Source:TSG SA WG2Title:CRs on 23.110 v 3.2.0Agenda Item:5.2.3

The following CRs have been approved by TSG SA WG2 and are requested to be approved by TSG SA plenary #6.

#### On 23.110

TDoc #	CR #	spec	Title
S2-99881	003	23.110	AS-NAS primitives
S2-99F14	004	23.110	Additions to the access stratum model to support Cell Broadcast.

### TSGS#6(99)550

### 3GPP TSG-SA2 meeting #8

help.doc

# Document **S2-99881**

Bonn, Germany, 13-17 September 1999

<b>3G CHANGE REQUEST</b> Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.										
		20 apositisation	<b>23.110</b>	CR		umbor oo d			on: 3.1.0	
3G specification number ↑ ↑ CR number as allocated by 3G support team For submision to TSG SA#5 for approval X (only one box should										
	ing no. here↑	for informa	ation	be marke	d with an X	()				
Form: 3G CR cover sheet, version 1.0       The latest version of this form is available from: ftp://ftp.3gpp.org/Information/3GCRF-xx.rtf         Proposed change affects: (at least one should be marked with an X)       USIM       ME       UTRAN       X       Core Network       X										
Source:		Nortel, T-Mobil						Date:	1999-09-13	
Subject:	bject: AS-NAS primit									
3G Work item: 23.110		23.110								
Category: (only one category shall be marked with an X)	F A B C D	CorrectionFCorresponds to a correction in a 2G specificationIAddition of featureIFunctional modification of featureIEditorial modificationI								
Reason for change: Figure 2, in section 6.1, currently depicts primitives in the user equipment (UE) and infrastructure (IF) sides pertaining to the lu and Uu protocols. This CR updates the figure to show intermediate functions modifying the underlying UMTS radio access network. The update is necessary to clearly distinguish additional functions needed the model. For instance, call control is provided by RANAP and RRC protocols and relocation handling requires functions which do not belong to these protocols.							R updates the radio access actions needed protocols and	in		
Clauses affect	ed	Section 6.	1							
Other specs affected:Other 3G core specifications Other 2G core specifications MS test specifications BSS test specifications O&M specifications					$\begin{array}{l} \rightarrow \text{ List of } (\\ \rightarrow  $	CRs: CRs: CRs:				
<u>Other</u> comments:										
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<----- double-click here for help and instructions on how to create a CR.

### 3GPP TSG SA2 Meeting #10

## Document S2-99F14

Abiko , Japan, 29 Nov – 3 Dec 1999

	<b>3G CHANGE REQUEST</b> Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly	Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.						
	<b>23.110 CR 004</b> Current Version: 3.2.0							
	3G specification number $\uparrow$ $\uparrow$ CR number as allocated by 3G support team	nber as allocated by 3G support team						
For submision to TSG       SA2#10       for approval       X       (only one box should         list TSG meeting no. here 1       for information       be marked with an X)								
Form: 3G CR cover sheet, version 1.0       The latest version of this form is available from: ftp://ftp.3gpp.org/Information/3GCRF-xx         Proposed change affects: (at least one should be marked with an X)       USIM       ME       UTRAN       X       Core Network       X								
<u>Source:</u>	T-Mobil December 3, 1999							
Subject:	Additions to the access stratum model to support Cell Broadcast.							
3G Work item:	TS 23.110.							
Category:FA(only one categoryshall be markedCwith an X)	CorrectionRelease:Phase 2Corresponds to a correction in a 2G specificationRelease 96Release 96Addition of featureXRelease 97Functional modification of featureRelease 98Release 98Editorial modificationRelease 00Release 00							
<u>Reason for</u> change:								
Clauses affected: 6.1.								
affected:	Other 3G core specifications $\rightarrow$ List of CRs:Other 2G core specifications $\rightarrow$ List of CRs:MS test specifications $\rightarrow$ List of CRs:BSS test specifications $\rightarrow$ List of CRs:O&M specifications $\rightarrow$ List of CRs:							
<u>Other</u> comments:								

1

# 6 Access Stratum services

The modeling of the services follow the basic principles as set by ITU-T X.210 [Error! Bookmark not defined.Fehler! Textmarke nicht definiert.]. In this recommendation the following figure is given as an example for peer-to-peer connection-mode services.

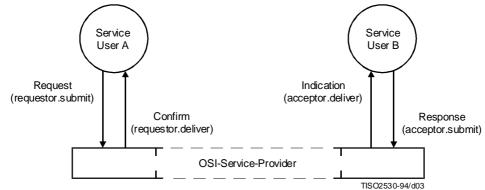
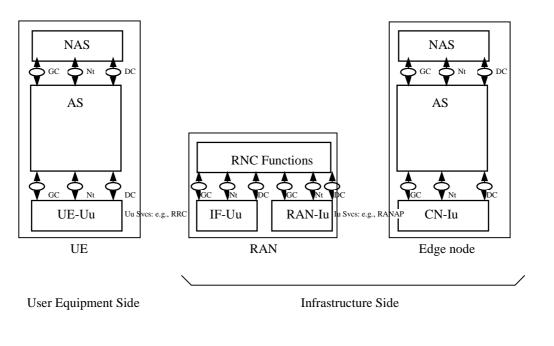


Figure <u>1</u>4: Example of a peer-to-peer connection-mode service [Error! Bookmark not defined.Fehler! Textmarke nicht definiert.]

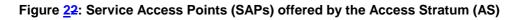
For connectionless-mode services the basic primitives are "request" and "indication".

### 6.1 Service Access Points (SAPs)

The SAPs offered by the Access Stratum (AS) to the rest of the system (Non Access Stratum: NAS) are reflected in the following figure.



÷ SAPs



For the time being, the SAPs offered by the AS are symmetric, i.e. the same SAPs are offered on the infrastructure side (CN-AS) and on the user equipment side (UE-AS). These SAPs are:

GC: General Control (see 6.1.1 for a general presentation and 6.2.2.1 for a detailed information).

Nt: Notification (see 6.1.2 for a general presentation and 6.2.2.2 for a detailed information).

DC: Dedicated Control (see 6.1.3 for a general presentation and 6.2.2.3 for a detailed information).

Note:

Broadcast and Multicast services can not be described using the services and functions defined so far in this TS. The nature of Broadcast and Multicast services, like Cell Broadcast Service (CBS), is very different from other specified services. The following model characteristics are missing to fulfil the CBS requirements, namely:

1. CBS uses two segments with different QoS requirements to deliver CB messages to the UE:

1a. From Cell Broadcast Center (CBC) to RNC, a SAP is required where for instance, 1 second turnaround time, interactive class, with a reliable transport is required.

1b. From RNC to UE, a SAP is required where for instance, a maximum delay of 10 seconds and a background class is required.

2. Because of (item 1), the service primitives used by each of the segments may also be different; i.e., the related SAPs to those primitives may differ in the two segments and a combination of \_GC, Nt, and DC <u>SAPs</u> requires study.

3. CBS traffic is asymmetric in nature. The communication flow is only in one direction from the CBC to the UE. There is no uplink channel needed and the UE can not initiate a communication or request specific information.

At least two changes are envisaged and thus detailed contributions are expected:

i. Introduce a new SAP type.

ii. Mapping example between the two communication segments.

Figure 2 shows also, as an example, some details of the AS architecture. The details are out of the scope of this document and are further specified in the 25-series.

This model does not exclude, nor imply, which protocol is specified between the UE-AS entity and the CN-AS entity. These protocols are 'transparent' for the AN, but participate in the service provided by the AS.