

**3GPP TSG-RAN-WG3 meeting #6**

**Document R3-99A34**

**Sophia Antipolis, France, August 23-27, 1999**

*Agenda Item : 22*

### 3G CHANGE REQUEST

**25.434 CR**

Current Version: **3.0.0**

3G specification number ↑

↑ CR number as allocated by 3G support team

For submission to TSG

*list TSG meeting no. here ↑*

for approval  for information

*(only one box should be marked with an X)*

*Form: 3G CR cover sheet, version 1.0*

*The latest version of this form is available from: ftp://ftp.3gpp.org/Information/3GCRF-xx.rtf*

**Proposed change affects:**

*(at least one should be marked with an X)*

USIM

ME

UTRAN

Core Network

**Source:**

Mitsubishi

**Date:**

Aug 23-27, 1999

**Subject:**

**3G Work item:**

**Category:**

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

- F Correction
- A Corresponds to a correction in a 2G specification
- B Addition of feature
- C Functional modification of feature
- D Editorial modification

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**Reason for change:**

Precise how to map binding Identifier within the current transport network (when using AAL2)

**Clauses affected:**

**Other specs affected:**

- Other 3G core specifications
- Other 2G core specifications
- MS test specifications
- BSS test specifications
- O&M specifications

<input checked="" type="checkbox"/>	→ List of CRs:
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25.414, 25.424, 25.426

**Other comments:**

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# 1 Intellectual Property Rights

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*Note: The content has to be reviewed according to the 3GPP IPR rules*

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## 2 Foreword

This Technical Specification has been produced by the 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 this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version 3.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 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 specification.

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## 3 1 Scope

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

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## 4 2 References

References may be made to:

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply;
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity);
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case the latest version applies.

A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ITU-T Recommendation I363.2 B-ISDN ATM Adaptation Layer type 2 (9/97).
- [2] ITU-T Recommendation I366.1 Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2 (6/98).
- [3] Draft New ITU-T Recommendation Q.2630.1 AAL Type 2 signalling protocol (Capability Set 1).
- [4] ITU-T Recommendation Q.2110 B-ISDN ATM Adaptation layer – Service Specific Connection Oriented Protocol (SSCOP) (7/94).
- [5] ITU-T Recommendation Q.2130 B-ISDN Signaling ATM Adaptation Layer – Service Specific Coordination Function for Support of Signaling at the User Network Interface (SSCF at UNI) (7/94).
- [6] Draft New ITU-T Recommendation Q.2150.2 AAL Type 2 Signalling Transport Converter on SSCOP.

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## 5 3 Definitions, symbols and abbreviations

### 5.1 3.1 Definitions

### 5.2 3.2 Symbols

### 5.3 3.3 Abbreviations

AAL	ATM Adaption Layer
AAL2	AAL Type 2
ATM	Asynchronous Transfer Mode
CPS	Common Part Sublayer
CPCS	Common Part Convergence 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
SSCOP	Service Specific Connection Oriented Protocol
SSCF	Service Specific Co-ordination Function
SSCS	Service Specific Convergence Sublayer
SSSAR	Service Specific Segmentation and Reassembly
UMTS	Universal Mobile Telecommunication Network
UNI	User-Network Interface
STC	Signalling Transport Converter
UTRAN	UMTS Terrestrial Radio Access Network

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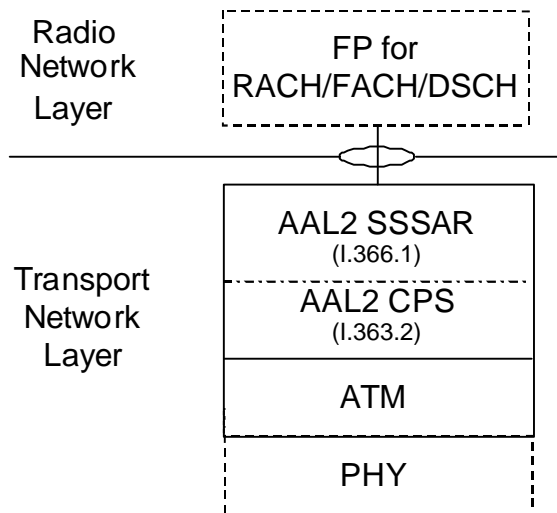
## 6 4 I<sub>ub</sub> Data Transport for Common Transport Channel Data Streams

### 6.1 4.1 Introduction

This chapter specifies the transport layers that support Common Transport Channels (FACH, RACH, DSCH) data streams.

### 6.2 4.2 Transport Layer

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



**Figure 1:** Protocol stack for RACH, FACH, and DSCH Iub data stream transport.

Figure 1 shows the protocol stack for the transport of RACH, FACH and DSCH 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).

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## 7 5 I<sub>ub</sub> Transport Signalling for Common Transport Channel Data Streams

### 7.1 5.1 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).

## 7.2 5.2 Transport Signalling

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

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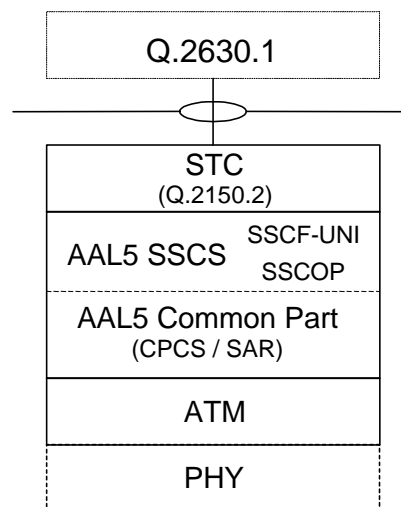
## 8 6 Signalling Bearer for Transport Signalling on I<sub>ub</sub> Interface

### 8.1 6.1 Introduction

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

### 8.2 6.2 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 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.

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## 9 8 History

Document history		
0.0.1	February 1999	Document structure proposal.
0.0.2	February 1999	Proposed incorporation of contents from 'Merged Description of Iub interface'.

0.0.3	March 1999	Removal of previous chapter 7 on O&M. Editorials on front page (e.g. title).
0.1.0	April 1999	Raised to v 0.1.0 for the April-99 release.
1.0.1	April 1999	Raised to v1.0.0 by TSG RAN. Then editorial improvements into v1.0.1.
1.0.2	April 1999	Incorporation of contents from Tdoc 311/334 (Nokia). Modification of figure 2 in line with the change of the corresponding figure in TS 25.426. References and abbreviations added due to both of these updates..
2.0.0	April 1999	Further editorial improvements. Modification also of figure 1, in the same spirit as of figure 2. Label 'working assumption' used in section 6.2 removed. For TSG RAN approval.
3.0.0	June 1999	Approved by TSG-RAN by correspondence
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This document is written in Microsoft Word version 7/97.		