3GPP TSG-RAN3 meeting #8
Abiko, Japan, 25-29 Oct 1999

Document R3-99D83

3G CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.412	CR	???	Current Version:	3.0.0

3G specification number ↑ *↑ CR number as allocated by 3G support team*

For submission to TSG	RAN#6	for approval	X	*(only one box should*
list TSG meeting no. here ↑		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.rtf*

Proposed change affects: *(at least one should be marked with an X)* USIM [ ] ME [ ] UTRAN [X] Core Network [X]

Source: Ericsson **Date:** 11 Oct 1999

Subject: Removal of usage of SCCP Class 1 for RANAP (Agenda Item: 12)

3G Work item:

Category: *(only one category shall be marked with an X)*

F	Correction	
A	Corresponds to a correction in a 2G specification	
B	Addition of feature	
C	Functional modification of feature	X
D	Editorial modification	

Reason for change: As described in R3-99D81, SCCP Class 1 is not needed as signalling bearer for RANAP. It is therefore recommended that SCCP Class 1 is removed from TS 25.412.

Clauses affected: 4.2 Signalling Bearer for Circuit Switched Domain
4.3 Signalling Bearer for Packet Switched Domain

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other 2G core specifications		→ List of CRs:
MS test specifications		→ 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.

4.1 Signalling Bearer for Circuit Switched Domain

The following figure 1 illustrates the protocol model having Broadband Signalling System No.7 as the signalling bearer for RANAP over the Iu interface that fulfils the requirements. Figure 1 shows, for the CS domain, the point at which the service primitives are invoked. The SAP provides the SCCP primitives.

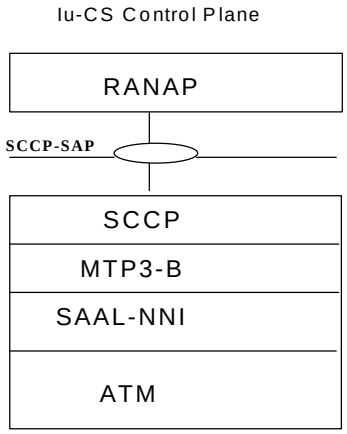

Figure 1 SAP between RANAP and its transport for Iu - CS Domain

-1 **SCCP** [7] provides connectionless service, class 0, ~~connectionless service with guaranteed order, class 1,~~ connection oriented service, class 2, separation of the connections mobile by mobile basis on the connection oriented link and establishment of a connection oriented link mobile by mobile basis.

-2 **MTP3-B** [4] provides message routing, discrimination and distribution (for point-to-point link only), signalling link management load sharing and changeover/back between link within one link-set. The need for multiple link-sets is precluded.

-3 **SAAL-NNI** [1] consists of the following sub-layers: - **SSCF** [3], - **SSCOP** [2] and – **AAL5** [6]. The SSCF maps the requirements of the layer above to the requirements of SSCOP. Also SAAL connection management, link status and remote processor status mechanisms are provided. SSCOP provides mechanisms for the establishment and release of connections and the reliable exchange of signalling information between signalling entities. Adapts the upper layer protocol to the requirements of the Lower ATM cells.

-4 **ATM** [5]

4.3 Signalling Bearer for Packet Switched Domain

The protocol stacks for the PS Domain is shown in figure 2. The standard allows operators to chose one out of two standardised protocol to suites for transport of SCCP messages.

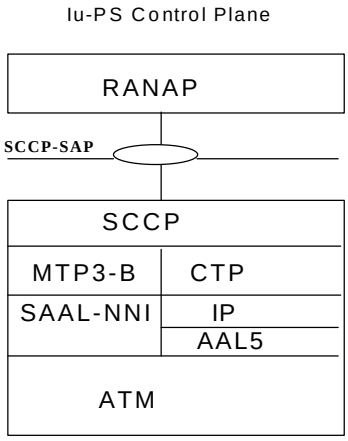

Figure 2 SAP between RANAP and its transport for the Iu -IP domain

Figure 2 shows, for the Iu IP domain, the point at which the service primitives are invoked. A single SAP is defined independently of the signalling bearer. The SAP provides the SCCP primitives. The figure is not intended to constrain the architecture.

Note: In case CTP Protocol does not become ready, for reference, by September '99, WG3 will re-evaluate the protocol

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-4 **ATM** [5]

-5 **CTP** [14] is a generic term used to describe the protocol being developed by the Sigtran working group of the IETF for the purposes of transporting various signaling protocols over IP networks.

-6 **IP** [13] is supported by AAL5 [6] and ATM [5]