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Technical Specification

Universal Mobile Telecommunications System (UMTS); UTRAN Iub Interface: Signalling Transport (3GPP TS 25.432 version 4.0.0 Release 4)



Reference

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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 Node B 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 Node B 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. 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 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

(void)

3.2 Symbols

(void)

3.3 Abbreviations

AAL	ATM Adaptation Layer
ATM	Asynchronous Transfer Mode
NBAP	Node B 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 Node B.

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].

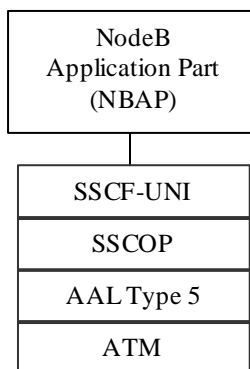


Figure 1: Iub NBAP Signalling Transport

Annex A (informative): Change history

Document history		
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History

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