## RP#16(02) 0413

## Technical Specification Group Radio Access Network Marco Island, USA 4 - 7 June 2002

TSG_Doc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	New_Ver_Num	Tdoc_Num	WorkItem
RP-020413	25.434	022		R99	Correction of Aesa formats	F	3.7.0	3.8.0	R3-021160	TEI
RP-020413	25.434	023		Rel-4	Correction of Aesa formats	A	4.3.0	4.4.0	R3-021164	TEI
RP-020413	25.434	024		Rel-5	Correction of Aesa formats	A	5.0.0	5.1.0	R3-021168	TEI

affected:

#### R3-021160 3GPP TSG-RAN WG3 Meeting #29 Gyeongju, Korea, 13th – May17<sup>th</sup>, 2002 CR-Form-v3 CHANGE REQUEST $\mathfrak{R}$ 25.434 CR 022 Current version: For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **%** symbols. ME/UE Radio Access Network X Core Network (U)SIM Proposed change affects: # Title: ★ Correction of Aesa formats Source: R-WG3 TEI Work item code: ₩ Date: 第 April 2002 Category: F Release: # R99 Use one of the following categories: Use <u>one</u> of the following releases: **F** (essential correction) 2 (GSM Phase 2) R96 (Release 1996) A (corresponds to a correction in an earlier release) **B** (Addition of feature), R97 (Release 1997) **C** (Functional modification of feature) R98 (Release 1998) R99 (Release 1999) **D** (Editorial modification) Detailed explanations of the above categories can REL-4 (Release 4) be found in 3GPP TR 21.900. REL-5 (Release 5) Reason for change: \* The version of October 96 of the recommendation E191 is inaccurate since it does not have other Aesa variants but it only references the embedded E164. Then, also, Aesa variants can designate E164 Aesa only variants if it is not clearly stated that other Aesa variants within the Nsap variants may also be considered. Native E164 reference is missing. Summary of change: ₩ The E191 recommendation reference has been corrected and also the possibility to use any other Nsap Aesa variants outside of E164 variants within Nsap format. Native E164 correct reference is given. <u>Impact assessment towards the previous version of the specification (same release):</u> This CR has isolated impact with the previous version of the specification (same release) since the RNC can use any other Aesa variant of the Nsap format with this correction. This CR has an impact under functional point of view for implementations not behaving like indicated in the CR. The impact can be considered isolated because the change affects only the aal2 transport layer addressing function. Consequences if Erroneous specification referenced and inaccurate restriction on the possible not approved: Nsap Aesa variants to be used. Clauses affected: 第 2.6.2 **X** Other core specifications 第 TS25434 CR023 REL-4 Other specs

TS25434 CR024 REL-5

Test specifications

**O&M Specifications** 

Other comments: #

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[11]

plan ".

## 2 References

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[2]	ITU-T Recommendation I.366.1 (6/98): "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2".
[3]	ITU-T Recommendation Q.2630.1 (12/99): "AAL type 2 signalling protocol (Capability Set 1)".
[4]	ITU-T Recommendation Q.2110 (7/94): "B-ISDN ATM adaptation layer - Service Specific Connection Oriented Protocol (SSCOP)".
[5]	ITU-T Recommendation Q.2130 (7/94): "B-ISDN signalling ATM adaptation layer - Service Specific Coordination Function for Support of Signalling at the User Network Interface (SSCF at UNI)".
[6]	ITU-T Recommendation Q.2150.2 (12/99): "Signalling Transport Converter on SSCOP and SSCOPMCE".
[7]	ITU-T Recommendation I.361 (11/95): "B-ISDN ATM layer specification".
[8]	ITU-T Recommendation I.630 (2/99): "ATM protection switching".
[9]	ITU-T Recommendation E.191 (1003/9600): "B-ISDN numbering and addressing".
[10]	ITU-T Recommendation X.213 (11/95): "Information Technology - Open Systems

ITU-T Recommendation E.164 (5/97): " The international public telecommunication numbering

Interconnection - Network Service Definition".

# 6 I<sub>ub</sub> Transport Signalling Application for Common Transport Channel Data Streams

#### 6.1 Introduction

This subclause specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in clause 7 (figure 2).

### 6.2 Transport Signalling

Q.2630.1 [3] as developed by ITU-T is selected as the standard AAL2 signalling protocol for Iub.

Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [3]. The binding identifier shall already be assigned and tied to a radio application procedure when the Establish Request message is received over the Iub interface in the Node B.

User Plane Transport bearers are established and in all normal cases released by the ALCAP in the Controlling RNC. The Node B shall initiate release of the user plane transport bearers for the removed common channels that were remaining within the cell when the cell is deleted.

AAL2 transport layer addressing is based on embedded E.164 or other AESA variants of the NSAP addressing format [9, 10]. Native E.164 addressing [11] 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) shall be included in the Establish Request message of AAL2 signalling protocol.

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- [9] ITU-T Recommendation Q.2630.2 (12/2000): "AAL Type 2 signalling protocol (Capability Set 2)".
- [10] ITU-T Recommendation E.191 (<u>0310/0096</u>): "B-ISDN numbering and addressing".
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- [12] ITU-T Recommendation E.164 (5/97): " The international public telecommunication numbering plan ".

# 6 I<sub>ub</sub> Transport Signalling Application for Common Transport Channel Data Streams

#### 6.1 Introduction

This subclause specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in clause 7 (figure 2).

### 6.2 Transport Signalling

Q.2630.2 as developed by ITU-T [9] is selected as the standard AAL2 signalling protocol for Iub. ITU-T Recommendation Q.2630.2 [9] adds new optional capabilities to ITU-T Recommendation Q.2630.1 [3].

Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [9]. The binding identifier shall already be assigned and tied to a radio application procedure when the Establish Request message is received over the Iub interface in the Node B.

User Plane Transport bearers are established and in all normal cases released by the ALCAP in the Controlling RNC. The Node B shall initiate release of the user plane transport bearers for the removed common channels that were remaining within the cell when the cell is deleted.

AAL2 transport layer addressing is based on embedded E.164 or <u>other</u> AESA variants of the NSAP addressing format [10, 11]. Native E.164 addressing [12] shall not be used.

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

If there is an AAL2 switching function in the transport network layer of the interface, the Path Type parameter (PT) may be included in the Establish Request message of AAL2 signalling protocol for prioritisation at ATM level.

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**O&M Specifications** 

Other comments: #

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[11]	ITU-T Recommendation X.213 (11/95): "Information Technology - Open Systems Interconnection - Network Service Definition".

- [12] IETF RFC 768, (August 1980): "User Datagram Protocol".
- [13] IETF RFC 2460, (December 1998): "Internet Protocol, Version 6 (IPv6) Specification".
- [14] IETF RFC 791, (September 1981): "Internet Protocol".
- [15] IETF RFC 2474, (December 1998): "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".
- [16] IETF RFC 1661, (July 1994): "The Point-to-Point Protocol (PPP)".
- [17] IETF RFC 1662, (July 1994): "PPP in HDLC-like Framing".
- [18] IETF RFC 2507, (February 1999): "IP header compression".
- [19] IETF RFC 1990, (August 1996): "The PPP Multilink Protocol (MP)".
- [20] IETF RFC 2686, (September 1999): "The Multi-Class Extension to Multi-Link PPP".
- [21] IETF RFC 2509, (February 1999): "IP Header Compression over PPP".

[22]	3GPP TS 25.401, "UTRAN Overall Description"
[23]	3GPP TS 25.426, "UTRAN Iur and Iub Interface Data Transport & Transport Signalling for DCH Data Streams"
[24]	IETF RFC 3153, (August 2001): "PPP Multiplexing".
[25]	IETF RFC 2364, (July 1998): "PPP over AAL5".
[26]	IETF RFC 3031, (January 2001): "Multiprotocol Label Switching Architecture".
[27]	ITU-T Recommendation E.164 (5/97): " The international public telecommunication numbering plan ".

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#### 6.1 Introduction

This subclause specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in clause 7 (figure 2).

### 6.2 Transport Signalling in case of ATM Transport Option

Q.2630.2 as developed by ITU-T [9] is selected as the standard AAL2 signalling protocol for Iub. ITU-T Recommendation Q.2630.2 [9] adds new optional capabilities to ITU-T Recommendation Q.2630.1 [3].

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If there is an AAL2 switching function in the transport network layer of the interface, the Path Type parameter (PT) may be included in the Establish Request message of AAL2 signalling protocol for prioritisation at ATM level.