

**TSG-RAN Meeting #9
Hawaii, US, 20 - 22 September 2000**

TSGRP#9(00)0390

Title: Agreed CRs to TS 25.434

Source: TSG-RAN WG3

Agenda item: 5.3.3

Tdoc_Num	Specification	CR_Num	Revision_Num	CR_Subject	CR_Category	WG_Status	Cur_Ver_Num	New_Ver_Num
R3-002071	25.434	003		Remove Draft in the title of the reference Q.2630.1 and Q.2150.2 in 25.434	F	agreed	3.3.0	3.4.0

CHANGE REQUEST

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

25.434

CR 003

Current Version: **3.3.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: TSG-RAN#9

list expected approval meeting # here ↑

for approval
 for information

Strategic (for SMG use only)
 non-strategic

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <http://ftp.3gpp.org/Information/CR-Form-v2.doc>

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

Source: R-WG3 **Date:** August 2000

Subject: Remove "Draft" in the title of the reference Q.2630.1 and Q.2150.2 in 25.434

Work item:

Category:	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

Reason for change: The title of the reference Q.2630.1 and Q.2150.2 are still shown as darft, however Q.2630.1 and Q.2150.2 have been decision in the ITU-T December 1999 SG11 meeting. The "Draft" is removed in order to show that the 25.434 is referring to the latest recommendation of Q.2630.1 and Q.2150.2

Clauses affected: 2

Other specs affected:	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs:	
------------------------------	---	--	--

Other comments:



<----- double-click here for help and instructions on how to create a CR.

1 Scope

The present document shall provide a specification of the UTRAN RNC-Node B (Iub) interface Data Transport and Transport Signalling for Common Transport Channel data streams.

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] ITU-T Recommendation I.363.2 (1997): "B-ISDN ATM Adaptation Layer type 2".
 - [2] ITU-T Recommendation I.366.1 (1998): "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2".
 - [3] ~~Draft~~-New ITU-T Recommendation Q.2630.1(1999): "AAL Type 2 signalling protocol (Capability Set 1)".
 - [4] ITU-T Recommendation Q.2110 (1994): "B-ISDN ATM Adaptation layer – Service Specific Connection Oriented Protocol (SSCOP)".
 - [5] 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)".
 - [6] ~~Draft~~-New ITU-T Recommendation Q.2150.2 (1999): "AAL Type 2 Signalling Transport Converter on SSCOP".
 - [7] ITU-T Recommendation I.361 (1995): "B-ISDN ATM Layer Specification".
 - [8] ITU-T Recommendation I.630 (1999): "ATM Protection Switching".
-

3 Definitions, symbols and abbreviations

3.1 Definitions

3.2 Symbols

3.3 Abbreviations

AAL	ATM Adaption Layer
AAL2	AAL Type 2
ATM	Asynchronous Transfer Mode
CPCH	Common Packet Channel
CPCS	Common Part Convergence Sublayer
CPS	Common Part Sublayer
DSCH	Downlink Shared Channel
FACH	Forward Access Channel

3G TS 25.434 V3.2.0 (2000-03)

Technical Specification

3rd Generation Partnership Project; Technical Specification Group Radio Access Network; UTRAN I_{ub} Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams (Release 1999)



The present document has been developed within the 3rd Generation Partnership Project (3GPP™) and may be further elaborated for the purposes of 3GPP. The present document has not been subject to any approval process by the 3GPP Organisational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP only. The Organisational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP Organisational Partners' Publications Offices.

Keywords

3GPP

Postal address

3GPP support office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

<http://www.3gpp.org>

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© 2000, 3GPP Organizational Partners (ARIB, CWTS, ETSI, T1, TTA, TTC).
All rights reserved.

Contents

Foreword.....	4
1 Scope.....	5
2 References	5
3 Definitions, symbols and abbreviations.....	5
3.1 Definitions.....	5
3.2 Symbols.....	5
3.3 Abbreviations	5
4 ATM Layer	6
4.1 General	6
4.2 Protection Switching at ATM Layer.....	6
5 I _{ub} Data Transport for Common Transport Channel Data Streams	6
5.1 Introduction	6
5.2 Transport Layer	6
6 I _{ub} Transport Signalling for Common Transport Channel Data Streams.....	7
6.1 Introduction	7
6.2 Transport Signalling	7
7 Signalling Bearer for Transport Signalling on I _{ub} Interface	7
7.1 Introduction	7
7.2 Signalling Bearer.....	7
Annex A (informative): Change history.....	9

Foreword

This Technical Specification (TS) has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document shall provide a specification of the UTRAN RNC-Node B (Iub) interface Data Transport and Transport Signalling for Common Transport Channel data streams.

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] ITU-T Recommendation I.363.2 (1997): "B-ISDN ATM Adaptation Layer type 2".
- [2] ITU-T Recommendation I.366.1 (1998): "Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2".
- [3] Draft New ITU-T Recommendation Q.2630.1: "AAL Type 2 signalling protocol (Capability Set 1)".
- [4] ITU-T Recommendation Q.2110 (1994): "B-ISDN ATM Adaptation layer – Service Specific Connection Oriented Protocol (SSCOP)".
- [5] 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)".
- [6] Draft New ITU-T Recommendation Q.2150.2: "AAL Type 2 Signalling Transport Converter on SSCOP".
- [7] ITU-T Recommendation I.361 (1995): "B-ISDN ATM Layer Specification".
- [8] ITU-T Recommendation I.630 (1999): "ATM Protection Switching".

3 Definitions, symbols and abbreviations

3.1 Definitions

3.2 Symbols

3.3 Abbreviations

AAL	ATM Adaption Layer
AAL2	AAL Type 2
ATM	Asynchronous Transfer Mode
CPCH	Common Packet Channel
CPCS	Common Part Convergence Sublayer
CPS	Common Part Sublayer
DSCH	Downlink Shared Channel
FACH	Forward Access Channel

FP	Frame Protocol
RACH	Random Access Channel
RNC	Radio Network Controller
SAAL	Signalling ATM Adaption Layer
SAR	Segmentation and Reassembly
SSCF	Service Specific Co-ordination Function
SSCOP	Service Specific Connection Oriented Protocol
SSCS	Service Specific Convergence Sublayer
SSSAR	Service Specific Segmentation and Reassembly
STC	Signalling Transport Converter
UMTS	Universal Mobile Telecommunication Network
UNI	User-Network Interface
USCH	Uplink Shared Channel
UTRAN	UMTS Terrestrial Radio Access Network

4 ATM Layer

4.1 General

ATM shall be used in the transport network user plane and the transport network control plane according to I.361[7].

4.2 Protection Switching at ATM Layer

If redundancy of pathways at ATM layer between RNC and Node B is supported, it shall be implemented using ATM Protection Switching according to I.630 [8].

5 I_{ub} Data Transport for Common Transport Channel Data Streams

5.1 Introduction

This chapter specifies the transport layers that support Common Transport Channels (FACH, RACH, CPCH [FDD], DSCH, USCH [TDD]) data streams.

5.2 Transport Layer

ATM and AAL2 (I363.2 [1] and I366.1 [2]) is used at the standard transport layer for Iub RACH, CPCH [FDD] FACH, DSCH, USCH [TDD] data streams.

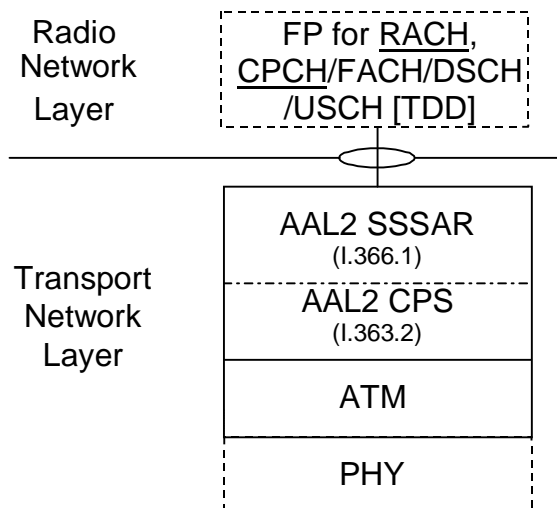


Figure 1: Protocol stack for RACH, CPCH [FDD], FACH, and DSCH Iub data stream transport

Figure 1 shows the protocol stack for the transport of RACH, CPCH [FDD], FACH, DSCH and USCH [TDD] Iub data streams. The Service Specific Segmentation and Reassembly (SSSAR) sublayer is used for the segmentation and reassembly of AAL2 SDUs (i.e. SSSAR is only considered from I366.1).

6 I_{ub} Transport Signalling 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 6 (Figure 2).

6.2 Transport Signalling

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

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

7.1 Introduction

This chapter specifies the signalling bearer protocol stack which supports the 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.

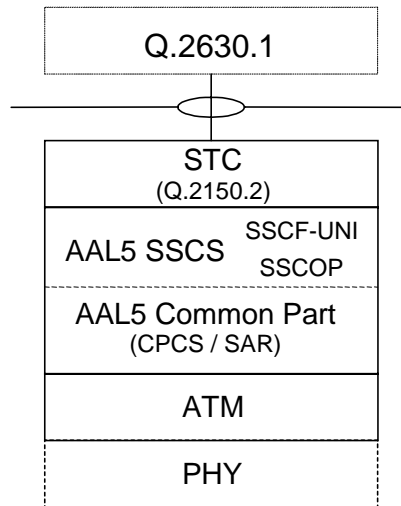


Figure 2: Transport Network Control plane protocol structure on Iub

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

A signalling transport converter (STC) is shown in the protocol stack, since Q.2630.1 does not include this. The converter relevant for Iub is Q.2150.2 [6]. The AAL5 Common Part contains CPCS and SAR.

Annex A (informative): Change history

Change history					
TSG RAN#	Version	CR	Tdoc RAN	New Version	Subject/Comment
RAN_04	-	-	-	3.0.0	Approved by TSG-RAN by correspondence
RAN_05	3.0.0	-	-	3.1.0	Approved by TSG-RAN #5
RAN_07	3.1.0	-	-	3.2.0	Approved at TSG RAN #7

Rapporteur for TS25.434 is:

Magnus Aldén
Telia AB
Tel.: +46 8 713 8108
Fax : +46 8 713 8199
Email : Magnus.X.Alden@telia.se