TSG-RAN Meeting #8
Düsseldorf, Germany, 21 - 23 June 2000

TSGRP#8(00)0247

Title: **Agreed CRs to TS 25.426**

Source: **TSG-RAN WG3**

Agenda item: **5.3.3**

Tdoc_Num	Specification	CR_Num	Revision_Nu	CR_Subject	CR_Category	WG_Status	Cur_Ver_Num	New_Ver_Nu
R3-001598	25.426	002	2	SCTP corrections for ALCAP	F	agreed	3.2.0	3.3.0

3GPP TSG RAN WG3 Meeting 13
Hawaii, USA, 22-26 May 2000

***Document* R3-001598**
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

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

25.426	CR	002r2	Current Version:	3.2.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-RAN#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: (U)SIM [ ] ME [ ] UTRAN / Radio [X] Core Network [ ]
(at least one should be marked with an X)

Source: R-WG3 **Date:** 15th May 2000

Subject: Corrections to IP based ALCAP for Iur

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Release 00	

Reason for change: Corrections to protocol stack and references for IP based ALCAP to align with status of SCTP in other Iur/Iub specifications.

Clauses affected: 2, 8.2

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM 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.

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.

[1] TS UMTS 25.427: "UTRAN Iur and Iub User plane Protocol for DCH Data Streams".

[2] ITU-T Recommendation I.361 (1995): "B-ISDN ATM Layer Specification".

[3] ITU-T Recommendation I.363.2 (1997): "B-ISDN ATM Adaptation Layer type 2".

[4] ITU-T Recommendation I.366.1 (1998): "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2".

[5] Draft new ITU-T Recommendation Q.2630.1: "AAL Type 2 signalling protocol (Capability Set 1)".

[6] ITU-T Recommendation E.191 (1996): "B-ISDN numbering and addressing".

[7] ITU-T Recommendation X.213 (1995): "Information Technology - Open Systems Interconnection - Network Service Definition".

[8] ITU-T Recommendation Q.2110 (1994): "B-ISDN ATM Adaptation layer - Service Specific Connection Oriented Protocol (SSCOP".

[9] ITU-T Recommendation Q.2130 (1994): "B-ISDN Signaling ATM Adaptation Layer - Service Specific Coordination Function for Support of Signaling at the User Network Interface (SSCF at UNI".

[10] Draft new ITU-T Recommendation Q.2150.2: "AAL Type 2 Signalling Transport Converter on SSCOP.

[11] ITU-T Recommendation Q.2210 (1996): Message transfer part level 3 functions and messages using the services of the ITU-T Recommendation Q.2140".

[12] ITU-T Recommendation Q.2140 (1995): "B-ISDN Signaling ATM Adaptation Layer - Service Specific Coordination Function for Support of Signaling at the Network Node Interface (SSCF at NNI)".

[13] Draft new ITU-T Recommendation Q.2150.1: "AAL Type 2 Signalling Transport Converter on MTP-3B".

[14] IETF RFC 791 (1981): "Internet Protocol".

[15] IETF RFC 1483 (1993): "Multiprotocol Encapsulation over ATM Adaptation Layer 5".

[16] IETF RFC 2225 (1998): "Classical IP and ARP over ATM".

[17] IETF RFC 768 (1980): "User Datagram Protocol".

[18] R. Stewart et al, "~~Simple~~ Stream Control Transmission Protocol", draft-ieft-sigtran-sctp-v9.txt (IESG Last Call Version), IETF, 19 April 2000~~", draft-ieft-sigtran-sctp-v0.txt (Work In Progress), IETF, September 1999~~.

[19] G. Sidebottom et al "SS7 MTP3 - User Adaptation Layer", draft-ietf-sigtran-m3ua-02.txt (Work In Progress), IETF, 10 March 2000, ~~"SS7 ISUP Tunneling", draft-ietf-sigtran-itun-00.txt (Work In Progress), IETF, June 1999~~.

[20] ITU-T Recommendation I.630 (1999): "ATM Protection Switching".

Definitions and abbreviations

3.1 Definitions

ALCAP is a generic name for the transport signalling protocol used to setup and tear down transport bearers.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AAL2	ATM Adaptation Layer type 2
AESA	ATM End System Address
ATM	Asynchronous Transfer Mode
CPCS	Common Part Convergence Sublayer
CPS	Common Part Sublayer
DCH	Dedicated Channel
~~ITUN~~	~~SS7 ISUP Tunnelling (Adaptation layer for ISUP and SCCP for SCTP)~~
M3UA	SS7 MTP3 User Adaptation Layer
MTP	Message Transfer Part
NNI	Network-Node Interface
NSAP	Network Service Access Point
SAAL	Signalling ATM Adaptation Layer
SAR	Segmentation and Reassembly
SCTP	Simple Control Transmission Protocol
SSCF	Service Specific Co-ordination Function
SSCOP	Service Specific Connection Oriented Protocol
SSCS	Service Specific Convergence Sublayer
SSSAR	Service Specific Segmentation and Reassembly sublayer
STC	Signalling Transport Converter
UNI	User-Network Interface

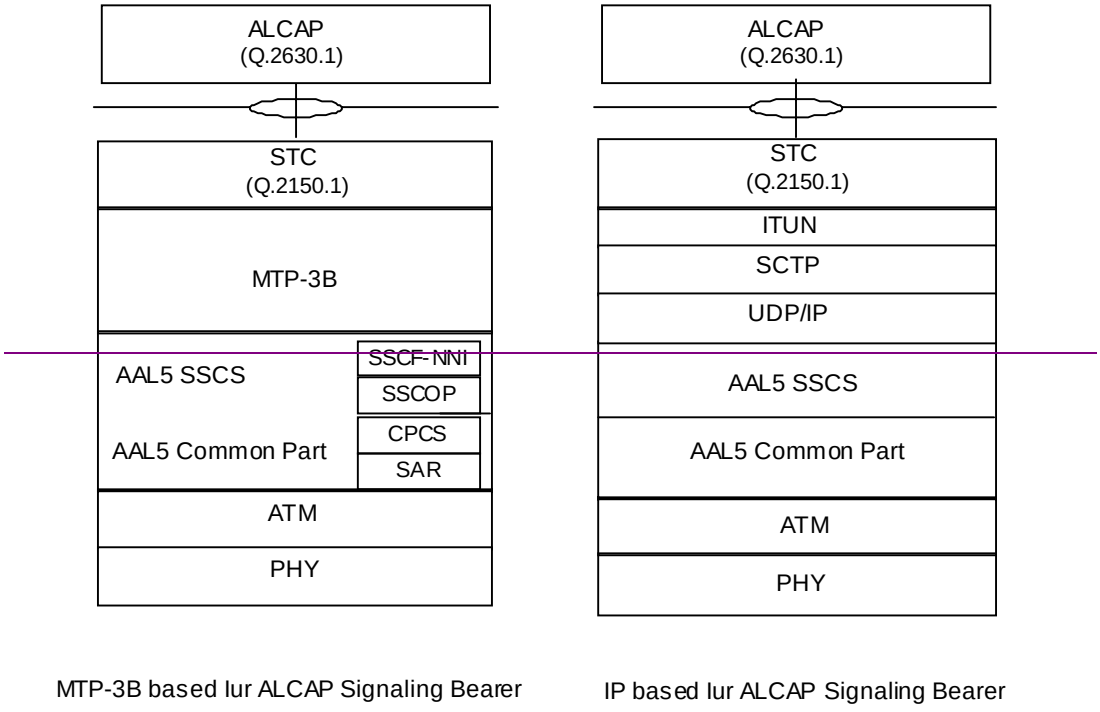
8 Signalling Bearer for ALCAP on I_{ur} Interface

8.1 Introduction

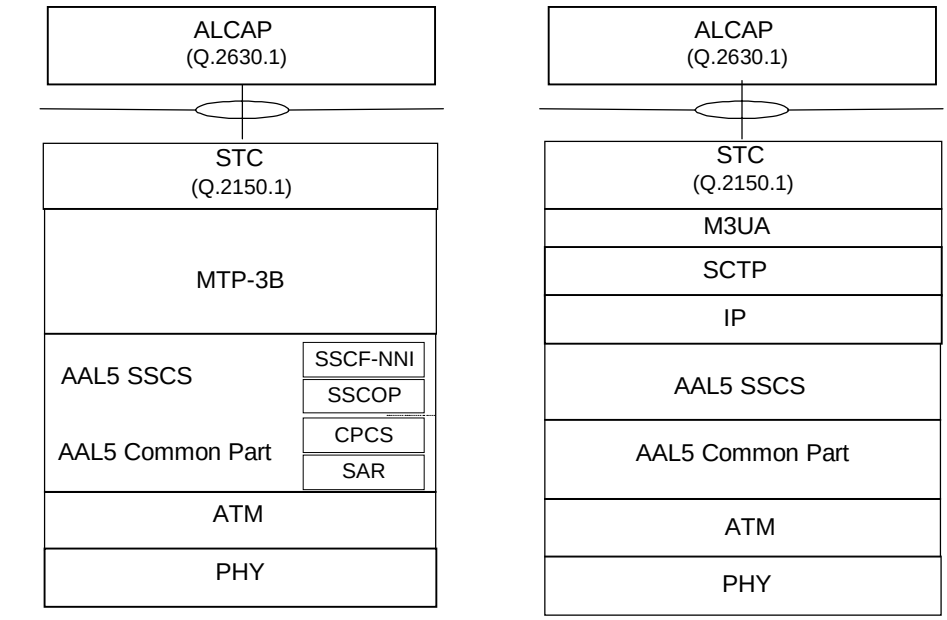
This clause specifies the signalling bearer for the ALCAP on the Iur interface. Signalling bearer is used for the conveyance of the ALCAP messages between the peer UTRAN nodes.

8.2 Signalling Bearer

There are two protocol stacks specified for Iur ALCAP Signalling Bearer - one based on MTP-3B [11] and SAAL-NNI [12, 8] and the other based on SCTP [18]. Signalling Transport Converter for MTP-3B is applied [13]. SCCP Adaptation Layer for SCTP is applied [19]. The following figure shows the signalling bearer protocol stacks for the ALCAP on Iur interface.



MTP-3B based Iur ALCAP Signaling Bearer IP based Iur ALCAP Signaling Bearer



MTP-3B based Iur ALCAP Signaling Bearer IP based Iur ALCAP Signaling Bearer

Figure 3: Signalling bearers for ALCAP on Iur interface