Technical Specification

3<sup>rd</sup> Generation Partnership Project (3GPP); Technical Specification Group (TSG) RAN; UTRAN I<sub>ur</sub> Interface User Plane Protocols for Common Transport Channel Data Streams [UMTS <spec>]

3GPI	P



Reference
<workitem> (<shortfilename>.PDF)</shortfilename></workitem>
Keywords
<keyword[, keyword]=""></keyword[,>

3GPP
Postal address
Office address

secretariat@3gpp.org
Individual copies of this deliverable can be downloaded from http://www.3gpp.org

Internet

#### **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.

© All rights reserved.

# Contents

1	Scope	4
2	References	4
3	Definitions, symbols and abbreviations	4
3.1	Definitions	
3.2	Symbols	
3.3	Abbreviations	
3.4	Notation	5
4	General aspects	5
4.1	Common Transport Channel Data Streams User Plane Protocol Services	5
4.1.1	RACH/FACH Data Streams User Plane Protocol Services	5
4.1.2	DSCH Data Streams User Plane Protocol Services	5
4.2	Services expected from data transport	5
5	Frame Structure and Coding	5
5.1	Data frame structure	5
5.1.1	RACH/FACH Channels	5
5.1.2	DSCH Channels	5
5.2	Control frame structure	5
5.2.1	RACH/FACH Channels	5
5.2.2	DSCH Channels	5
5.3	Coding	6
Com	mon Transport Channel Data Streams User Plane Procedures	6
6.1	Data Transfer	
6.1.1	RACH/FACH Channels	6
6.1.2	DSCH Channels	6
6.2	Flow Control	6
6.2.1	RACH/FACH Channels	6
6.2.2	DSCH Channels	6
7	Bibliography	6
8	History	6

## Intellectual Property Rights

[IPRs essential or potentially essential to the present deliverable may have been declared to ETSI/3GPP. The information pertaining to these essential IPRs, if any, is publicly available for ETSI members and non-members, free of charge. This can be found in the latest version of the ETSI Technical Report: ETR 314: "Intellectual Property Rights (IPRs); Essential or potentially Essential, IPRs notified to ETSI in respect of ETSI standards". The most recent update of ETR 314, is available on the ETSI web server or on request from the Secretariat.

Pursuant to the ETSI Interim IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in the ETR 314, which are, or may be, or may become, essential to the present document.]

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

#### Foreword

This Technical Specification (TS) has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP). The contents of this TS are subject to continuing work within 3GPP TSG RAN and may change following formal TSG RAN 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.

#### Introduction

This clause is optional. If it exists, it is always the third unnumbered clause. No text block identified.

## 1 Scope

This document shall provide a description of the UTRAN RNS-RNS (Iur) interface user plane protocols for Common Transport Channel data streams as agreed within the TSG-RAN working group 3.

## 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);
- 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.

# 3 Definitions, symbols and abbreviations

#### 3.1 Definitions

. [Editor's note: For list of definitions, see [1]. Only definitions specific to this document are listed below, in order to avoid inconsistency between documents. When list is stable, definitions relevant for this document should be extracted.

Common Transport Channels are defined as transport channels that are shared by several users i.e. RACH, FACH and DSCH.

## 3.2 Symbols

#### 3.3 Abbreviations

[Editor's note: For list of abbreviations, see [1]. Only abbreviations specific to this document are listed below, in order to avoid inconsistency between documents. When list is stable, abbreviations relevant for this document should be extracted.]

#### 3.4 Notation

[Editor's note: This text has been copied from [1].]

Parts of the document apply only to one mode, FDD or TDD. Any such area will be tagged by [FDD — xxxxxxxxx], or [TDD — yyyyyyyyyy], respectively. The tag applies to the text until the closing bracket.

## 4 General aspects

# 4.1 Common Transport Channel Data Streams User Plane Protocol Services

[Editor's Note: This chapter describes the services that the User Plane Protocols provide such as data transfer, flow control, etc.]

- 4.1.1 RACH/FACH Data Streams User Plane Protocol Services
- 4.1.2 DSCH Data Streams User Plane Protocol Services
- 4.2 Services expected from data transport

## 5 Frame Structure and Coding

- 5.1 Data frame structure
- 5.1.1 RACH/FACH Channels
- 5.1.2 DSCH Channels
- 5.2 Control frame structure
- 5.2.1 RACH/FACH Channels
- 5.2.2 DSCH Channels

### 5.3 Coding

# 6 Common Transport Channel Data Streams User Plane Procedures

[Editor's Note: This chapter specifies the user plane procedures for CCH data streams. Typical related scenarios at Iur interface should be described.]

For the user plane of the radio network layer there are three Common Transport Channel frame handling protocols:

- Random Access Channel Frame Protocol (RACH FP) for transport of Iur data streams carried on RACH on the Uu-interface.
- Forward Access Channel Frame Protocol (FACH FP) for transport of Iur data streams carried on FACH on the Uu-interface.
- Downlink Shared Channel Frame Protocol (DSCH FP) for transport of Iur data streams carried on DSCH on the Uu-interface.

#### 6.1 Data Transfer

- 6.1.1 RACH/FACH Channels
- 6.1.2 DSCH Channels
- 6.2 Flow Control
- 6.2.1 RACH/FACH Channels
- 6.2.2 DSCH Channels

# 7 Bibliography

# 8 History

Document history				
0.0.1	February 1999	Document structure proposal		
0.0.2	February 1999	Introduction of the related content of Merged description of Iur interface.		
0.0.3	March 1999	Revision bars removed. Modifications of the title.		
		CCH have been changed into "Common Transport Channel".		
		Addition of a definition of Common Transport Channes.		
0.0.4	April 1999	Removal of temporary reference to Merged Iur specification		
0.1.0	April 1999	Removal of revision bars		
Editor for 3GPP RAN S3.25 is:				

Nicolas Drevon

Alcatel

Tel.: +33 1 3077 0916 Fax: +33 1 3077 9430

Email: nicolas.drevon@alcatel.fr

This document is written in Microsoft Word version 7/97.