

Technical Specification Group, Radio Access Network
Meeting #2, Fort Lauderdale, 2-4 March 1999

TSGR#2(99)067

Source: **Editor**
Title: **S3.15: Iu Interface RAN-CN User Plane Protocols**
Document for: **Decision**
Agenda Item: **7**

3GPP

**3rd Generation Partnership Project (3GPP);
Technical Specification Group (TSG) RAN
Interface CN-RAN User Plane Protocols**

UMTS S3.15

UMTS S3.15

(S3.15.PDF)

Keywords

<keyword[, keyword]>

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Intellectual Property Rights

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project, Technical Specification Group RAN WG3.

The contents of this TS may be subject to continuing work within the 3GPP and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released with an identifying change of release date and an increase in version number as follows:

Version m.t.e

where:

- m indicates [major version number]
- x the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- y the third digit is incremented when editorial only changes have been incorporated into the specification.

Scope

This Technical Specification defines the protocols being used to transport and control over the Iu interface, the Iu User Data Streams.

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] | UTRAN Architecture |
| [2] | UMTS S3.xx RANAP protocol |
| [3] | UMTS S3.14, 3 rd Generation Partnership Project (3GPP) Technical Specification Group (TSG) RAN; Iu Interface Data Transport and Transport Signalling |
| [4] | 23.10 |

Definitions, symbols and abbreviations

Definitions

For the purposes of the present document, the following terms and definitions apply.

Symbols

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

Abbreviations

Concepts

General

PSTN/ISDN Domain

General

Protocol Architecture

Interfaces of the Iu CS UP protocol *layer*

Iu UP Protocol layer Services

Services Expected from the UP Data Transport layer

Functions of the Iu UP Protocol Layer

Elementary procedures

Primitives used by the Iu UP Protocol Layer

Primitives towards the upper layers

Primitives towards the transport layers

Elements for Iu UP communication

Frame Format and content definition

Frame coding

Timers

Handling of unknown, unforeseen and erroneous protocol data

IP Domain

General

- The standard shall support that the user data flows transported over the Iu reference point to/from the SGSN shall be multiplexed on top of common layer 2 resources.

Protocol Architecture

Interfaces of the Iu UP protocol layer

Iu UP Protocol layer Services

Services Expected from the UP Data Transport layer

Functions of the Iu UP Protocol layer

Flow Control and/or Buffer management

Elementary procedures

Primitives used by the Iu UP Protocol layer

Primitives towards the upper layers

Primitives towards the transport layers

Elements for Iu UP communication

Handling of unknown, unforeseen and erroneous protocol data

Annex A (Normative)

History

Document history		
Edition x		Publication
0.0.1	Feb 1999	First draft
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This document is written in Microsoft Word version 6.0/96.		