TSG-RAN Meeting #10
Bangkok, Thailand, 6 - 8 December 2000

TSGRP#10(00)0624

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_Categor	WG_Status	Cur_Ver_Nu	New_Ver_Nu
R3-002648	25.426	007		Editorial correction to 25.426	D	agreed	3.4.0	3.5.0
R3-003038	25.426	008		Corrections to SCTP and M3UA version numbers	F	agreed	3.4.0	3.5.0
R3-003257	25.426	009	1	Application of AAL2 Link Characteristics on Iub/Iur	F	agreed	3.4.0	3.5.0

3GPP TSG RAN WG3 Meeting #16
Windsor, England, 16.-20. October, 2000

***Document* R3-002648**
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	007	Current Version:	3.4.0

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

For submission to:	RAN#10	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: *(at least one should be marked with an X)* (U)SIM [ ] ME [ ] UTRAN / Radio [X] Core Network [ ]

Source: R-WG3 **Date:** 06.10.2000

Subject: Editorial correction to 25.426

Work item:

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

F	Correction		**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	X		Release 99	X
				Release 00	

Reason for change: In chapter 8.2. SCCP User adaptation (SUA) has been mentioned in the text though MTP-3 User Adaptation shall actually be used (the figure and the reference are correct). In the same chapter the reference to Q.2210 Implementor's Guide [21] is in the wrong place.

Clauses affected: 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:

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.

8.2 Signalling Bearer

There are two protocol stacks specified for Iur ALCAP Signalling Bearer - one based on MTP-3B [11, 21] and SAAL-NNI [12, 8] and the other based on SCTP [18]. Signalling Transport Converter for MTP-3B is applied [13 ~~& 21~~]. ~~SCCP~~ MTP-3 User Adaptation Layer (M3UA) for SCTP is applied [19]. The following figure shows the signalling bearer protocol stacks for the ALCAP on Iur interface.

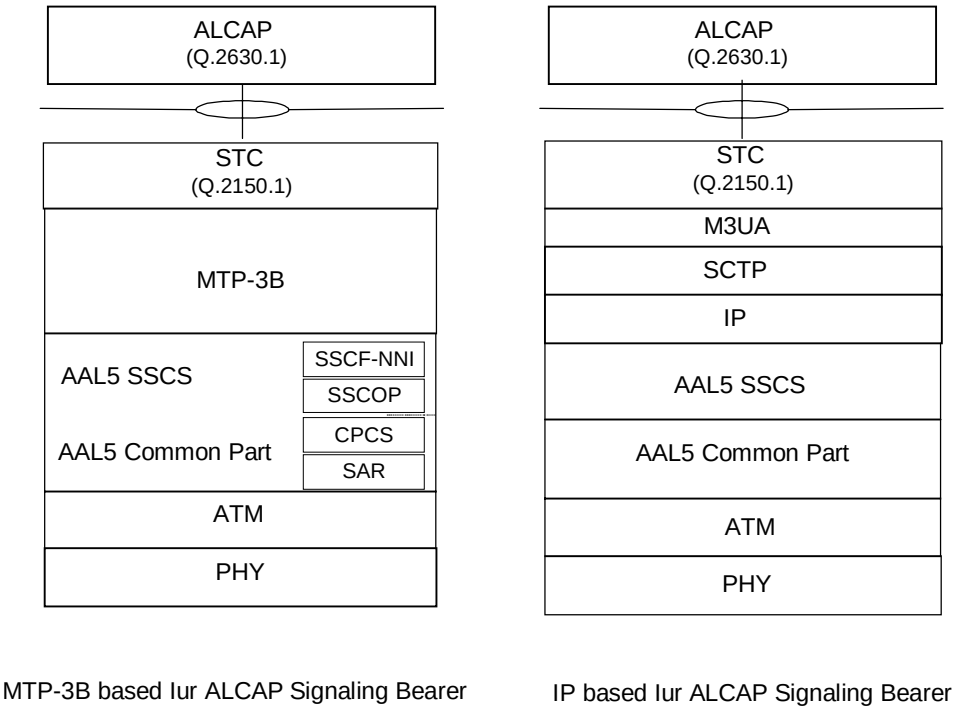

Figure 3: Signalling bearers for ALCAP on Iur interface

3GPP TSG-RAN3 Meeting #17
Chicago, USA, 20-24 November 2000

Tdoc R3-003038

CR-Form-v3

CHANGE REQUEST

⌘ **25.426** **CR** **008** ⌘ rev **-** ⌘ Current version: **3.4.0** ⌘

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Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network **X** Core Network **X**

Title:	⌘	Corrections to SCTP and M3UA Version Numbers
Source:	⌘	R-WG3
Work item code:	⌘	***Date:*** ⌘ 14 November 2000
Category:	⌘ **F**	***Release:*** ⌘ R99

Use one of the following categories:
F *(essential 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:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change:	⌘	Update to latest available version of SCTP and M3UA. SCTP is now an RFC instead of a working-draft document. The acronym for SCTP is incorrect.
Summary of change:	⌘	Update the SCTP version reference from an IETF working draft to the new approved RFC for SCTP. Update the M3UA version reference to the latest working draft version. Correct the acronym for SCTP.
Consequences if not approved:	⌘	Designs could be incorrect if they were completed by following the wrong version of the references.

Clauses affected:	⌘	
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments:	⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

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] (void)

Note: this reference will be to ITU-T Recommendation Q.2630.1 (1999): "AAL Type 2 signalling protocol (Capability Set 1)" when this becomes available.

[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] 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] New ITU-T Recommendation Q.2150.1 (1999): "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, "Stream Control Transmission Protocol", draft-ieft-sigtran-sctp-v9.txt (IESG Last Call Version), IETF, 19 April 2000.~~

[18] IETF RFC 2960 (10/2000): “Stream Control Transmission Protocol”.

[19] G. Sidebottom et al, "SS7 MTP3 - User Adaptation Layer", draft-ietf-sigtran-m3ua-04~~2~~.txt (Work In Progress), IETF, ~~10 March~~ September 2000.

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

[21] ITU-T Implementor's guide (12/99) for recommendation Q.2210 (07/96).

3 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
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~~ Stream 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

3GPP TSG-RAN WG3 Meeting #17 ***R3-003257***
Chicago, U.S.A., 20.-24. November, 2000

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CHANGE REQUEST

⌘ **25.426** **CR** **009** ⌘ rev **1** ⌘ Current version: **3.4.0** ⌘

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Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network **X** Core Network ☐

Title:	⌘	Application of AAL2 Link Characteristics on Iub/Iur DCHs
Source:	⌘	R-WG3
Work item code:	⌘	***Date:*** ⌘ 22.11.2000
Category:	⌘	**F** ***Release:*** ⌘ R99

Use one of the following categories:
F *(essential 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:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change:	⌘	Currently the application of AAL2 Link Characteristics (ALC) is ambiguous as nothing has been said of it. In the given reference Q.2630 the use of ALC is optional, but meant to be used in the switched case of AAL2. From the multivendor operability viewpoint it is required to be specified whether ALC is available or not in the UTRAN interfaces.
Summary of change:	⌘	The ALC is a mandatory parameter in ALCAP when there is AAL2 switching in the Transport Network Layer of the interface.
Consequences if not approved:	⌘	The TS is ambiguous and the multivendor operability is endangered.

Clauses affected:	⌘	6.1		
Other specs affected:	⌘	**X** Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	TS25.434 (CR005), TS25.424 (CR006)
Other comments:	⌘	The resulting revised CR of the contribution R3-003129		

6 Transport Signalling Application for DCH Data Streams

6.1 ALCAP

AAL2 signalling protocol Capability Set 1 [5] is the signalling protocol to control AAL2 connections on Iub and Iur interfaces.

Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [5].

User Plane Transport bearers for Iur interface are established and released by the ALCAP in the Serving RNC. The binding identity shall already be assigned and tied to a radio application procedure when the first ALCAP message is received over the Iur interface in the Drift RNC.

User Plane Transport bearers for Iub interface are established and released by the ALCAP in the Controlling RNC.

AAL2 transport layer addressing is based on embedded E.164 or AESA variants of the NSAP addressing format [6, 7]. Native E.164 addressing shall not be used.

If there is an AAL2 switching function in the transport network layer of the interface, the AAL2 Link Characteristics parameter (ALC) in the Establish Request message of AAL2 signalling protocol shall be used.