Technical Specification Group Services and System Aspects   *TSGS#8(00)0199*
Meeting #8, Düsseldorf, Germany, 26-28 June 2000

Source: **TSG SA1**

Title: **CRs to Calling Line Identity (22.081)**

Document for: **Approval**

Agenda Item: **6.1.3**

Doc-1st-Level	Doc-2nd-Level	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New
SP-000199	S1-000443	22.081	003		R99	B	Access dependent services	3.1.0	3.2.0

TSG-SA WG 1 (Services) meeting #9TSG S1 (00) 443
Taastrup, Denmark 17th to 21st July 2000   Agenda Item:

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

22.081	**CR**	**003**		Current Version:	3.1.0	

GSM (AA.BB) or 3G (AA.BBB) specification number ?   ? *CR number as allocated by MCC support team*

For submission to: **TSG#8**   for approval **X**   strategic ☐ *(for SMG*
list expected approval meeting # here ?   for information ☐   non-strategic ☐ *use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ☐   ME **X**   UTRAN / Radio **X**   Core Network **X**
(at least one should be marked with an X)

Source:	Nokia	**Date:**	5/6/00

Subject:	Cause for no CLI

Work item:	

Category:

				Release:		
F	Correction	☐		Phase 2	☐
A	Corresponds to a correction in an earlier release	☐		Release 96	☐
B	Addition of feature	**X**		Release 97	☐
C	Functional modification of feature	☐		Release 98	☐
D	Editorial modification	☐		Release 99	**X**
				Release 00	☐

(only one category shall be marked with an X)

Reason for change:	Cause for no CLI added.

Clauses affected:	10

Other specs affected:

Other 3G core specifications	**X**	?	List of CRs:	CR's from TSG-CN4/CN1
Other GSM core specifications	☐	?	List of CRs:	
MS test specifications	☐	?	List of CRs:	
BSS test specifications	☐	?	List of CRs:	
O&M specifications	☐	?	List of CRs:	

Other comments:	

help.doc

<--------- double-click here for help and instructions on how to create a CR.

0 Scope

The present document describes the Supplementary Services belonging to the group Line Identification Supplementary Services.

The general aspects, including definitions and recommended provision, of the description of the Supplementary Services are given in 3GPP TS 22.004.

The group of Line Identification Supplementary Services is divided into the following four Supplementary Services:

CLIP - Calling line identification presentation (clause 1);

CLIR - Calling line identification restriction (clause 2);

COLP - Connected line identification presentation (clause 3);

COLR - Connected line identification restriction (clause 4).

Definition of line identity: The line identity is made up of a number of information units:

- the subscriber's national ISDN/MSISDN number (MSISDN number is the number stored in the VLR);

- the country code;

- optionally, subaddress information. The PLMN cannot be responsible for the content of this subaddress. (For definition of the subaddress see ITU-T Recommendation E.164 [3] subclause 11.2).

  In a full ISDN environment, the line identity shall include all the address information necessary to unambiguously identify a subscriber.

  The calling line identity is the line identity of the calling party.

  The connected line identity is the line identity of the connected party.

If for the line identity of the calling party or the connected party additional line identification is received (additional calling party/connected party number) in a PLMN this additional line identification shall be used for the presentation purpose of the line identification presentation services.

Definition of Presentation and Screening Indicators: In addition to or instead of the line identity, the network may give a Presentation Indicator (PI) and/or a Screening Indicator (SI) to the served subscriber. The following information may be given:

- Presentation Indicator showing:

  a) presentation allowed, or

  b) presentation restricted, or

  c) number not available due to interworking;

If Presentation Indicator is set to "Presentation Restricted", then the MS can get additional information on the Cause of no CLI, if provided by the network.

The Cause of no CLI value may be one of the following :

- Unavailable

- reject by user

- interaction with other services

- coin line / pay phone

- Screening Indicator showing:

  a) user provided, verified and passed, or

  b) user provided, not screened, or

  c) network provided.

If the line identity is that of a PLMN subscriber, then:

the national number and the country code shall always be provided by the network;

the subaddress shall only be included if it is provided by the user (or user equipment);

the screening indicator shall indicate "network provided".

0.1 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.

? For this Release 1999 document, references to GSM documents are for Release 1999 versions (version 8.x.y).

[1] GSM 01.04: "Digital cellular telecommunications system (Phase 2+); Abbreviations and acronyms".

[2] GSM 22.004: General on Supplementary Services".

[3] ITU-T Recommendation E.164: "Numbering plan for the ISDN era".

[4] TR 21.905: " Vocabulary for 3GPP Specifications ".

0.2 Abbreviations

Abbreviations used in the present document are listed in GSM 01.04 and TR 21.905 [4].

1 Calling Line Identification Presentation (CLIP)

1.1 Definition

The CLIP Supplementary Service provides the called party with the possibility to receive the line identity of the calling party.

1.2 Description

1.2.1 Description

This Supplementary Service provides for the ability to indicate the line identity of the calling party to the called party. The network shall deliver the calling line identity to the called party at call set-up time, regardless of the terminal capability to handle the information.

1.2.2 Applicability to telecommunication services

The applicability of this Supplementary Service is defined in GSM 22.004 [2].

1.3 Normal procedures with successful outcome

1.3.1 Provision

This Supplementary Service is provisioned for all Basic Services subscribed to and to which it is applicable, i.e. not

provisioned for any subset of these Basic Services.

Override category within a PLMN

Override category within an ISDN/PLMN. Depending on national regulations, some networks may define categories of subscribers that have the ability to override the presentation restriction (CLIR, clause 2) and have the calling line identity presented (e.g., the police). The ability to have such override category is a national option.

Override category between a PLMN and a network providing calling line identification restriction

Override category between ISDN/PLMNs. When a call originates in one ISDN/PLMN and terminates in another ISDN/PLMN and the CLIR Supplementary Service is applied, the rules and regulations of the destination network shall 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 applied can still be overridden in the destination network.

The override category is only applicable within the HPLMN country.

1.3.2 Withdrawal

The CLIP Supplementary Service shall be withdrawn at the customer's request or for administrative reasons.

1.3.5 Activation

The CLIP Supplementary Service is activated as a result of provision.

1.3.6 Deactivation

The CLIP Supplementary Service is deactivated as a result of withdrawal.

1.3.7 Invocation

The network shall automatically invoke the CLIP Supplementary Service in the call set-up phase.

1.3.8 Normal operation with successful outcome

A user who has subscribed to the CLIP Supplementary Service and receives a call shall also receive the line identity of the calling party.
In addition to or instead of the calling line identity, the subscriber may be given a Presentation Indicator and/or a Screening Indicator with the relevant information. If provided by the network, the subscriber may also be given some additional information on the Cause of no CLI in case of a presentation restricted.

1.3.11 Interrogation

Status check

The mobile subscriber can request the status of the Supplementary Service and be informed if the service is provided to her.

1.4 Exceptional procedures or unsuccessful outcome

If the CLIR Supplementary Service is applicable to the call, then the called PLMN user shall receive an indication that the calling line identity is not available because of restriction.

NOTE: See also subclause 1.3.1 (override category).

In some interworking situations in which the connection is not completely supported by the sufficient signalling capability, then the called PLMN user shall receive an indication that the calling line identity is not available.
For an international call in which the originating network does not provide the calling line identity, then the called PLMN user shall receive an indication that the calling line identity is not available.

1.5 Alternate procedures

None identified.

1.6 Interactions with other Supplementary Services

1.6.81.2 Calling line identification restriction

The CLIR Supplementary Service shall take precedence over the CLIP Supplementary Service.
The CLIP Supplementary Service can take precedence over the CLIR Supplementary Service when the called user has an override category. The availability of the override category as well as the handling of calling line identity parameters for the override category is a national matter.

1.6.82.1 Call forwarding unconditional

When a call has been forwarded and the forwarded-to user has been provided with the CLIP Supplementary Service, the forwarded-to user shall receive the number of the original calling user, if this calling user has not subscribed to or invoked the CLIR Supplementary Service.

1.6.82.2 Call forwarding on mobile subscriber busy

Same as the interaction with call forwarding unconditional.

1.6.82.3 Call forwarding on no reply

Same as the interaction with call forwarding unconditional.

1.6.82.4 Call forwarding on mobile subscriber not reachable

Same as the interaction with call forwarding unconditional.

1.6.83.1 Call Waiting

If the served mobile subscriber is provisioned with the CLIP service, the notification of an incoming (waiting) call offered to that subscriber shall include the calling line identity, as for a normal call.

1.7 Interworking considerations

According to national network specific rules, the CLIP Supplementary Services need not be applicable, if at least one of the two parties is not an ISDN or PLMN subscriber.
2   Calling Line Identification Restriction (CLIR)

2.1 Definition

The CLIR Supplementary Service enables the calling party to prevent presentation of its line identity to the called party.

2.2 Description

2.2.1 Description

The CLIR Supplementary Service is a Supplementary Service offered to the calling party to prevent presentation of the calling party's line identity, to the called party. In the case where the called party has an override category, see subclause 2.4.

2.2.2 Applicability to telecommunications services

The applicability of this Supplementary Service is defined in GSM 22.004.

2.3 Normal procedures with successful outcome

2.3.1 Provision

This Supplementary Service is provisioned for all Basic Services subscribed to and to which it is applicable, i.e. not provisioned for any subset of these Basic Services.

As a service provider option, the CLIR Supplementary Service can be offered with one subscription option permanent (invoked for all relevant calls) or temporary (suppressed by the user on a per call basis).
In temporary mode, the subscriber may subscribe to the default values:

- presentation restricted: or,

- presentation not restricted.

The option applies to all BS which are provisioned for this SS.

2.3.2 Withdrawal

This Supplementary Service will be withdrawn at the subscriber's request or for administrative reasons.

2.3.5 Activation

The CLIR Supplementary Service shall be activated on provision.

2.3.6 Deactivation

The CLIR Supplementary Service shall be deactivated on withdrawal.

2.3.7 Invocation

If subscribed to in the permanent mode, then the network shall automatically invoke the CLIR Supplementary Service for each outgoing call.
If subscribed-to in the temporary mode with the default value "presentation restricted", then the network shall automatically invoke the CLIR Supplementary Service for each outgoing call unless CLIR is suppressed by subscriber request at the time of call request.
If subscribed-to in the temporary mode with the default value "presentation not restricted", then the network shall only invoke the CLIR Supplementary Service if requested by subscriber at the time of call request.

2.3.8 Normal operation with successful outcome

When the CLIR Supplementary Service is invoked, the originating network shall provide the destination network with a notification that the line identity of the calling party is not allowed to be presented to the called party. The originating network may also provide information on the cause of no CLI.
If the called party subscribes to the CLIP Supplementary Service 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.

2.3.11 Interrogation

Data request
The mobile subscriber can request the data of the Supplementary Service.
In response the following information shall be given:

- whether the service is provided of not;

- if provided which mode is subscribed;

- if subscribed-to the temporary mode, which default value.

2.4 Exceptional procedures or unsuccessful outcome

If the subscriber has subscribed to the permanent mode and she tries to suppress the invocation of the CLIR Supplementary Service per MMI command during call set-up (i.e. requests that the CLI is displayed), she shall be notified that the suppression has not been performed and the call set-up shall continue. If the user has not subscribed to CLIR Supplementary Service and she tries to invoke it during call set-up per MMI command (i.e. requests that the CLI is not displayed), the call set-up attempt shall be rejected.
If the called party has a relevant override category (see subclause 1.3.1), the restriction service will be overridden and the calling line identity will be presented to the called party.

2.5 Alternate Procedures

A VPLMN which supports the CLIR service shall ensure that the line identity of a subscriber whose HPLMN does not support the CLIR service shall not be displayed to the called party unless the subscriber wishes so or the called party has CLIR override capability.

2.6 Interactions with other Supplementary Services

2.6.81.1 Calling line identification presentation

See subclause 1.6.81.2.

2.6.82.1 Call forwarding unconditional

No interaction, i.e. when the CLIR Supplementary Service is applicable and invoked for the original calling subscriber, her line identity shall not be presented to the forwarded-to user unless the forwarded-to user has an override category.

2.6.82.2 Call forwarding on mobile subscriber busy

Same as the interaction with call forwarding unconditional.

2.6.82.3 Call forwarding on no reply

Same as the interaction with call forwarding unconditional.

2.6.82.4 Call forwarding on mobile subscriber not reachable

Same as the interaction with call forwarding unconditional.

2.7 Interworking considerations

On calls to or via non-ISDNs, it cannot be assured that a calling line identification restriction indication can be carried to the destination network. As a national 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.

For inter-network calls, when the CLIR Supplementary Service is invoked, the originating network shall provide the destination network with a notification that the line identity of the calling party is not allowed to be presented to the called party. The originating network may also provide information on the cause of no CLI.

NOTE: When the Supplementary Service CLIR is invoked, some network providers may not send the identity of the calling subscriber to other network.