TSG-RAN Meeting #6 Nice, France, 13 – 15 December 1999

TSGRP#6(99)744

Title: Agreed CRs of category "C" (Modification) and "F" (Correction) to TS 25.412

Source: TSG-RAN WG3

Agenda item: 5.4.3

| Doc # | Status- | Spec | CR | Rev | Subject | Cat | Versio | Versio |
|----------|---------|--------|-----|-----|----------------------------------|-----|--------|--------|
| R3-99i90 | agreed | 25.412 | 001 | | Removal of usage of SCCP Class 1 | С | 3.1.0 | 3.2.0 |

3GPP TSG-RAN Meeting #6 Nice, France, 13-15 December 1999

help.doc

Document R3-99i90

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

| | | CHANGE I | REQU | JEST | Please se page for | | | at the bottom of the fill in this form con | |
|--|--|--|------------|---------|-----------------------|-----------|----------|--|---|
| | | 25.412 | CR | 001 | | Current V | ersior | n: 3.1.0 | |
| GSM (AA.BB) or 3G | (AA.BBB) specifica | cation number ↑ ↑ CR number as allocated by MCC support team | | | | | | | |
| For submission | neeting # here ↑ | for infor | ! | X | non-st | _ | C use of | nly) | |
| Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc Proposed change affects: (at least one should be marked with an X) The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc WE UTRAN / Radio X Core Network X | | | | | | | | | |
| Source: | TSG-RAN \ | VG3 | | | | <u>Da</u> | ate: | 1999-11-03 | |
| Subject: | Removal of | usage of SCCP (| Class 1 fo | or RANA | νP | | | | |
| Work item: | | | | | | | | | |
| Category: A (only one category shall be marked with an X) F A C D | Correction Corresponds to a correction in an earlier release Addition of feature Functional modification of feature Editorial modification Release: Release: Release: Release: Release: X Release: Relea | | | | | | | | X |
| Reason for change: | | N3 meeting #8, it earer for RANAP. | | | | | | | |
| Clauses affected | | nalling Bearer for nalling Bearer for | | | | | | | |
| affected: | Other 3G core specifications Other GSM core specifications MS test specifications BSS test specifications O&M specifications → List of CRs: | | | | | | | | |
| Other comments: | | | | | | | | | |
| | | | | | | | | | |

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

5.2 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.

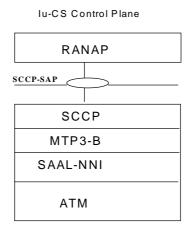


Figure 1 SAP between RANAP and its transport for Iu – CS Domain

- -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]

5.3 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.

Iu-PS Control Plane

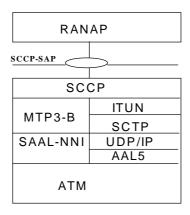


Figure 2 SAP between RANAP and its transport for the Iu -IP domain

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.

- -1 **SCCP** [7] provides connectionless service, class 0, eonnectionless 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-NNI** [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]
- -5 SCTP [18] refers to the Simple Control Transmission Protocol [18] developed by the Sigtran working group of the IETF for the purpose of transporting various signaling protocols over IP networks. . ITUN refers to the SCCP adaptation layer "SS7 ISUP Tunneling" [19] also developed by the Sigtran working group of the IETF.
- -6 **UDP** [16] /**IP** [14] over ATM are defined in [15] and [16]