ETSI TC SMG#29   *TSG S#4 (99) 231*

Miami, Florida, USA 21st – 23rd June, 1999

Agenda Item: 5.1

Source: S1

Title: CR on Re-negotiation during call / session affecting 3G TS 22.100

Document for: Approval

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SA_Tdoc	Doc	Spec_	CR#	R	Vers	C	New	Topic	Title
SP-99231	378	22.100	A015		3.3.0	B	3.4.0	Re-negotiate QoS	Re-negotiation during Call / Session - Modify QoS Parameters

The re-negotiation during call / session is the feature of UMTS / IMT2000. This feature shall be possible for the user to modify QoS parameters. Therefore, the user can modify the bearer by application during call / session. It provides more flexible service capability to the users.

CHANGE REQUEST No : <u>A015</u>   *Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.*

Technical Specification / Report UMTS | 22.100   Version: 3.3.0

Submitted to TSG_SA	#4	for approval	X	without presentation ("non-strategic")	X
list TSG plenary meeting no. here ↑		for information		with presentation ("strategic")	

PT SMG CR cover form is available from: http://docbox.etsi.org/tech-org/smg/Document/smg/tools/CR_form/crf28_1.zip

Proposed change affects: USIM [ ]   TE [X]   Network [X]
(at least one should be marked with an X)

Work item: UMTS Phase 1 Release 99 requirements

Source: ~~NTT DoCoMo / Mannesmann Mobilfunk~~ S1   **Date:** May 12, 1999

Subject: Re-negotiation feature

Category:

(one category and one release only shall be marked with an X)

			Release:		
F	Correction			Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature	X		Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			UMTS 99	X

Reason for change: The re-negotiation during call / session is the feature of UMTS / IMT2000. This feature shall be possible for the user to modify QoS parameters. Therefore, the user can modify the bearer by application during call / session. It provides more flexible service capability to the users.

Clauses affected: section 6, section 8

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:

help.doc

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

6 UTRAN capabilities

NOTE : The term performance refers in this clause to the realisation of the QoS objectives inside the UTRAN.

UTRAN capabilities for UMTS are the complete set of bearer capabilities and bearer control specified in UMTS 22.05. The UTRAN shall have the following capabilities :

1) A UTRAN shall be contained within only one UMTS network. (In the case of a network with a phase 1 UMTS core network consisting of an evolved GSM core network, it shall be possible to connect the UTRAN to the GSM NSS and GPRS backbone infrastructures or only one of them.)

2) The UTRAN shall support the set-up, re-negotiation and clearing of connections with a range of traffic and performance characteristics. The re-negotiation of QoS attributes / bearer attributes may result from an upper layer request or a change in the radio conditions (handover, cell load modification,...) and may be mobile station (e.g. by an application or the user via an application) or network initiated. It shall be possible for the UTRAN to apply the following traffic policing mechanisms such as :
   . connection admission control (CAC) during connection set-up and re-negotiation,
   . flow control (FC) on a connection during its lifetime,
   . usage parameter control (UPC) on a connection during its lifetime..
   ~~The re-negotiation shall provide flexible service capabilities which will enable the user to modify QoS parameters (bearer) during call / session.~~

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.*

The phase 1 UMTS core network shall enable set-up, re-negotiation and clearing of connections with a range of traffic and performance characteristics. The re-negotiation of QoS attributes / bearer may be caused by an application or the user via an application ~~on the UTRAN interface~~ (see UTRAN capability section).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. ~~The re-negotiation shall provide flexible service capabilities which will enable the user to modify QoS parameters (bearer) during call / session.~~