

<b>CHANGE REQUEST No :</b>		<b>A018</b>	<i>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</i>
<b>Technical Specification GSM / UMTS:</b>		22.01	Version <b>3.5.0</b>
Submitted to SMG <input type="checkbox"/>	for approval <input checked="" type="checkbox"/>	without presentation ("non-strategic") <input type="checkbox"/>	
<i>list plenary meeting or STC here ↑</i>	for information <input type="checkbox"/>	with presentation ("strategic") <input type="checkbox"/>	
<small>PT SMG CR cover form. Filename: crf26_3.doc</small>			

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

**Work item:** Terminal capabilities

**Source:** Telecom Modus **Date:** 12 Feb., 1999

**Subject:** Explicit statement of R99 terminal capabilities

<b>Category:</b> <i>(one category and one release only shall be Marked with an X)</i>	F Correction	<input type="checkbox"/>	<b>Release:</b> Phase 2	<input type="checkbox"/>
	A Corresponds to a correction in an earlier release	<input type="checkbox"/>	Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>	Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>	Release 98	<input type="checkbox"/>
	D Editorial modification	<input checked="" type="checkbox"/>	Release 99	<input type="checkbox"/>
			UMTS	<input checked="" type="checkbox"/>

**Reason for change:** To provide explicitly stated service requirements for service capabilities (note that this does not create new requirements)

**Clauses affected:** 8.4

<b>Other specs Affected:</b>	Other releases of same spec	<input type="checkbox"/>	→ List of CRs:	
	Other core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications / TBRs	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

**Other comments:**



help.doc

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

## 15 Types of features of MSs

UMTS should support a wide variety of mobile stations, i.e. setting any limitations on terminals should be avoided as much as possible. For example mobile stations like hand-helds, personal digital assistants and laptop computers can clearly be seen as likely terminals for UMTS.

In order not to limit the possible types of mobile stations they are not standardised in UMTS. Anyhow some informative examples can be given to be the basis for mobile station discussions. The MS types could be categorised by their service capabilities rather than by their physical characteristics. Typical examples are speech only MS, narrowband data MS, wideband data MS, data and speech MS, etc.

In order to enhance functionality split and modularity inside the mobile station the interfaces of MS should be identified. Interfaces like UICC-interface, PCMCIA-interface and other PC-interfaces, including software interfaces, should be covered by references to the applicable interface standards.

MSs have to be capable of supporting a wide variety of teleservices and applications provided in UMTS environment. Limitations may exist on MSs capability to support all possible teleservices and information types (speech, narrowband data, wideband data, video, etc.) and therefore functionality to indicate capabilities of an MS shall be specified. MSs should be capable of supporting new supplementary services without any changes in MS.

The basic mandatory MS requirements are:

- Encrypted terminal-UICC interface
- Support for GSM phase 2 and 2+ SIM cards, phase 1 5V SIM cards shall not be supported
- Home environment and serving network registration and deregistration
- Location update
- Originating or receiving a connection oriented or a connectionless service;
- An unalterable equipment identification; IMEI, see GSM 02.16
- Basic identification of the terminal capabilities related to services such as; the support for software downloading, application execution environment/interface, MExE terminal class, supported bearer services.
- Terminals capable for emergency calls shall support emergency call without a USIM.
- Support for the execution of algorithms required for encryption;
- Support for the method of handling automatic calling repeat attempt restrictions as specified in GSM 02.07.
- At least one capability type shall be standardised for mobile terminals supporting the GSM BSS and UTRAN radio interfaces.
- Under emergency situations, it may be desirable for the operator to prevent MS users from making access attempts (including emergency call attempts) or responding to pages in specified areas of a UMTS network, see GSM 02.11.

## Terminal Service Capabilities for R99

UMTS R99 should standardise technical means according to which a terminal may implement the following service capabilities.

Note 1: unless otherwise stated, none of these service capabilities is mandatory in the terminal and the support of one service in a terminal does imply a requirement to support any other service.

Note 2: the R'99 requirements for the services listed below are elaborated in TS 22.00 unless otherwise indicated.

- Addressing schemes
- Narrowband Speech. Note: where a terminal supports this service it shall support emergency speech calls.
- Emergency speech call.
- Circuit Switched bearers of QoS as elaborated in TS 22.00.
- Packet Switched bearers of QoS as elaborated in TS 22.00.
- Real time fax service.
- Short Message Service Point to Point.
- Short Message Service Cell Broadcast.
- Handover requirements elaborated in TS 22.129.
- Supplementary service as in GSM R'99
- Terminal resident service platform and execution environments as in GSM R'99.
- Support for on-line billing.

