TSG-RAN Meeting #15   *TSGRP#15(02) 0175*
Cheju, Korea, 5 - 8 March 2002

Title: **Agreed CRs to TS 25.434**

Source: **TSG-RAN WG3**

Agenda item: **7.3.3/7.3.4**

RP_Num	Tdoc_Num	Specification	CR_Num	Revision _Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	Workitem
RP-020175	R3-020417	25.434	015		R99	Alignment of 25.434 to 25.426	F	3.6.0	TEI
RP-020175	R3-020418	25.434	016		Rel-4	Alignment of 25.434 to 25.426	A	4.2.0	TEI
RP-020175	R3-020596	25.434	017	1	R99	Correction to transport bearers release initiation	F	3.6.0	TEI
RP-020175	R3-020597	25.434	018	1	Rel-4	Correction to transport bearers release initiation	A	4.2.0	TEI
RP-020175	R3-020598	25.434	019	1	R99	Alignment of 25.434 to 25.426 and Correction to transport bearers release initiation	F	3.6.0	TEI
RP-020175	R3-020599	25.434	020	1	Rel-4	Alignment of 25.434 to 25.426 and Correction to transport bearers release initiation	A	4.2.0	TEI

CR-Form-v4

CHANGE REQUEST

⌘   **25.434** CR **015**   ⌘ ev **-** ⌘   Current version: **3.6.0** ⌘

*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 **X**   Core Network ☐

Title: ⌘	Alignment of 25.434 to 25.426	
Source: ⌘	R-WG3	
Work item code: ⌘	TEI	***Date:*** ⌘ January, 2002

Category: ⌘   **F**

Use <u>one</u> of the following categories:
   F (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 <u>TR 21.900</u>.

Release: ⌘   R99

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: ⌘	Currently, TS 25.434 appears heavily inconsistent w.r.t. to the development occurred to the dedicated transport data streams counterpart (TS 25.426). In order to align this specification to 25.426 some modifications are needed.
Summary of change: ⌘	Subclauses 2, 6 and 7 are aligned to the corresponding subclauses in 25.426.
Consequences if not approved: ⌘	There would be an inconsistency between 25.434 and 25.426. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has no impact on the previous version of the specification (same release) for implementations aligned with the added modifications. All the information previously contained in the affected clauses is still preserved after the modifications. Additional text was added for the sake of consistency between 25.434 and 25.426, but it does not represent a functional modification.

Clauses affected: ⌘	2, 6, 7
Other specs affected: ⌘	**X** Other core specifications ⌘ CR 016, CR 017, CR 019 on 25.434 ☐ Test specifications ☐ O&M Specifications
Other comments: ⌘	If this CR and CR017 are approved, CR019 supersedes them

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

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[1] ITU-T Recommendation I.363.2 (9/97): "B-ISDN ATM Adaptation Layer type 2".

[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): "AAL type 2 signalling transport converter on SSCOP".

[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 (10/96): "B-ISDN numbering and addressing".

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

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

6.1 Introduction

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

6.2 Transport Signalling

Q.2630.1 as developed by ITU-T [3] 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 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 [9, 10]. 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) shall be included in the Establish Request message of AAL2 signalling protocol.

7 Signalling Bearer for ~~Transport Signalling~~ALCAP on I_{ub} Interface

7.1 Introduction

This chapter specifies the signalling bearer protocol stack which supports the ALCAP~~transport signalling~~ protocol.

7.2 Signalling Bearer

 SAAL-UNI is the standard signalling bearer for the AAL Type Signalling protocol (Q.2630.1) on Iub [4, 5]. The protocol stack is shown in Figure 2 below.
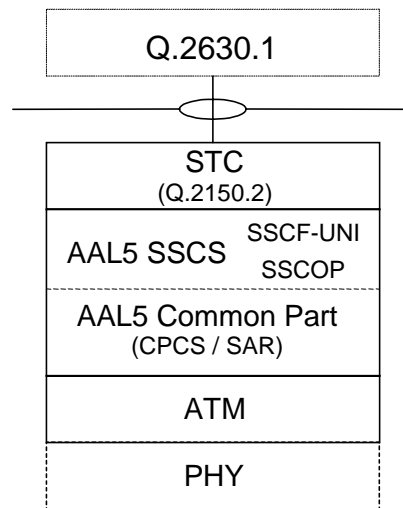
Figure 2: Transport Network Control plane protocol structure on Iub

~~Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [3].~~

The signalling transport converter (STC) relevant for Iub is Q.2150.2 [6]. The AAL5 Common Part contains CPCS and SAR.

CR-Form-v4

CHANGE REQUEST

| ⌘ | **25.434** CR **020** | ⌘ | ev | **1** | ⌘ | 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 **X**   Core Network ☐

Title: ⌘	Alignment of 25.434 to 25.426 and Correction to transport bearers release initiation

Source: ⌘	R-WG3

Work item code: ⌘	TEI	***Date:*** ⌘	January, 2002

Category: ⌘ **A**	***Release:*** ⌘ REL-4

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

Reason for change: ⌘	CR 016R1 and 018 R1 were proposed to align this specification to 25.426 and to clarify the ALCAP release in abnormal cases. To ease the implementation of the specification updates, this CR proposes the merge for the mentioned CRs.

Summary of change: ⌘	CR 016 R1 and 018 R1 are merged; R1 is due to the modifications present in R1 of CR016 and 018

Consequences if not approved: ⌘	See CR 016 R1 and 018 R1

Clauses affected: ⌘	2,6,7

Other specs ⌘	**X** Other core specifications	⌘	CR 016 R1 and 018 R1, CR019 R1 on 25.434
affected:	☐ Test specifications		
	☐ O&M Specifications		

Other comments: ⌘	If CR 016 R1 and 018 R1 are approved, this CR supersedes them.

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[3]   ITU-T Recommendation Q.2630.1 (12/99): "AAL type 2 Signalling Protocol (Capability Set 1)".

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[8]   ITU-T Recommendation I.630 (2/99): "ATM Protection Switching".

[9]   ITU-T Recommendation Q.2630.2 (12/2000): "AAL Type 2 signalling protocol (Capability Set 2)".

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

6.1 Introduction

This chapter specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in chapter 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. Q.2630.2 [9] adds new optional capabilities to 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 AESA variants of the NSAP addressing format [10, 11]. Native E.164 addressing 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.

7 Signalling Bearer for ~~Transport Signalling~~ALCAP on I_{ub} Interface

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This chapter specifies the signalling bearer protocol stack which supports the ~~transport signalling protocol~~ALCAP.

7.2 Signalling Bearer

SAAL-UNI is the standard signalling bearer for the AAL Type Signalling protocol (Q.2630.2) on Iub [4, 5]. The protocol stack is shown in Figure 2 below.
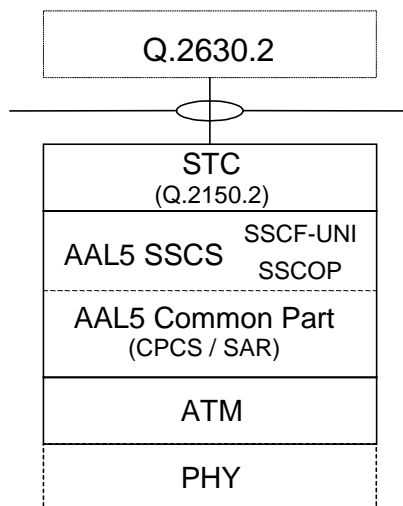
Figure 2: Transport Network Control plane protocol structure on Iub

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The signalling transport converter (STC) relevant for Iub is Q.2150.2 [6]. The AAL5 Common Part contains CPCS and SAR.

CR-Form-v4

CHANGE REQUEST

| ⌘ | **25.434** CR **019** | ⌘ | ev | **1** | ⌘ | Current version: | **3.6.0** | ⌘ |

*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 **X** Core Network ☐

Title: ⌘	Alignment of 25.434 to 25.426 and Correction to transport bearers release initiation
Source: ⌘	R-WG3
Work item code: ⌘	TEI ***Date:*** ⌘ January, 2002

Category: ⌘ **F**	***Release:*** ⌘ R99

Use <u>one</u> of the following categories:
F *(correction)*
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2   *(GSM Phase 2)*
R96   *(Release 1996)*
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Reason for change: ⌘	CR 015R1 and 017R1 were proposed to align this specification to 25.426 and to clarify the ALCAP release in abnormal cases. To ease the implementation of the specification updates, this CR proposes the merge for the mentioned CRs.
Summary of change: ⌘	CR 015R1 and 017R1 are merged; R1 is due to the modifications present in R1 of CR015 and 017
Consequences if not approved: ⌘	See CR 015 R1 and 017R1

Clauses affected: ⌘	2, 6, 7
Other specs ⌘ **X**	Other core specifications ⌘ CR015R1, CR017 R1 and CR020R1 on 25.434
affected:	☐ Test specifications
	☐ O&M Specifications
Other comments: ⌘	If CR 015R1 and 017R1 are approved, this CR supersedes them.

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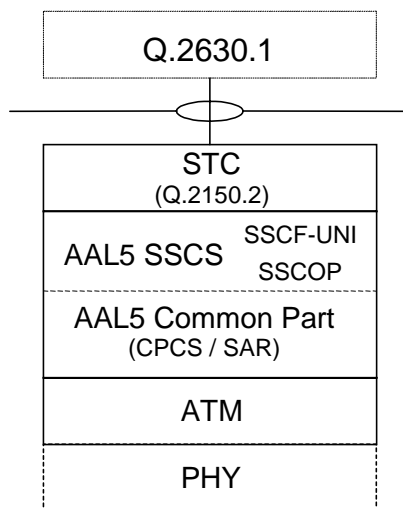
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The signalling transport converter (STC) relevant for Iub is Q.2150.2 [6]. The AAL5 Common Part contains CPCS and SAR.

CR-Form-v4

CHANGE REQUEST

⌘ | **25.434** CR **018** | ⌘ | ev | **1** | ⌘ | 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 **X** Core Network ☐

Title: ⌘	Correction to transport bearers release initiation	
Source: ⌘	R-WG3	
Work item code: ⌘	TEI	***Date:*** ⌘ January, 2002

Category: ⌘ **A**	***Release:*** ⌘ REL-4

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
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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 TS 25.434 specifies that the user plane transport bearers for Iub interface are established and RELEASED by the ALCAP in the CRNC, but there are some scenarios where the Node B needs to initiate the release of transport bearers such as in case of Cell Deletion, when the Node B receives a CELL DELETION REQUEST but there are still transport channels in the cell. This scenarios are correctly specified in TS 25.430 and TS 25.433. In RAN3 #25 it was decided that TS 25.426 should be aligned with TS 25.430 (see CR018R1 on 25.426), therefore this should also apply to 25.434.
Summary of change: ⌘	Added sentence in subclause 6.2 to indicate that in some cases (e.g. when transport channels still exist when the cell is deleted) the Node B can also release the transport bearers. R1: 'and dedicated' was removed from the added text.
Consequences if not approved: ⌘	The current text procedural text may lead to incorrect implementation, as it is contradictory with TS 25.430 and TS 25.433 and the intended behaviour of the Nodes. Inconsistencies between the specifications can lead to multi-vendor interoperability problems.

Impact Analysis:
Impact assessment towards the previous version of the specification (same release):
This CR has [isolated impact] on the previous version of the specification (same release) because it affects implementations supporting the corrected functionality, i.e. only the CRNC being able to release the transport bearers. Those implementations would not be able to handle the scenarios described here, where only the Node B can initiate the release of transport bearers.
This CR has an impact under [functional] point of view.
The impact [can] be considered isolated because the change affects [one] [system function] namely the release of transport bearers with ALCAP. |

Clauses affected: ⌘	6.2

Other specs affected:	⌘	**X**	Other core specifications	⌘	CR017R1, CR016R1, CR020R1 on 25.434
			Test specifications		
			O&M Specifications		

| Other comments: | ⌘ | If this CR and CR016R1 are approved, CR020R1 supersedes them. |

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6.2   Transport Signalling

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

<u>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.</u>

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.

CR-Form-v4

CHANGE REQUEST

⌘ **25.434** CR **017** ⌘ ev **1** ⌘ Current version: **3.6.0** ⌘

*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 **X** Core Network ☐

Title: ⌘	Correction to transport bearers release initiation	
Source: ⌘	R-WG3	
Work item code: ⌘	TEI	***Date:*** ⌘ January, 2002
Category: ⌘ **F**		***Release:*** ⌘ R99

Use one of the following categories:
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   REL-5 *(Release 5)*

Reason for change: ⌘	Currently TS 25.434 specifies that the user plane transport bearers for Iub interface are established and RELEASED by the ALCAP in the CRNC, but there are some scenarios where the Node B needs to initiate the release of transport bearers such as in case of Cell Deletion, when the Node B receives a CELL DELETION REQUEST but there are still transport channels in the cell. This scenarios are correctly specified in TS 25.430 and TS 25.433. In RAN3 #25 it was decided that TS 25.426 should be aligned with TS 25.430 (see CR018R1 on 25.426), therefore this should also apply to 25.434.
Summary of change: ⌘	Add sentence in the subclause 6.2 to indicate that in some cases (i.e. when transport channels still exist when the cell is deleted) the Node B can also release the transport bearers. R1: 'and dedicated' was removed from the added text.
Consequences if not approved: ⌘	The current text procedural text may lead to incorrect implementation, as it is contradictory with TS 25.430 and TS 25.433 and the intended behaviour of the Nodes. Inconsistencies between the specifications can lead to multi-vendor interoperability problems. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has [isolated impact] on the previous version of the specification (same release) because it affects implementations supporting the corrected functionality, i.e. only the CRNC being able to release the transport bearers. Those implementations would not be able to handle the scenarios described here, where only the Node B can initiate the release of transport bearers. This CR has an impact under [functional] point of view. The impact [can] be considered isolated because the change affects [one] [system function] namely the release of transport bearers with ALCAP.

Clauses affected: ⌘	6.2

Other specs affected:	⌘	X	Other core specifications	⌘	CR015R1, CR018R1, CR019R1 on 25.434
			Test specifications		
			O&M Specifications		

Other comments:	⌘	If this CR and CR015R1 are approved, CR019R1 supersedes them

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://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 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.

6.2   Transport Signalling

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

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.

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.

CR-Form-v4

CHANGE REQUEST

⌘ **25.434** CR **016** ⌘ ev **-** ⌘ 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 **X** Core Network ☐

Title: ⌘	Alignment of 25.434 to 25.426	
Source: ⌘	R-WG3	
Work item code: ⌘	TEI	***Date:*** ⌘ January, 2002

Category: ⌘ **A**

Use <u>one</u> of the following categories:
F (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 <u>TR 21.900</u>.

Release: ⌘ REL-4

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: ⌘	Currently, TS 25.434 appears heavily inconsistent w.r.t. to the development occurred to the dedicated transport data streams counterpart (TS 25.426). In order to align this specification to 25.426 some modifications are needed.
Summary of change: ⌘	Subclauses 2, 6 and 7 are aligned to the corresponding subclauses in 25.426.
Consequences if not approved: ⌘	There would be an inconsistency between 25.434 and 25.426. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has no impact on the previous version of the specification (same release) for implementations aligned with the added modifications. All the information previously contained in the affected clauses is still preserved after the modifications. Additional text was added for the sake of consistency between 25.434 and 25.426, but it does not represent a functional modification.

Clauses affected: ⌘	2, 6, 7	
Other specs affected: ⌘	**X** Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications	CR015, CR018, CR020 on 25.434
Other comments: ⌘	If this CR and CR018 are approved, CR020 supersedes them.	

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://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 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. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1]   ITU-T Recommendation I.363.2 (11/2000): "B-ISDN ATM Adaptation Layer type 2".

[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): "AAL type 2 signalling transport converter on SSCOP".

[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 Q.2630.2 (12/2000): "AAL Type 2 signalling protocol (Capability Set 2)".

[10]   ITU-T Recommendation E.191 (10/96): "B-ISDN numbering and addressing".

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

6 I_{ub} Transport Signalling <u>Application </u>for Common Transport Channel Data Streams

6.1 Introduction

This chapter specifies the transport signalling protocol(s) used to establish the user plane transport bearers. The protocol stack is shown in chapter 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. Q.2630.2 [9] adds new optional capabilities to Q.2630.1 [3].

<u>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.</u>

<u>User Plane Transport bearers are established and released by the ALCAP in the Controlling RNC.</u>

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

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.

7 Signalling Bearer for ~~Transport Signalling~~<u>ALCAP</u> on I_{ub} Interface

7.1 Introduction

This chapter specifies the signalling bearer protocol stack which supports the ~~transport signalling protocol~~<u>ALCAP</u>.

7.2 Signalling Bearer

SAAL-UNI is the standard signalling bearer for the AAL Type Signalling protocol (Q.2630.2) on Iub [4, 5]. The protocol stack is shown in Figure 2 below.
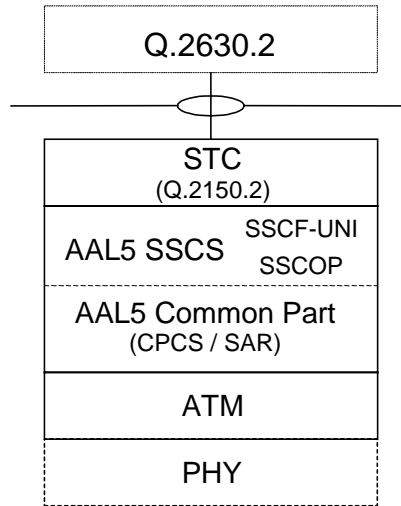
Figure 2: Transport Network Control plane protocol structure on Iub

~~Binding ID provided by the radio network layer shall be copied in SUGR parameter of ESTABLISH.request primitive of [9].~~

The signalling transport converter (STC) relevant for Iub is Q.2150.2 [6]. The AAL5 Common Part contains CPCS and SAR.