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**Public Switched Telephone Network (PSTN);
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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).

In accordance with CCITT Recommendation I.130 [3], the following three level structure is used to describe supplementary telecommunications services for the 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.

The principle of this three level structure has been used to develop the service description for the Calling Line Identification Restriction (CLIR) supplementary service as provided by European public telecommunication operators for the Public Switched Telephone Network (PSTN).

This ETS details the stage 1 aspects (overall service description) for the Calling Line Identification Restriction (CLIR) supplementary service for the PSTN.

ETS 300 659-1 [5] specifies the subscriber line protocol for the CLIR supplementary service.

Transposition dates	
Date of adoption	21 February 1997
Date of latest announcement of this ETS (doa):	30 June 1997
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 December 1997
Date of withdrawal of any conflicting National Standard (dow):	31 December 1997

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1 Scope

This European Telecommunication Standard (ETS) defines the stage one of the Calling Line Identification Restriction (CLIR) supplementary service for the Public Switched Telephone Network (PSTN) as provided by European public network operators. Stage one is an overall service description from the user's point of view (see CCITT Recommendation I.130 [3]), but does not deal with the details of the human interface itself.

This ETS defines the interworking requirements between PSTNs and private networks, PSTNs and Integrated Services Digital Networks (ISDNs), and Public Land Mobile Networks (PLMNs).

Interactions with supplementary services not listed in clause 8 are outside the scope of this ETS.

Charging principles are outside the scope of this ETS.

The CLIR supplementary service enables the calling party to prevent presentation of its calling line identity to the called party.

This ETS is applicable to the ETS containing the subscriber line protocol to support the CLIR supplementary service. Where the text indicates the status of a requirement (i.e. as strict command or prohibition, as authorization leaving freedom, or as a capability or possibility), this shall be reflected in the text of that standard.

Furthermore, conformance to this ETS is met by conforming to the standards containing the subscriber line protocol to support the CLIR supplementary service with the field of application appropriate to the equipment being implemented. Therefore no method of testing is provided for this ETS.

2 Normative references

This ETS 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 ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 089 (1992): "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".
- [2] ETS 300 090 (1992): "Integrated Services Digital Network (ISDN); Calling Line Identification Restriction (CLIR) supplementary service; Service description".
- [3] CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [4] ETS 300 648: "Public Switched Telephone network (PSTN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".
- [5] ETS 300 659-1 (1996): "Public Switched Telephone Network (PSTN); Subscriber line protocol over the local loop for display (and related) services; Part 1: On hook data transmission".

3 Definitions

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

calling line identity: The number (an information) identifying the calling user.

served user: The user to whom the CLIR supplementary service is provided.

temporary mode: This mode allows the served user to indicate on per call basis whether or not presentation of the served user's calling line identity is allowed.

permanent mode: The CLIR supplementary service is invoked automatically by the network on all calls originated by the calling user.

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

analogue access: An ordinary subscriber line access or a Private Branch Exchange (PBX) analogue line access.

4 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
ISDN	Integrated Services Digital Network
PLMN	Public Land Mobile Network
PSTN	Public Switched Telephone Network
PBX	Private Branch Exchange

5 Description

The CLIR supplementary service shall apply to an analogue access.

NOTE: Some networks may provide the CLIR supplementary service only for analogue accesses that are connected to digital exchanges.

The CLIR supplementary service enables the calling party to prevent presentation of its calling line identity to the called party.

In the case where the called party has an override category, see subclause 6.2.3.

6 Procedures

6.1 Provision and withdrawal

The CLIR supplementary service, temporary mode, shall either be provided after prior arrangement with the service provider or be generally available.

The CLIR supplementary service, permanent mode, shall be provided after prior arrangement with the service provider.

As a service provider option, the CLIR supplementary service can be offered with several subscription options. A network providing the CLIR supplementary service shall support a CLIR mode of temporary at a minimum. Subscription options are summarized in table 1.

Table 1: Subscription options

Subscription option	Values
CLIR mode	- permanent (active for all calls) - temporary (specified by user per call)
Temporary mode default	- presentation restricted - presentation not restricted

6.2 Normal procedures

6.2.1 Registration and erasure

Not applicable.

6.2.2 Activation and deactivation

The CLIR supplementary service shall be activated on provision and deactivated on withdrawal.

As a service provider option, the served user can select a temporary mode default value to be applied to the served user's line.

6.2.3 Invocation and operation

6.2.3.1 Calling user side

If the calling party has subscribed to the CLIR supplementary service in the permanent mode, then the network shall automatically invoke the CLIR supplementary service for each outgoing call.

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

If the calling user has subscribed to the CLIR supplementary service in the temporary mode with default value "presentation not restricted", then the network shall only invoke the CLIR supplementary service if requested by the subscriber at the time of the call request.

6.2.3.2 Called user side

If the called party subscribes to the CLIP supplementary service, ETS 300 659-1 [5], and the CLIR supplementary service has been invoked, then the called party shall receive an indication that the calling line identity is not available due to restriction.

NOTE 1: If a PSTN supports the override category, then depending on national regulations, some networks may define categories of subscriber that have the ability to override the presentation restriction and have the calling party's calling line identity 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 called user on a call which originates in one network and terminates in another network and if the CLIR supplementary service is invoked, the rules and regulations of the destination network apply. For example, the override category may not be applicable in the originating network but may be applicable in the destination network. In this situation a call with the CLIR supplementary service invoked can still be overridden in the destination network.

6.2.4 Interrogation

As a service provider option, the served user can interrogate the network in order to determine the temporary mode default value. Information shall be provided in response to a request indicating:

- presentation restricted;
- presentation not restricted.

6.3 Exceptional procedures

6.3.1 Registration and erasure

Not applicable.

6.3.2 Activation and deactivation

Not applicable.

6.3.3 Invocation and operation

Not applicable.

6.3.4 Interrogation

If the calling party has not subscribed to the CLIR supplementary service in the temporary mode, then the interrogation request shall be rejected.

7 Intercommunication considerations

On calls to or via PSTNs, it cannot be assured that a calling line restriction indication can be carried to the destination network. As a network option the originating network can restrict any information identifying the calling party from being forwarded to the destination network when the CLIR supplementary service is applicable. If a destination network receives a calling line identity without any indication of presentation allowed or restricted, the destination network shall act according to its rules and regulations and agreement between the originating and destination public network operators.

For internetwork calls, when the CLIR supplementary service is invoked, the originating network shall provide the destination network with a notification that the calling line identity is not allowed to be presented to the called party.

NOTE: When the CLIR supplementary service is invoked, some networks may not send the identity of the calling line to other networks.

7.1 Interworking with public ISDNs

If presentation of the calling line identity of the PSTN user is not allowed this identity shall not be presented to the called ISDN user.

7.2 Interworking with private networks

As a service provider option, the CLIR supplementary service can be available to private networks.

7.3 Interworking with PLMNs

If presentation of the calling line identity of the PSTN user is not allowed, then the calling line identification shall not be presented to the called PLMN user.

8 Interactions with other supplementary services

8.1 Calling line identification presentation

The CLIR supplementary service shall take precedence over the CLIP supplementary service unless the called user has an override category (see note).

NOTE: The CLIP supplementary service can take precedence over the CLIR supplementary service when the called user has an override category. This is a national matter, the operation of which is outside the scope of this ETS.

8.2 Calling line identification restriction

Not applicable.

History

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