3GPP TSG CT Meeting #28 **CP-050180**
1st – 3rd June 2005. Quebec, CANADA.

CR-Form-v7.1

CHANGE REQUEST

⌘ **49.008** **CR** **03** ⌘ **rev** **-** ⌘ Current version: **6.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Network-initiated SCUDIF on MAP/E-interface with BSSAP
Source:	⌘	Nokia
Work item code:	⌘	TEI-6
Date:	⌘	27/05/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change:	⌘	When network-initiated SCUDIF is supported in UTRAN, it should be possible for the non-anchor MSC to send an indication to the anchor MSC over the MAP E-interface, that the conditions for service change have become suitable. The indication needs to be sent also when BSSAP is used over the MAP E-interface. When RANAP is used over the MAP E-interface, this indication is sent by re-using the RAB MODIFY REQUEST message with a new optional IE indicating that the conditions for service change have become suitable. The message is sent from the non-anchor MSC to the anchor MSC inside AN-APDU for the RANAP based MAP E-interface. The AN-APDU currently contains a mandatory access network protocol message. TSG GERAN WG2 has defined a new BSSAP message CHANNEL MODIFY REQUEST in TS 48.008 for this purpose. However, this new BSSAP message also needs to be added in TS 49.008, as one of the BSSAP messages sent on E-interface, as indicated in the LS from TSG GERAN WG2 (CP-050181).
Summary of change:	⌘	A new BSSAP message CHANNEL MODIFY REQUEST is defined for BSSAP on the E-interface.
Consequences if not approved:	⌘	The network-initiated SCUDIF procedures in inter-MSC scenarios would not be supported for BSSMAP on the E-interface.

Clauses affected:	⌘	2, 5, 5.15 (new), 6

		Y	N			
Other specs affected:	⌘	X		Other core specifications	⌘	29.002, 29.010, 48.008
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘

********** FIRST MODIFIED SECTION **********

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] Void.

[1a] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 23.009: "Handover procedures".

[2a] 3GPP TS 23.002: "Network Architecture".

[3] 3GPP TS 48.006: "Signalling transport mechanism specification for the Base Station System - Mobile-services Switching Centre (BSS - MSC) interface".

[4] 3GPP TS 48.008: "Mobile-services Switching Centre - Base Station System (MSC - BSS) interface; Layer 3 specification".

[5] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[6] 3GPP TS 29.010: "Information element mapping between Mobile Station - Base Station System (MS - BSS) and Base Station System - Mobile-services Switching Centre (BSS - MSC); Signalling procedures and the Mobile Application Part (MAP)".

[7] 3GPP TS 23.172: "Technical realization of Circuit Switched (CS) multimedia service; UDI/RDI fallback and service modification; Stage 2)".

[8] 3GPP TS 25.413: "UTRAN Iu interface Radio Access Network Application Part (RANAP) signalling".

********** NEXT MODIFIED SECTION **********

5 Use of the BSSAP on the E-interface

DTAP is used on the E-interface for the transfer of messages between the MSC-A and the MS.

The dedicated BSSMAP procedures (3GPP TS 48.008 subclause 3.1) used on the E-interface to some extent are:

- assignment;
- handover resource allocation;
- handover execution;
- internal handover indication;
- release due to BSS generated reasons;
- classmark handling;

- cipher mode control;
- trace invocation;
- queuing indication;
- data link control SAPI not equal to "0";
- Location Acquisition;
- LSA handling;
- Common ID.

One dedicated BSSMAP procedure is used only on the E-interface:

- Service Change (subclause 5.15).

********** NEW SECTION ADDED **********

5.15 Service Change procedure

In the Service Change procedure for network-initiated SCUDIF (see 3GPP TS 23.172), the MSC-I sends the CHANNEL MODIFY REQUEST message (see 3GPP TS 48.008) to the MSC-A. The request was originally sent by the RNC using RAB MODIFY REQUEST to trigger execution of the alternative RAB configuration (see 3GPP TS 25.413). For the CHANNEL MODIFY REQUEST message, the involved MSCs shall act according to the following:

- the MSC-A acts as the MSC;
- the MSC-I acts as the BSS.

********** NEXT MODIFIED SECTION **********

6 BSSMAP messages transferred on the E-interface

The following BSSMAP messages, defined in 3GPP TS 48.008 subclause 3.2.1, are transferred on the E-interface:

ASSIGNMENT REQUEST (MSC-A -> MSC-I)

Excluded information element: CIRCUIT IDENTITY CODE

ASSIGNMENT COMPLETE (MSC-I -> MSC-A)

Excluded information element: CIRCUIT POOL, CIRCUIT IDENTITY CODE

ASSIGNMENT FAILURE (MSC-I -> MSC-A)

Excluded information elements: CIRCUIT POOL, CIRCUIT POOL LIST

* HANDOVER REQUEST (MSC-A -> MSC-T and MSC-I -> MSC-A)

Excluded information element: CIRCUIT IDENTITY CODE

* HANDOVER REQUEST ACKNOWLEDGE (MSC-T -> MSC-A and MSC-A -> MSC-I)

Excluded information element: CIRCUIT POOL, CIRCUIT IDENTITY CODE

* HANDOVER COMPLETE (MSC-T -> MSC-A)

* HANDOVER FAILURE (MSC-T -> MSC-A, MSC-A -> MSC-I and MSC-I -> MSC-A)

Excluded information elements: CIRCUIT POOL, CIRCUIT POOL LIST

	HANDOVER PERFORMED	(MSC-I -> MSC-A)
*	HANDOVER DETECT	(MSC-T -> MSC-A)
	CLEAR REQUEST	(MSC-I -> MSC-A and MSC-T -> MSC-A)
	SAPI "n" REJECT	(MSC-I -> MSC-A)
	CONFUSION	(MSC-T -> MSC-A, MSC-A -> MSC-T, MSC-I -> MSC-A and MSC-A -> MSC-I)
#	MSC INVOKE TRACE	(MSC-A -> MSC-I and MSC-A -> MSC-T)
#	BSS INVOKE TRACE	(MSC-I -> MSC-A and MSC-A -> MSC-T)
	CIPHER MODE COMMAND	(MSC-A -> MSC-I)
	CIPHER MODE COMPLETE	(MSC-I -> MSC-A)
	CIPHER MODE REJECT	(MSC-I -> MSC-A)
**	QUEUING INDICATION	(MSC-T -> MSC-A, MSC-I -> MSC-A, and MSC-A -> MSC-I)
	CLASSMARK UPDATE	(MSC-I -> MSC-A and MSC-A -> MSC-T)
	CLASSMARK REQUEST	(MSC-A -> MSC-I)
	CONNECTION ORIENTED INFORMATION	(MSC-I -> MSC-A, MSC-A->MSC-I)
	LSA INFORMATION	(MSC-A -> MSC-I)
	PERFORM LOCATION REQUEST	(MSC-I->MSC-A, MSC-A -> MSC-I)
	PERFORM LOCATION ABORT	(MSC-I->MSC-A, MSC-A -> MSC-I)
	PERFORM LOCATION RESPONSE	(MSC-I -> MSC-A, MSC-A->MSC-I)
	COMMON ID	(MSC-A -> MSC-I)
	CHANNEL MODIFY REQUEST	(MSC-I -> MSC-A)

All other BSSMAP messages shall be considered as non-existent on the E-interface.

NOTE: Segmentation procedures for LCS CONNECTION ORIENTED INFORMATION message in 3GPP TS 48.008 apply to the corresponding message on the E-interface.

Some of the messages above are qualified by *, ** or #. This signifies whether the message, when sent on the E-interface, is considered as:

- handover related message (*);
- handover related when sent as a response to HANDOVER REQUEST (**); or
- trace related message (#).