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INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

SERVICE CAPABILITIES

CONNECTED LINE IDENTIFICATION RESTRICTION (COLR)

ITU-T Recommendation I.251.6

(Previously "CCITT Recommendation")

FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation I.251.6 was revised by ITU-T Study Group 1 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 21st February 1995.

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NOTE

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

CONTENTS

SUMMARY

Connected Line Identification Restriction (COLR) is a supplementary service offered to the connected party to restrict presentation of the connected party's ISDN number and sub-address information to the calling party.

CONNECTED LINE IDENTIFICATION RESTRICTION (COLR)

(revised in 1994)

1 Definition

Connected Line Identification Restriction (COLR) is a supplementary service offered to the connected party to restrict presentation of the connected party's ISDN number and sub-address information to the calling party.

2 Description

2.1 General description

When COLR is applicable and invoked, the destination node provides the originating node with a notification that the connected party's ISDN number and any sub-address information is not allowed to be presented to the calling party. In this case no connected party number is included in the call connected information to the calling party.

NOTE – When COLR is subscribed to, some network providers may not wish to send the identity of the connected customer to other network providers.

2.2 Specific terminology

None identified.

2.3 Qualification on the applicability to telecommunication services

None identified, i.e. this supplementary service is applicable to all telecommunication services.

Certain countries may define categories of subscribers that have the ability to override the presentation restriction and have the connected party's ISDN number and any sub-address presented (e.g. the police).

The ability to have such an override option is a national matter.

3 Procedures

3.1 Provision/withdrawal

COLR can be provided on a subscription basis or be generally available.

As a network provider option, COLR can be offered with the following subscription option.

Subscription option	Values
COLR mode	– Permanent (presentation restricted for all calls)
	– Temporary (specified by user per call)
Default (only for temporary mode)	– Presentation restricted
	– Presentation not restricted
NOTE – If COLR permanent mode is provided generally, all connected numbers will be restricted for presentation.	

3.2 Normal procedures

3.2.1 Activation/deactivation/registration

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

This supplementary service requires no registration.

3.2.2 Invocation and operation

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.

If the calling party subscribes to Connected Line Identification Presentation and the connected party had COLR activated, the calling party shall receive an indication that the presentation of the connected party number is restricted.

3.3 Exceptional procedures

3.3.1 Activation/deactivation/registration

No exceptional procedures identified.

3.3.2 Invocation and operation

No exceptional procedures identified.

3.4 Alternative procedures

No alternative procedures identified.

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 Interworking considerations

When a call originates in one ISDN and terminates in another ISDN and COLR is applied, the rules and regulations of the destination network (the host network) should apply.

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 sub-address information (if any) is not allowed to be presented to the calling party.

> NOTES
>
> 1   When the COLR supplementary service is invoked, some network providers may not send the connected line identity to other network providers.
>
> 2   It is assumed that a network able to carry a connected line identity is also able to carry the connected line restriction indication.

5.1 Interworking with non-ISDN networks

On calls to or via non-ISDNs, it cannot be assured that a COLR indication can be carried to the originating network. As a network option the destination network shall have the possibility to restrict any information identifying the connected party from being returned to the originating network when COLR is applicable. If a network receives a connected party ISDN number without any indication of presentation allowed or restricted, the originating network (the host network) will act according to its rules and regulations.

5.2 Interworking with private ISDN

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.

6 Interaction with other supplementary services

6.1 Advice of Charge (AOC)

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

6.2 Call Hold (HOLD)

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

6.3 Call transfer services (ECT, NCT)

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

If user C has subscribed to COLR, then neither user A nor user B shall receive the connected number when user A invokes any call transfer procedure.

6.4 Call Waiting (CW)

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

Assume that a call from a user C, invokes call waiting at user B, who has subscribed to the COLR service. User B would receive a call waiting indication but would not have his number returned when the call waiting indication is given.

6.5 Closed User Group (CUG)

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

6.6 Completion of calls services

6.6.1 Completion of Calls on No Reply (CCNR)

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

6.6.2 Completion of Calls to Busy Subscribers (CCBS)

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

6.7 Conference services

6.7.1 Conference Calling (CONF)

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

6.7.2 Three-Party Service (3PTY)

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

6.8 Diversion services

6.8.1 Call Deflection (CD)

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

If a deflected-to user subscribes to COLR "temporary mode", the provision of the deflected-to user's number to the calling user shall not be allowed during the alerting conditions of the call. The deflected-to user's connected number may still be provided on answer, based on COLR temporary mode operation.

In each of the above situations, a calling user that subscribes to COLP and having override capability shall not be able to receive the deflected-to user number as part of the diverting notification information, but can invoke COLP in order to receive the connected line identity when the call is answered.

6.8.2 Call Forwarding Busy (CFB)

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

If the forwarded-to user subscribes to COLR "temporary mode", the provision of the forwarded-to-user's number to the calling user shall not be allowed during the alerting condition of the call. The forwarded-to-user's connected number may still be provided on answer based on COLR temporary mode operation.

In each of the above situations, a calling user that subscribes to COLP and having override capability shall not be able to receive the forwarded-to user number as part of the diverting notification information, but can invoke COLP in order to receive the connected line identity when the call is answered.

6.8.3 Call Forwarding No Reply (CFNR)

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

If the forwarded-to user subscribes to COLR "temporary mode", the provision of the forwarded-to-user's number to the calling user shall not be allowed during the alerting condition of the call. The forwarded-to-user's connected number may still be provided on answer based on COLR temporary mode operation.

In each of the above situations, a calling user that subscribes to COLP and having override capability shall not be able to receive the forwarded-to user number as part of the diverting notification information, but can invoke COLP in order to receive the connected line identity when the call is answered.

6.8.4 Call Forwarding Unconditional (CFU)

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

If the forwarded-to user subscribes to COLR "temporary mode", the provision of the forwarded-to-user's number to the calling user shall not be allowed during the alerting condition of the call. The forwarded-to-user's connected number may still be provided on answer based on COLR temporary mode operation.

In each of the above situations, a calling user that subscribes to COLP and having override capability shall not be able to receive the forwarded-to user number as part of the diverting notification information, but can invoke COLP in order to receive the connected line identity when the call is answered.

6.9 Direct-Dialling-In (DDI)

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

6.10 In-call Modification (IM)

The connected user's identity of the second terminal shall not be presented to the calling user after the incall modification has occurred.

6.11 ISDN Freephone (IFS)

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

6.12 Line Hunting (LH)

If the connected user supplies a number, then the COLR supplementary service subscribed to the number that is sent to the calling user shall apply. If a direct dialling-in number is sent, the COLR supplementary service subscribed to that hunt group number shall apply.

If the connected user does not supply any number, then the COLR supplementary service subscribed to that hunt group number applies.

6.13 Malicious Call Identification (MCID)

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

6.14 Multi-level Precedence and Preemption (MLPP)

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

6.15 Multiple Subscriber Number (MSN)

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

6.16 Name identification services

6.16.1 Calling Name Identification Presentation (CNIP)

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

6.16.2 Calling Name Identification Restriction (CNIR)

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

6.17 Number identification services

6.17.1 Calling Line Identification Presentation (CLIP)

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

6.17.2 Calling Line Identification Restriction (CLIR)

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

6.17.3 Connected Line Identification Presentation (COLP)

COLR will take precedence over COLP. The only occasion when a user subscribing to COLP can take precedence over COLR is when the user is in an override category. This is a national option.

6.17.4 Connected Line Identification Restriction (COLR)

Not applicable.

6.18 Outgoing Call Barring (OCB)

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

6.19 Reverse Charging (REV)

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

6.20 Sub-addressing (SUB)

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

6.21 Terminal Portability (TP)

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

6.22 User-to-User Signalling (UUS)

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

7 Dynamic description

The dynamic description for this service is shown in Figure 1/I.251.5.