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Technical Specification

Universal Mobile Telecommunications System (UMTS); Call Deflection (CD) Supplementary Service - Stage 3 (3GPP TS 24.072 version 4.0.0 Release 4)



Reference

RTS/TSGN-0424072Uv4

Keywords

UMTS

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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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Foreword

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Foreword

This Technical Specification has been produced by the 3GPP.

This TS describes procedures on the radio interface for the call deflection supplementary service within the 3GPP system.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version 3.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 Indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the specification;

1 Scope

This Global System for Mobile communications Technical Specification specifies the procedures used at the radio interface (reference point Um as defined in GSM 04.02) for normal operation of Call Deflection (CD) supplementary service. Provision and withdrawal of supplementary services is an administrative matter between the mobile subscriber and the service provider and cause no signalling on the radio interface.

2 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. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] GSM 01.04: "Digital cellular telecommunications system (Phase 2+); Abbreviations and acronyms".
- [2] GSM 02.72: "Digital cellular telecommunications system (Phase 2+); Call Deflection (CD) supplementary service Stage 1".
- [3] GSM 04.02: " Digital cellular telecommunications system (Phase 2+); GSM Public Land Mobile Network (PLMN) access reference configuration".
- [4] GSM 04.08: " Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 specification".
- [5] GSM 04.80: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 supplementary services specification; Formats and coding".

3 Definitions and abbreviations

3.1 Abbreviations

Abbreviations used in this specification are listed in GSM 01.04.

4 Call Deflection (CD)

4.1 Normal operation

4.1.1 Served mobile subscriber side

The served mobile subscriber may invoke the call deflection supplementary service if an incoming call is offered. According to GSM 02.72 this may happen as an automatic response from the mobile station if the call is offered or as the result of a subscriber action.

The mobile station shall invoke the call deflection supplementary service by initiating call clearing with a DISCONNECT message including the call deflection request (refer to figure 4.1). The call deflection request shall contain the DeflectedToNumber which may be accompanied by a DeflectedToSubAddress.

The MS may invoke the call deflection supplementary service at every time after call confirmation until the call is accepted (refer to GSM 04.08). If the network accepts the call deflection request, it shall continue call clearing. The result indication shall be returned to the mobile station in the RELEASE message.

If the network cannot accept the call deflection request, it shall continue call clearing. The corresponding error indication shall be returned to the mobile station in the RELEASE message. Error values are specified in GSM 04.80.

During the call deflection request the MS shall run a timer TCD. This timer is started when the call deflection request is sent and stopped when a response is received from the network. If this timer expires the MS shall assume that the call deflection request has failed, locally release the invokeID, inform the user of the failure and continue call clearing as defined in GSM 04.08.

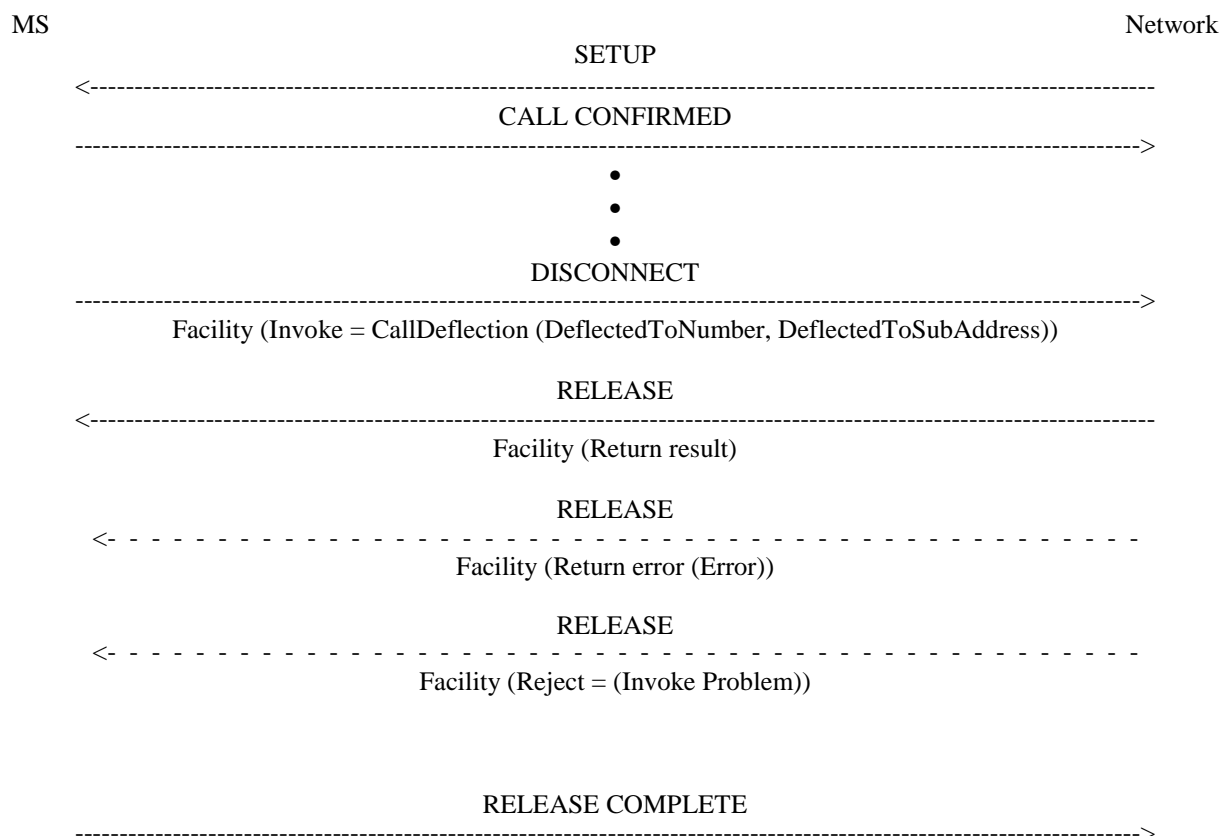


Figure 4.1: Call deflection invocation for an incoming call

4.1.2 Deflected-to mobile subscriber side

As for the call forwarding supplementary services the deflected-to mobile subscriber will receive a NotifySS operation containing the SS Notification indicating that the incoming call is a forwarded call. When available, the SS Code of the Call Deflection supplementary service is included, see figure 4.2.

When multiple diversions occurs the value of the SS Code shall relate to the last invoked diversion service.

In addition the deflected-to subscriber will receive the redirecting party BCD number and optionally, a redirecting party subaddress.

The redirecting party BCD number information element is made up of a number of information units as defined in GSM 04.08.

In addition to or instead of the redirecting party's digits, the subscriber may be given the following information:

- screening indicator;
- presentation indicator.

Indicator values are given in GSM 04.08.

The redirecting party subaddress information element is made up of a number of information units as defined in GSM 04.08.

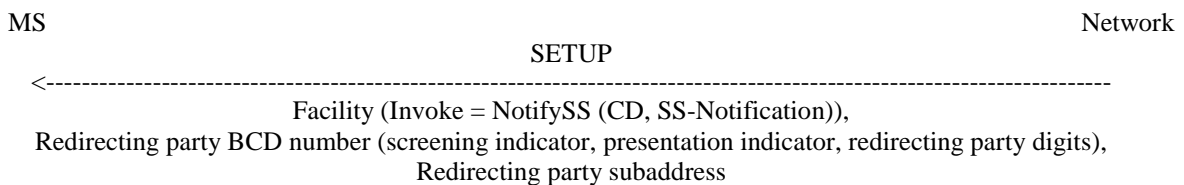


Figure 4.2: Notification to the forwarded to mobile subscriber that the incoming call is a forwarded call

4.1.3 Calling mobile subscriber side

As a subscription option, the served mobile subscriber can request that the calling mobile subscriber receives a NotifySS operation containing the SS Notification indicating that the call has been deflected. When available, the SS Code of the call deflection supplementary service is included, see figure 4.3.

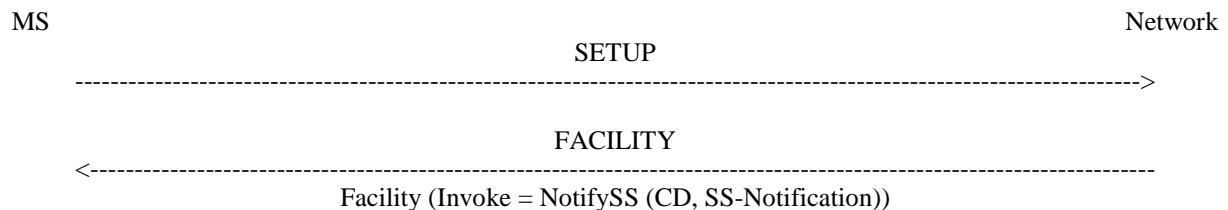


Figure 4.3: Notification to the calling mobile subscriber that the call is forwarded

Annex A (informative): Change history

Change history						
TSG CN#	Spec	Version	CR	<Phase>	New Version	Subject/Comment
Apr 1999	GSM 04.72	7.0.0				Transferred to 3GPP CN1
CN#03	24.072				3.0.0	Approved at CN#03
CN#11	24.072	3.0.0			4.0.0	Release 4 after CN#11

History

Document history		
V4.0.0	March 2001	Publication