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|---------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>CHANGE REQUEST No :</b> <b>A004</b>            |                                                  |                                                                 | Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly. |
| <b>Technical Specification UMTS:</b>              | 22.00                                            | Version                                                         | 2.0.0                                                                                                            |
| Submitted to 3GPP <input type="checkbox"/>        | for approval <input checked="" type="checkbox"/> | without presentation ("non-strategic") <input type="checkbox"/> |                                                                                                                  |
| <small>list plenary meeting or STC here ↑</small> | for information <input type="checkbox"/>         | with presentation ("strategic") <input type="checkbox"/>        |                                                                                                                  |
| 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:** GSM evolved network requirements to 3GPP from TTC

**Source:** NEC **Date:** 12 Feb., 1999

**Subject:** Requirements on multicall

|                                                                              |                                                                              |                 |                                          |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------|------------------------------------------|
| <b>Category:</b>                                                             | 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"/>      |
| <small>(one category and one release only shall be marked with an X)</small> | B Addition of feature <input checked="" type="checkbox"/>                    |                 | Release 97 <input type="checkbox"/>      |
|                                                                              | C Functional modification of feature <input type="checkbox"/>                |                 | Release 98 <input type="checkbox"/>      |
|                                                                              | D Editorial modification <input type="checkbox"/>                            |                 | Release 99 <input type="checkbox"/>      |
|                                                                              |                                                                              |                 | UMTS <input checked="" type="checkbox"/> |

**Reason for change:** The number of simultaneous active call that is offered to the user shall be limited. However, both home and serving network operators should be able to freely set the number of simultaneous active calls.

**Clauses affected:** 8 UMTS Core Network

|                              |                                                        |                |  |
|------------------------------|--------------------------------------------------------|----------------|--|
| <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:**



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

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## 8 UMTS Core Network

NOTE 1: The term performance refers in this clause to the resource level usage and reliability of the UMTS core network.

NOTE 2: SMG1 does not use the (circuit switched) notion of call to define UMTS phase 1 core network capabilities. If SMG12 decides to use this notion to fulfil SMG1 requirements, it shall be noted that it is not required for phase 1 UMTS core networks to support calls with multiple connections. Multiple connections for a single mobile could be realised through several calls.

In the first phase of UMTS, the UMTS core network capabilities are a superset of the phase 2+ release 99 GSM core network capabilities. The additional requirements for the phase 1 UMTS core network are the following :

- 1) The phase 1 UMTS core network shall support circuit switched data service capability of at least 64 kbit/s per user. *This shall not limit the user from choosing lower data rates.*
- 2) The phase 1 UMTS core network shall support packet switched data service capabilities of at least 2 Mbit/s peak bit rate per user. *This shall not limit the user from choosing lower data rates.*
- 3) The phase 1 UMTS core network shall enable set-up, re-negotiation and clearing of connections with a range of traffic and performance characteristics. It shall be possible to apply traffic policing (e.g. connection admission control, flow control, usage parameter control...) on a connection during its set-up and lifetime.
- 4) The phase 1 UMTS core network shall support a range of traffic and performance characteristics for connectionless traffic.
- 5) The range of traffic and performance characteristics that shall be supported by the phase 1 UMTS core network for connection oriented and connectionless traffic shall be at least those of GPRS phase 2+ release 99. This means that the support of the full set of bearer services defined in TS 22.05 section 5.2 to 5.4 is not required for the phase 1 UMTS core network.
- 6) Point to multipoint communication configurations as defined in TS 22.05 shall be supported by the phase 1 UMTS core network.
- 7) The phase 1 UMTS core network shall allow one mobile termination to handle more than one bearer service simultaneously and to have bearer services of different connection modes. It is nevertheless expected that the terminal and network capabilities will put some limitations on the number of bearer services that can be handled simultaneously. It shall be possible for each connection to have independent traffic and performance characteristics. It shall be possible for each connectionless message to have independent traffic and performance characteristics.
- 8) The number of simultaneous call offered to the user shall be limited by subscription to the network operator. This should be implemented by appropriate mechanisms.
- 9) With the multicall service , CW, CALL HOLD and MPTY services can be offered simultaneously. Service scenarios(i.e. the combination of bearer capabilities or tele-services) to be provided.
- 108) In order to facilitate the development of new applications, it shall be possible to address applications to/from a phase 1 UMTS mobile termination in connection oriented and connectionless traffic modes (e.g. the notion of Internet port).