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Technical Specification

Universal Mobile Telecommunications System (UMTS); UTRAN Iub Interface: Signalling Transport (3G TS 25.432 version 3.1.0 Release 1999)



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Foreword

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1 Scope

The present document specifies the signalling transport related to NBAP signalling to be used across the Iub Interface. The Iub interface is a logical interface for the interconnection of NodeB and Radio Network Controller (RNC) components of the UMTS Terrestrial Radio Access Network (UTRAN) for the UMTS system. The radio network control signalling between these nodes is based on the NodeB application part (NBAP).

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.
- 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 Q.2100 (07/94). “B-ISDN signalling ATM adaptation layer (SAAL) overview description”.

[2] ITU-T Recommendation Q.2130 (07/94). “B-ISDN signalling ATM adaptation layer – Service specific coordination function for support of signalling at the user network interface (SSCF–UNI)”.

[3] ITU-T Recommendation Q.2110 (07/94). “B-ISDN ATM adaptation layer – Service specific connection oriented protocol (SSCOP)”.

[4] ITU-T Recommendation I.363.5 (08/96). “B-ISDN ATM Adaptation Layer Type 5 Specification”.

[5] ITU-T Recommendation I.361 B-ISDN ATM Layer Specification (11/95)

[6] ITU-T Rec. **I.630** (2/99) ATM Protection Switching

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the [following] terms and definitions [given in ... and the following] apply.

3.2 Symbols

For the purposes of the present document, the following symbols apply:

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AAL	ATM Adaptation Layer
ATM	Asynchronous Transfer Mode
NBAP	NodeB Application Part
RNC	Radio Network Controller
SAAL	Signalling ATM Adaptation Layer
SSCF	Service Specific Coordination Function
SSCOP	Service Specific Connection Oriented Protocol
UNI	User-Network Interface

4 ATM Layer

4.1 General

ATM shall be used in the radio network control plane according to I.361 [5]

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 [6].

5 NBAP Signalling Bearer

5.1 Introduction

The Signalling Bearer for NBAP is a point-to-point protocol. There may be multiple point-to-point links between an RNC and a NodeB.

5.2 Signalling Bearer

The signalling bearer in the Radio Network Control Plane is SAAL-UNI [1] over ATM. The figure below shows the protocols to be used to support NBAP signalling. These are SSCF-UNI [2] on top of SSCOP [3] and AAL Type 5 [4].

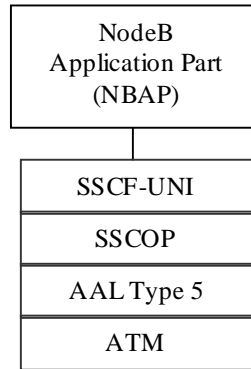


Figure 1: Iub NBAP Signalling Transport

History

Document history		
V3.1.0	January 2000	Publication