

ETSI TS 124 072 V3.0.0 (2000-01)

Technical Specification

**Digital cellular telecommunications system (Phase 2+) (GSM);
Universal Mobile Telecommunications System (UMTS);
Call Deflection (CD) Supplementary Service - Stage 3
(3G TS 24.072 version 3.0.0 Release 1999)**



Reference

DTS/TSGN-SS24072U

Keywords

GSM, UMTS

ETSI

Postal address

F-06921 Sophia Antipolis Cedex - FRANCE

Office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - 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

Internet

secretariat@etsi.fr
Individual copies of this ETSI deliverable
can be downloaded from
<http://www.etsi.org>
If you find errors in the present document, send your
comment to: editor@etsi.fr

Important notice

This ETSI deliverable may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2000.
All rights reserved.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by the ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables. The mapping of document identities is as follows:

For 3GPP documents:

3G TS | TR nn.nnn "<title>" (with or without the prefix 3G)

is equivalent to

ETSI TS | TR 1nn nnn "[Digital cellular telecommunications system (Phase 2+) (GSM);] Universal Mobile Telecommunications System; <title>

For GSM document identities of type "GSM xx.yy", e.g. GSM 01.04, the corresponding ETSI document identity may be found in the Cross Reference List on www.etsi.org/key

Contents

Foreword	4
1 Scope.....	5
2 References.....	5
3 Definitions and abbreviations	5
3.1 Abbreviations.....	5
4 Call Deflection (CD).....	6
4.1 Normal operation.....	6
4.1.1 Served mobile subscriber side.....	6
4.1.2 Deflected-to mobile subscriber side	7
4.1.3 Calling mobile subscriber side	7
Annex A: Change history.....	8
History.....	9

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.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [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.

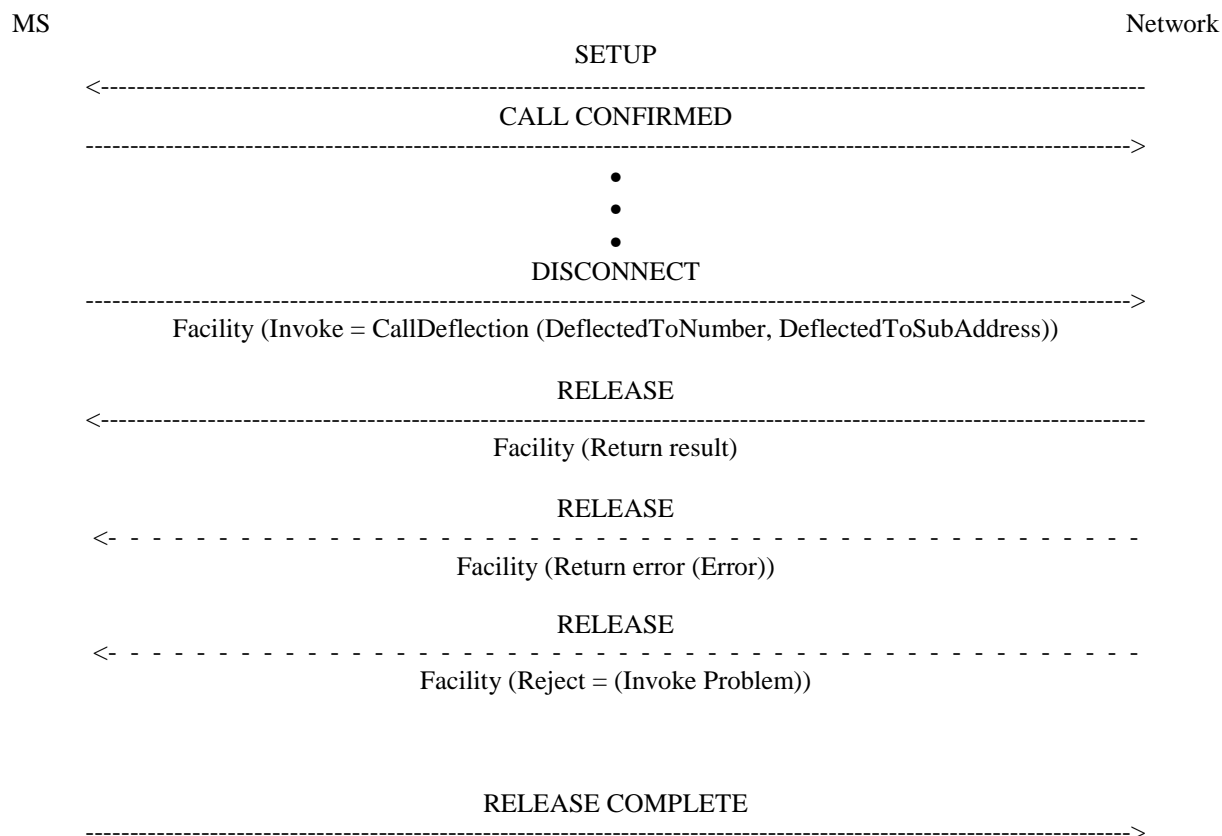


Figure 4.1: Call deflection invocation for an incoming call

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.

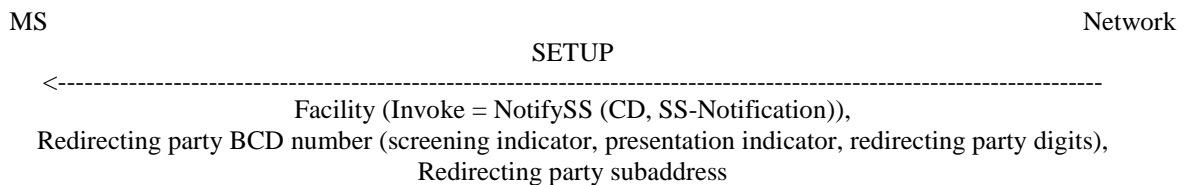


Figure 4.2: Notification to the forwarded to mobile subscriber that the incoming call is a forwarded call

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.

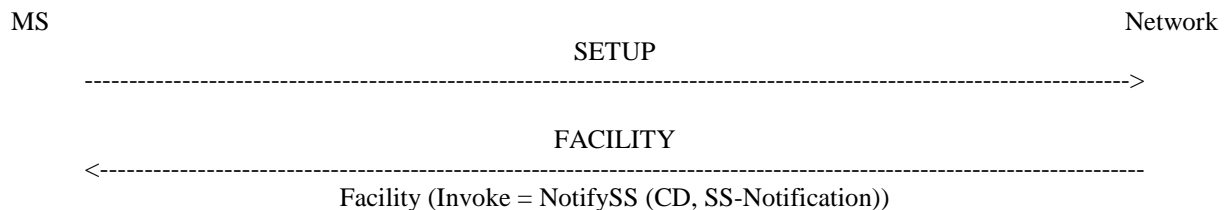


Figure 4.3: Notification to the calling mobile subscriber that the call is forwarded

Annex A: 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

History

Document history		
V3.0.0	January 2000	Publication