

3GPP
Technical Specification Group Core Networks
Meeting #3, Yokohama, 21-23 April 1999

Document **NP-99132**

Source: ETSI STC SMG1

Title: GSM data streamlining

Document for: Decision

Attention: Agenda item 5

CN is invited to endorse these CRs to be passed to SMG#29 for approval.

CHANGE REQUEST No : Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

Technical Specification GSM / UMTS: **Version**

Submitted to SMG list plenary meeting or STC here ↑ for approval without presentation ("non-strategic")
 for information with presentation ("strategic")

PT SMG CR cover form. Filename: crf26_3.doc

Proposed change affects: SIM ME Network
(at least one should be marked with an X)

Work item:

Source: **Date:**

Subject:

Category: F Correction **Release:** Phase 2
 A Corresponds to a correction in an earlier release Release 96
(one category and one release only shall be marked with an X) B Addition of feature Release 97
 C Functional modification of feature Release 98
 D Editorial modification Release 99
 UMTS

Reason for change:

Clauses affected:

Other specs affected: Other releases of same spec → List of CRs:
 Other core specifications → List of CRs:
 MS test specifications / TBRs → List of CRs:
 BSS test specifications → List of CRs:
 O&M specifications → List of CRs:

Other comments:



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

3 Categories and framework of supplementary services

3.1 Framework for the description of supplementary services

GSM 02.01 describes the principles of the Telecommunication services provided in a GSM PLMN. It also defines the concepts of Telecommunication services and describes their characterization by appropriate attributes. Bearer services and Teleservices, which are offered by a GSM PLMN in connection with other networks, are respectively defined in GSM 02.02 and 02.03. Besides these basic Telecommunication services, their enhancement or modification by supplementary services need also to be offered.

A supplementary service modifies or enhances a basic Telecommunication service and, hence, cannot be offered to a subscriber on a stand alone basis. It must be offered together with or in association with a basic Telecommunication service. The same supplementary service may be offered with a number of different Telecommunication services. For applicability of a Supplementary Service to a Telecommunication service refer to annex A.

Table 3.1/GSM 02.04 (identical to table 1/GSM 02.01 and to table 1 of CCITT Recommendation I.210) illustrates the description of Telecommunication services.

Table 3.1/GSM 02.04: Categorisation of Telecommunication services

TELECOMMUNICATION SERVICE			
BEARER SERVICE		TELESERVICE	
Basic Bearer Service	Basic Bearer service + supplementary services	Basic Teleservice	Basic Teleservice + supplementary service

Provision and withdrawal of a supplementary service, with the exception of Closed User Group, shall apply to all basic services the subscriber subscribes to.

Registration, erasure, activation and deactivation of a supplementary service shall apply to one or more group of basic services. The groups of basic services are defined to avoid handling of many basic service codes.

An operation is effective on the basic services, within the basic service group, which have been provisioned and for which the supplementary service is applicable. The fact that a basic service is provisioned but is not supplied by the network shall not lead to reject the request. The request shall be accepted since there is one basic service within the group(s) which is provisioned and for which the supplementary service is applicable. For applicability of a Supplementary Service to a basic service or service group refer to annex A.

Note that Supplementary Service operations on "alternate" and "followed by" Bearer Services (BS61 and BS81) are managed on the basis of the Bearer Service BS2x or BS3x corresponding to the data part of the "alternate" and "followed by" Bearer Services. This means that subscribers with a subscription to basic services BS61 or BS81 can perform call independent supplementary service operations against the groups "all data circuit asynchronous" and "all data circuit synchronous" regardless of whether or not they have a subscription to any of the basic services in the set BS2x or BS3x.

This is also required for the invocation of a supplementary service related to the "alternate" and "followed by" Bearer Services.

The basic service groups are define in table 3.2/GSM 02.04.

Table 3.2/GSM 02.04: List of basic service groups

Basic service group		Basic service (1) (2)	
Number	name	number (23)	name
1	Speech	TS 11 TS 12	Telephony Emergency call
2	Short message service	TS 21 TS 22 TS 23	Short message MT/PP Short message MO/PP Short message CB
3 - 5	Not allocated		
6	Facsimile services	TS 61 TS 62	Alternate speech and facsimile group 3 Automatic facsimile group 3
7	All Data circuit asynchronous asynchronous	BS 20 BS 21 BS 22 BS 23 BS 24 BS 25 BS 26	General asynchronous bearer service Data circuit duplex asynch. 300 bit/s Data circuit duplex asynch. 1 200 bit/s Data circuit duplex asynch. 1 200/75 bit/s Data circuit duplex asynch. 2 400 bit/s Data circuit duplex asynch. 4 800 bit/s Data circuit duplex asynch. 9 600 bit/s
8	All Data circuit synchronous	BS 30 BS 31 BS 32 BS 33 BS 34	General synchronous bearer service Data circuit duplex synch. 1 200 bit/s Data circuit duplex synch. 2 400 bit/s Data circuit duplex synch. 4 800 bit/s Data circuit duplex synch. 9 600 bit/s
9	All dedicated PAD access	BS 40 BS 41 BS 42 BS 43 BS 44 BS 45 BS 46	General PAD access bearer service PAD access circuit asynch. 300 bit/s PAD access circuit asynch. 1 200 bit/s PAD access circuit asynch. 1 200/75 bit/s PAD access circuit asynch. 2 400 bit/s PAD access circuit asynch. 4 800 bit/s PAD access circuit asynch. 9 600 bit/s
10	All dedicated packet access	BS 50 BS 51 BS 52 BS 53	General packet access bearer service Data packet duplex synch. 2 400 bit/s Data packet duplex synch. 4 800 bit/s Data packet duplex synch. 9 600 bit/s
12	Voice group services	TS 91 TS 92	Voice Group Call Service Voice Broadcast Service
13	All GPRS access	BS 70	GPRS bearer service
NOTE 1: Basic services are defined in GSM 02.02 and 02.03.			
NOTE 2: Alternate speech/unrestricted data (BS61) and speech followed by data (BS81) belong to the BS group of the equivalent data service.			
NOTE 23: TS: Teleservice BS: Bearer service.			

Annex A (normative): Applicability of Supplementary Services to Telecommunication Services

Table A.1 gives the applicability of GSM Supplementary Services to telecommunication services.

Table A.1/GSM 02.04: Applicability of SSS to telecommunication services

SS	Telephony		Emergency Call		SMS PTP		SMS-CB		Fax		cct Data		GPRS		PAD/Packet Access		Voice Group Services	
	TS11	TS12	TS21	TS22	TS 23	TS 6x	BS2x, BS3x	BS 70	BS4x	BS5x	TS 91	TS 92						
eMLPP	Yes	Yes ⁹				Yes	Yes		Yes ³	Yes ³	Yes	Yes						
CD	Yes					Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
CLIP	Yes					Yes	Yes		Yes ³	Yes ³	Yes	Yes						
CLIR	Yes					Yes	Yes		Yes	Yes	Yes	Yes						
COLP	Yes					Yes	Yes		Yes ³	Yes ³	Yes	Yes						
COLR	Yes					Yes	Yes		Yes ³	Yes ³	Yes	Yes						
CFU	Yes					Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
CFB	Yes					Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
CFNRy	Yes					Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
CFNRc	Yes					Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
CW ¹	Yes					Yes	Yes		Yes	Yes	Yes ⁶	Yes ⁶						
HOLD ²	Yes										Yes ⁶	Yes ⁶						
MPTY	Yes										Yes ⁶	Yes ⁶						
CUG	Yes					Yes	Yes				Yes ⁶	Yes ⁶						
AoCI	Yes					Yes	Yes		Yes	Yes								
AoCC	Yes					Yes	Yes		Yes	Yes								
UUS	Yes					Yes	Yes											
BAOC	Yes		Yes ³	Yes		Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
BOIC	Yes		Yes ³	Yes		Yes	Yes				Yes ⁶	Yes ⁶						
BOIC-exH C	Yes		Yes ³	Yes		Yes	Yes				Yes ⁶	Yes ⁶						
BIC	Yes		Yes	Yes ³		Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
BIC-Roam	Yes		Yes	Yes ³		Yes	Yes		Yes ³	Yes ³	Yes ⁶	Yes ⁶						
ECT	Yes										Yes ⁶	Yes ⁶						
\$(CCBS\$): CCBS	Yes					Yes	Yes				Yes ⁶	Yes ⁶						
\$(SPNP) SPNP	Yes		Yes ⁵	Yes ⁵		Yes	Yes											
\$(CNAP\$) CNAP	Yes		8	8					Yes	Yes	Yes ³	Yes ³						
\$(MSP\$) MSP	Yes		Yes	Yes		Yes	Yes				Yes	Yes						

NOTE 1: The applicability of Call Waiting refers to the telecommunication service of the active call and not of the waiting call. The incoming, waiting, call may be of any kind.

NOTE 2: If the served mobile subscriber has a call on hold, she may set up another call using the same or a different telecommunication service.

NOTE 3: The SS is applicable, but generally will not be invoked.

NOTE 4: For the purposes of applicability of supplementary services, the Alternate speech/unrestricted data (BS61) and speech followed by data (BS81) belong to the BS-group of the equivalent data service.

NOTE 5: Both the SMS service centre and the mobile destination can be reached by PNP numbers.

NOTE 6: The SS is only applicable for dispatchers. For service subscribers the service is not applicable. More detailed description see GSM 02.68 and GSM 02.69.

NOTE 7: The interaction of VBS and VGCS with UUS is not defined yet in the protocol (GSM 04.68 and GSM 04.69).

NOTE 8: Applicability of SMS PTP to CNAP is for further study. - \$(CNAP)\$

NOTE 9: The network shall apply a specific or the default priority level to emergency calls. There is no possibility to change this priority by the subscriber.

Pre-emption of an on-going emergency call is not possible.