

# ETSI TS 101 517 V7.0.1 (2001-10)

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*Technical Specification*

**Digital cellular telecommunications system (Phase 2+);  
Call Deflection (CD) Supplementary Service;  
Stage 3  
(GSM 04.72 version 7.0.1 Release 1998)**

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**GSM**®  
GLOBAL SYSTEM FOR  
MOBILE COMMUNICATIONS



Reference

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Keywords

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## Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Special Mobile Group (SMG).

This Specification describes procedures on the radio interface for the call deflection supplementary service within the digital cellular telecommunications system.

The contents of this TS are subject to continuing work within SMG and may change following formal SMG approval. Should SMG modify the contents of this TS it will then be republished by ETSI with an identifying change of release date and an increase in version number as follows:

Version 7.x.y

where:

- 7 GSM Phase 2+ Release 1998;
- x the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.;
- y the third digit is incremented when editorial only changes have been incorporated in the specification.

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# 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.

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# 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.
- For this Release 1998 document, references to GSM documents are for Release 1998 versions (version 7.x.y).

- [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".

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# 3 Definitions and abbreviations

## 3.1 Abbreviations

Abbreviations used in the present document are listed in GSM 01.04.

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# 4 Call Deflection (CD)

## 4.1 Normal operation

### 4.1.1 Served mobile subscriber side

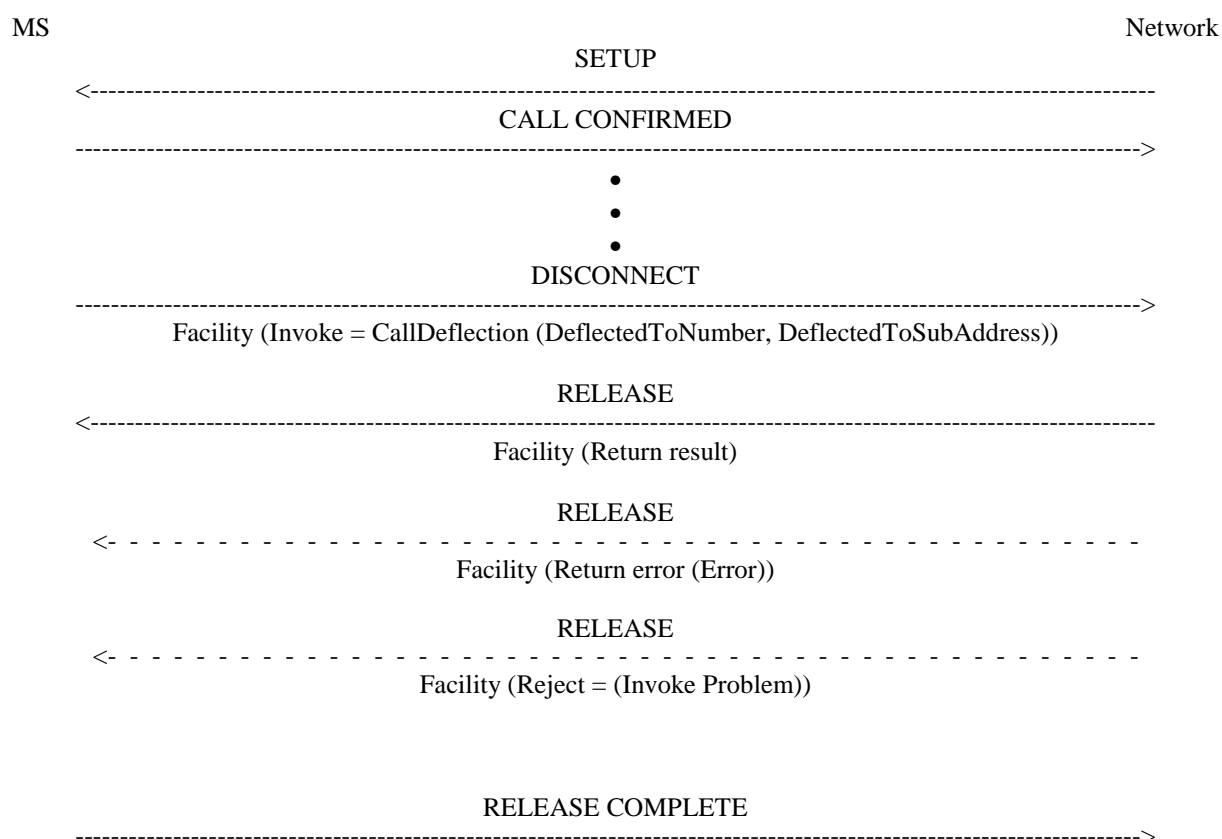
The served mobile subscriber may invoke the call deflection supplementary service if an incoming call is offered. According to GSM 02.72 this may happen as an automatic response from the mobile station if the call is offered or as the result of a subscriber action.

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.

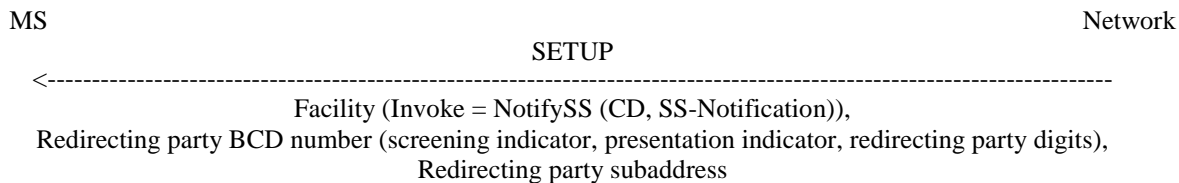
In addition to or instead of the redirecting party's digits, the subscriber may be given the following information:

- screening indicator;

- presentation indicator.

Indicator values are given in GSM 04.08.

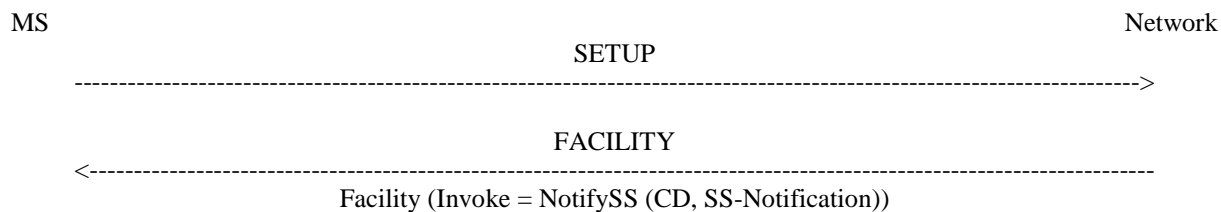
The redirecting party subaddress information element is made up of a number of information units as defined in GSM 04.08.



**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): Status of GSM 04.72

<b>Status of Technical Specification GSM 04.72: stage 3 of Call Deflection</b>		
<b>Date</b>	<b>Version</b>	<b>Comments</b>
		No Phase 1 and no Phase 2 version
May 1998	0.0.0	first draft at the SMG3-WPB meeting in Basingstoke, 11-15 May 1998
May 1998	0.1.0	Incorporation of comments during the SMG3-WPB meeting in Basingstoke
August 1998	0.2.0	presented at the SMG3-WPB meeting in Stuttgart, 10-14 August 1998
August 1998	0.2.1	clean version 0.2.0 to SMG3 September 1998 in Bonn
October 1998	1.0.0	to SMG#27 for information
October 1998	1.1.0	presented at the SMG3-WPB meeting in Chicago, 26-30 October 1998
January 1999	1.2.0	presented at the SMG3-WPB meeting in Sophia Antipolis, 11-15 January 1999
January 1999	2.0.0	presented at the SMG#28 for approval
February 1999	7.0.0	TS approved by SMG#28
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# History

<b>Document history</b>		
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