

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

RP#16(02) 0408

TSG_Doc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	New_Ver_Num	Tdoc_Num	WorkItem
RP-020408	25.424	021		R99	Correction of Aesa formats	F	3.8.0	3.9.0	R3-021161	TEI
RP-020408	25.424	022		Rel-4	Correction of Aesa formats	A	4.2.0	4.3.0	R3-021165	TEI
RP-020408	25.424	023		Rel-5	Correction of Aesa formats	A	5.0.0	5.1.0	R3-021169	TEI

3GPP TSG-RAN WG3 Meeting #29
 Gyeongju, Korea, 13th – May17th, 2002

R3-021161

CR-Form-v3

CHANGE REQUEST

⌘ **25.424** **CR 021** ⌘ rev **-** ⌘ Current version: **3.8.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

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

Title:	⌘ Correction of Aesa formats		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ April 2002
Category:	⌘ F	Release:	⌘ R99
Use <u>one</u> 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 <u>one</u> 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: ⌘ 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. The March 00 of E191 is the one than defines the aesa variants and not only 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 address reference is missing.

Summary of change: ⌘ The referenced recommendations for Aesa variants has been corrected. The actual reference for native E164 has been given.

Impact assessment towards the previous version of the specification (same release):
 This CR has isolated impact with the previous version of the specification (same release) since the RNC can with this correction use any other Aesa variant of the Nsap format.

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 not approved: ⌘ Erroneous specification referenced and inaccurate restriction on the possible Nsap Aesa variants to be used.

Clauses affected: ⌘ 2, 6.2

Other specs affected:	<input checked="" type="checkbox"/>	Other core specifications	<input checked="" type="checkbox"/>	TS25424 CR022 REL-4
	<input type="checkbox"/>	Test specifications	<input type="checkbox"/>	TS25424 CR023 REL-5
	<input type="checkbox"/>	O&M Specifications		
Other comments:	<input checked="" type="checkbox"/>			

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.
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- 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.

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- [1] ITU-T Recommendation I.361 (11/95): "B-ISDN ATM Layer Specification".
- [2] ITU-T Recommendation I.363.2 (9/97): "B-ISDN ATM Adaptation Layer type 2".
- [3] ITU-T Recommendation I.366.1 (6/98): "Segmentation and Re-assembly Service Specific Convergence Sublayer for the AAL type 2".
- [4] New ITU-T Recommendation Q.2630.1 (12/99): "AAL Type 2 signalling protocol (Capability Set 1)".
- [5] ITU-T Recommendation E.191 (~~1003/9600~~): "B-ISDN numbering and addressing".
- [6] 3GPP TS 25.426: "UTRAN I_{ur} and I_{ub} Interface Data Transport & Transport Signalling for DCH Data Streams".
- [7] 3GPP TS 25.434: "UTRAN I_{ub} Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams".
- [8] ITU-T Recommendation X.213 (11/95): "Information Technology - Open Systems Interconnection - Network Service Definition".
- [9] ITU-T Recommendation E.164 (5/97): "The International Public Telecommunication Numbering Plan ".

6 I_{ur} Transport Signalling Application for Common Transport Channel Data Streams

6.1 Introduction

This clause specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in [6].

6.2 Transport Signalling

AAL2 signalling protocol Capability Set 1, ITU-T Recommendation Q.2630.1 [4], is the signalling protocol to control the AAL2 connections on Iur interfaces. AAL2 transport layer addressing is based on embedded E.164 or other AESA variants of the NSAP addressing format [5,8]. Native E.164 addressing [9] shall not be used.

Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [4]. The binding identifier shall already be assigned and tied to a radio application procedure when the Establish Request message is received over the Iur interface in the Drift RNC.

User Plane Transport bearers are established and in all normal cases released by the ALCAP in the Serving RNC.

The AAL2 Link Characteristics parameter (ALC) shall be included in the Establish Request message of AAL2 signalling protocol.

3GPP TSG-RAN WG3 Meeting #29
 Gyeongju, Korea, 13th – May17th, 2002

R3-021165

CR-Form-v3

CHANGE REQUEST

⌘ **25.424** **CR 022** ⌘ rev **-** ⌘ Current version: **4.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

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

Title:	⌘	Correction of Aesa formats		
Source:	⌘	R-WG3		
Work item code:	⌘	TEI		
		Date: ⌘ April 2002		
Category:	⌘	A		
		Release: ⌘ REL-4		
		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Use <u>one</u> of the following categories:</i></p> <p>F (essential correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (Addition of feature),</p> <p>C (Functional modification of feature)</p> <p>D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Use <u>one</u> of the following releases:</i></p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p> </td> </tr> </table>	<p><i>Use <u>one</u> of the following categories:</i></p> <p>F (essential correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (Addition of feature),</p> <p>C (Functional modification of feature)</p> <p>D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p><i>Use <u>one</u> of the following releases:</i></p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>REL-4 (Release 4)</p> <p>REL-5 (Release 5)</p>
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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. The March 00 of E191 is the one than defines the aesa variants and not only 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 address reference is missing.

Summary of change: ⌘ The referenced recommendations for Aesa variants has been corrected. The actual reference for native E164 has been given.

Impact assessment towards the previous version of the specification (same release):
 This CR has isolated impact with the previous version of the specification (same release) since the RNC can with this correction use any other Aesa variant of the Nsap format.

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 not approved: ⌘ Erroneous specification referenced and inaccurate restriction on the possible Nsap Aesa variants to be used.

Clauses affected: ⌘ 2, 6.2

Other specs affected:	<input checked="" type="checkbox"/>	Other core specifications	<input checked="" type="checkbox"/>	TS25424 CR021 R99
	<input type="checkbox"/>	Test specifications	<input type="checkbox"/>	TS25424 CR023 REL-5
	<input type="checkbox"/>	O&M Specifications	<input type="checkbox"/>	
Other comments:	<input checked="" type="checkbox"/>			

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- [1] ITU-T Recommendation I.361 (11/95): "B-ISDN ATM Layer Specification".
- [2] ITU-T Recommendation I.363.2 (11/2000): "B-ISDN ATM Adaptation Layer type 2".
- [3] ITU-T Recommendation I.366.1 (6/98): "Segmentation and Re-assembly Service Specific Convergence Sublayer for the AAL type 2".
- [4] New ITU-T Recommendation Q.2630.1 (12/99): "AAL Type 2 signalling protocol (Capability Set 1)".
- [5] ITU-T Recommendation E.191 (~~1003/9600~~): "B-ISDN ~~numbering and~~ addressing".
- [6] 3GPP TS 25.426: "UTRAN I_{ur} and I_{ub} Interface Data Transport & Transport Signalling for DCH Data Streams".
- [7] 3GPP TS 25.434: "UTRAN I_{ub} Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams".
- [8] ITU-T Recommendation Q.2630.2 (12/2000): "AAL Type 2 signalling protocol (Capability Set 2)".
- [9] ITU-T Recommendation X.213 (11/95): "Information Technology - Open Systems Interconnection - Network Service Definition".
- [10] ITU-T Recommendation E.164 (5/97): "The international public telecommunication numbering plan".

6 I_{ur} Transport Signalling Application for Common Transport Channel Data Streams

6.1 Introduction

This clause specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in [6].

6.2 Transport Signalling

AAL2 signalling protocol Capability Set 2, ITU-T Recommendation Q.2630.2 [8], is the signalling protocol to control the AAL2 connections on Iur interfaces. Q.2630.2 [8] adds new optional capabilities to Q.2630.1 [4].

AAL2 transport layer addressing is based on embedded E.164 or **other** AESA variants of the NSAP addressing format [5,9]. Native E.164 addressing [10] shall not be used.

Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [8]. The binding identifier shall already be assigned and tied to a radio application procedure when the Establish Request message is received over the Iur interface in the Drift RNC.

User Plane Transport bearers are established and in all normal cases released by the ALCAP in the Serving RNC.

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.

3GPP TSG-RAN WG3 Meeting #29
 Gyeongju, Korea, 13th – May17th, 2002

R3-021169

CR-Form-v3

CHANGE REQUEST

⌘ **25.424** **CR 023** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

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

Title:	⌘	Correction of Aesa formats
Source:	⌘	R-WG3
Work item code:	⌘	TEI
		Date: ⌘ April 2002
Category:	⌘	A
		Release: ⌘ REL-5
		<p><i>Use <u>one</u> of the following categories:</i></p> <p>F (essential correction) A (corresponds to a correction in an earlier release) B (Addition of feature), C (Functional modification of feature) D (Editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>
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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. The March 00 of E191 is the one than defines the aesa variants and not only the embedded E164.

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Native E164 address reference is missing.

Summary of change: ⌘ The referenced recommendations for Aesa variants has been corrected. The actual reference for native E164 has been given.

Impact assessment towards the previous version of the specification (same release):
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This CR has an impact under functional point of view for implementations not behaving like indicated in the CR.
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Consequences if not approved: ⌘ Erroneous specification referenced and inaccurate restriction on the possible Nsap Aesa variants to be used.

Clauses affected: ⌘ 2, 6.2

Other specs affected:	<input checked="" type="checkbox"/>	Other core specifications	<input checked="" type="checkbox"/>	TS25424 CR021 R99
	<input type="checkbox"/>	Test specifications	<input type="checkbox"/>	TS25424 CR022 REL-4
	<input type="checkbox"/>	O&M Specifications	<input type="checkbox"/>	
Other comments:	<input checked="" type="checkbox"/>			

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- [8] ITU-T Recommendation Q.2630.2 (12/2000): "AAL Type 2 signalling protocol (Capability Set 2)".
- [9] ITU-T Recommendation X.213 (11/95): "Information Technology - Open Systems Interconnection - Network Service Definition".
- [10] IETF STD 51, RFC 1661 (July 1994): "The Point-To-Point Protocol (PPP)".
- [11] IETF STD 51, RFC 1662 July 1994: "PPP in HDLC-like Framing".
- [12] IETF RFC 2507 (February 1999): "IP header compression".
- [13] IETF RFC 1990 "The PPP Multilink Protocol (MP)".
- [14] IETF RFC 2686 "The Multi-Class Extension to Multi-Link PPP".
- [15] IETF RFC 2509 (February 1999): "IP Header Compression over PPP".
- [16] IETF RFC 2460 "Internet Protocol, Version 6 (Ipv6) Specification".
- [17] IETF RFC 791 (1981): "Internet Protocol".
- [18] IETF RFC 2474 (December 1998): "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".
- [19] IETF RFC 768 (8/1980): "User Datagram Protocol".
- [20] IETF RFC 3153 (1/2001): "PPP Multiplexing".
- [21] IETF RFC 2364 (1/2001): "PPP over AAL5".
- [22] IETF RFC 3031 (1/2001): "Multiprotocol Label Switching Architecture".

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

6 I_{ur} Transport Signalling Application for Common Transport Channel Data Streams

6.1 Introduction

This clause specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in [6].

6.2 Transport Signalling in case of ATM option

AAL2 signalling protocol Capability Set 2, ITU-T Recommendation Q.2630.2 [8], is the signalling protocol to control the AAL2 connections on I_{ur} interfaces. Q.2630.2 [8] adds new optional capabilities to Q.2630.1 [4].

AAL2 transport layer addressing is based on embedded E.164 or other AESA variants of the NSAP addressing format [5,9]. Native E.164 addressing [23] shall not be used.

Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [8]. The binding identifier shall already be assigned and tied to a radio application procedure when the Establish Request message is received over the I_{ur} interface in the Drift RNC.

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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.