user's number as part of the diverting notification information, but can use the override capability in order to receive the connected line identity when the call is answered.

8.10.4 Call deflection

If a deflected-to user subscribes to the COLR supplementary service "permanent mode", then the deflected-to user's number shall not be provided with the notification that the call has been diverted.

If a deflected-to user subscribes to the COLR supplementary service "temporary mode", then the deflected-to user's number shall not be provided until negotiation with the user has taken place and a positive indication from the user has been received (i.e. the default value will not be used). Note that the deflected-to user's number can still be released on answer, after confirmation, or using the default.

In each of the above situations, a calling user that subscribes to the COLP supplementary service and who has override capability will not receive the deflected-to user's number as part of the diverting notification information, but can use the override capability in order to receive the connected line identity when the call is answered.

8.11 Freephone

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

8.12 Malicious call identification

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

8.13 Multiple subscriber number

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

8.14 Subaddressing

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

8.15 Terminal portability

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

8.16 Three party service

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

8.17 User-user signalling

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

History

Document history	
January 1992	First Edition
January 1996	Converted into Adobe Acrobat Portable Document Format (PDF)