

Edinburgh, Scotland 9th-12th March 1999

CHANGE REQUEST No : <input style="width: 50px;" type="text"/>		<i>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</i>
Technical Specification 3GPP: <input style="width: 50px;" type="text" value="22.00"/>		Version <input style="width: 50px;" type="text" value="2.0.0"/>
Submitted to <input style="width: 50px;" type="text" value="#3"/> TSG SA	for approval <input checked="" type="checkbox"/>	without presentation ("non-strategic") <input checked="" type="checkbox"/>
<i>list plenary meeting or STC here ↑</i>	for information <input type="checkbox"/>	with presentation ("strategic") <input type="checkbox"/>
<i>PT SMG CR cover form. Filename: crf26_3.doc</i>		

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

Work item:

Source: **Date:**

Subject:

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

Reason for change:

Clauses affected:

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



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

3 Definitions, and abbreviations

3.1 Definitions

Definitions applicable to current document :

CAC (Connection Admission Control) : is a set of measures taken by the network to balance between the QoS requirements of new connections request and the current network utilisation without affecting the grade of service of existing/already established connections.

Capability Class : is a piece of information which indicates general UMTS mobile station characteristics (e.g. supported radio interfaces,...) for the interest of the network.

~~**Connection mode** : characterizes the type of association between two endpoints as required by the bearer service for the transfer of information. A bearer service is either connection-oriented or connectionless. In a connection-oriented mode, a logical association called *connection* needs to be established between the source and the destination entities before information can be exchanged between them. Within the connection, information is delivered to the destination entity in the same order as it was provided by the source entity. Connection-oriented bearer services lifetime is the period of time between the establishment and the release of the connection.~~

~~In a connectionless mode, no connection is established beforehand between the source and the destination entities ; the source and destination network addresses need to be specified in each message. Transferred information cannot be guaranteed of ordered delivery. Connectionless bearer services lifetime is reduced to the transport of one message.~~

Connectionless-mode transfer:

"The terms 'message', 'datagram', 'transaction mode' and 'connection-free' have been used in the literature to describe variations on the same basic theme: the transmission of a unit of data in a single, self-contained operation without establishing, maintaining, and releasing a connection."

"(Connectionless-mode transmission) is the transmission of a single unit of data from a source service-access-point to one or more destination service-access-point(s) without establishing a connection. A connectionless-mode service allows an entity to initiate such a transmission by the performance of a single service access."

In contrast to a connection, an instance of the use of a connectionless-mode service does not have a clearly distinguishable lifetime. In addition, the connectionless-mode service, unless otherwise explicitly determined, has the following fundamental characteristics:

- a) no dynamic peer-to-peer agreement is involved in an instance of the service;
- b) all of the information required to deliver a unit of data (destination address, quality of service selection, options, etc.) is presented to the layer providing the connectionless-mode service, together with the user data to be transmitted, in a single service access. The layer providing the connectionless-mode service is not required to relate this access to any other service access.

As a result of these fundamental characteristics it may also be true that

- c) each unit of data transmitted is entirely self-contained and can be routed independently;
- d) copies of a unit of data can be transmitted to a number of destination addresses."

NOTE: **Connectionless-mode transfer** normally implies that the service a) does not provide confirmed delivery of SDUs, b) does not guarantee delivery of SDUs, c) does not guarantee maintenance of SDU sequencing and d) does not guarantee elimination of SDUs.

Connection-mode transfer:

"A connection is an association established for the transfer of data between two or more peer-entities. This association is established between the peer-entities themselves and between each entity and the next lower layer. The ability to establish a connection and to transfer data over it is provided to the entities in a given layer by the next lower layer as a connection-mode service. An instance of the use of a connection-mode service by peer-entities proceeds through three distinct phases of operation:

- a) connection establishment;
- b) data transfer; and
- c) connection release."

NOTE: **Connection-mode transfer** normally implies that the service a) provides confirmed delivery of SDUs, b) provides ordered, in-sequence delivery of SDUs and c) will not duplicate SDUs.

FC (Flow Control) : is a set of mechanisms used to prevent the network from becoming overloaded by regulating the input rate transmissions.

GSM BSS : refers in this specification to the GSM/GPRS access network.

GSM core network : refers in this specification to the GSM NSS and GPRS backbone infrastructure.

Home environment : enables a user to obtain UMTS services in a consistent manner regardless of the user's location or terminal used (within the limitations of the serving network and current terminal).

Performance : is concerned with the ability to track service and resource usage levels and provides feedback on the responsiveness and reliability of the network.

Serving network : provides the user with access to the services of home environment.

UMTS core network : refers in this specification to an evolved GSM core network infrastructure or any new UMTS core network infrastructures, integrating circuit and packet switched traffic..

UMTS mobile termination : part of the UMTS Mobile Station which provides functions specific to the management of the radio interface (Um).

UMTS network: refers to a network operated by a single network operator and consisting of :
UTRAN access networks (WCDMA and/or TD-CDMA),
optionally GSM BSS access networks,
an UMTS core network.

UPC (Usage Parameter Control) : is a set of actions taken by the network to monitor and control the offered traffic and the validity of the connection with respect to the traffic contract negotiated between the user and the network.