TSG-RAN Meeting #9 ***RP-000449***
Oahu, HI, USA, 20 - 22 September 2000

From: **TSG-RAN WG2**

To: **TSG-RAN**

Subject: **Work Item and Study Item Status reports TSG-RAN WG2**

This document contains the status reports of the WIs and Study Items for which TSG-RAN has given TSG-RAN WG2 first responsibility.

3G TR XX.XXX V0.0.1 (2000-08)

Technical Report

3rd Generation Partnership Project;
Technical Specification Group Radio Access Network;
1.28 Mcps TDD UE Radio Access Capabilities
(Release 2000)

Keywords

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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (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 the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

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

1 Scope

This Technical Report describes the UE radio access capabilities for 1.28 Mcps TDD, identifies the commonalties and explains the differences to 3.84 Mcps TDD.

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.

[1] 3G TR 25.926: "UE Radio Access Capabilities".

[2] 3G TR 25.928: "1.28 Mcps functionality for UTRA TDD Physical Layer".

3 Abbreviations

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

UE	User Equipment
UMTS	Universal Mobile Telecommunications System

4 Background and Introduction

Low chip rate TDD UE radio access capabilities is a release 2000 work item that was agreed in RAN#8 plenary meeting. This work item involves the definition of UE radio access capabilities 1.28 Mcps TDD. It is assumed that the physical parameter set of the 1.28 Mcps TDD is basically the same as the 3.84 Mcps TDD .

Therefore many UE radio access capability parameters do not need to be changed. However, due to the specific physical layer structure and key features of 1.28 Mcps TDD specific parameters have to be added or modified.
The aim of this report is to describe the UE radio access capabilities for 1.28 Mcps TDD as well as to identify the commonalties and to explain the differences to 3.84 Mcps TDD.

5 UE radio access capability parameters

Note: This section needs to be reviewed by TSG RAN WG1.

5.1 PDCP parameters

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.2 BMC parameters

No UE radio access capability parameters identified (as in [1]).

5.3 RLC parameters

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.4 MAC parameters

No UE radio access capability parameters identified (as in [1]).

5.5 PHY parameters

5.5.1 Transport channel parameters in downlink

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.5.2 Transport channel parameters in uplink

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.5.3 Physical channel parameters in downlink

An additional parameter Support of 8PSK is needed:

Support of 8PSK

Defines whether 8PSK modulation is supported or not.

[Explanation of difference:]

The modulation scheme for FDD and 3.84 Mcps TDD is QPSK. For 1.28 Mcps TDD 8PSK modulation is additionally needed to provide high data rate services up to 2 Mbps.

The parameter Maximum number of timeslots per frame for 3.84 Mcps TDD is replaced by Maximum number of timeslots per subframe for 1.28 Mcps TDD. The parameter Maximum number of physical channels per frame for 3.84 Mcps TDD is replaced by Maximum number of physical channels per subframe for 1.28 Mcps TDD.

[Explanation of difference:]

1.28 Mcps TDD has a different frame structure than 3.84 Mcps TDD. Each 10ms radio frame consists of two 5ms subframes.

No further modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.5.4 Physical channel parameters in uplink

The parameter Maximum number of timeslots per frame for 3.84 Mcps TDD is replaced by Maximum number of timeslots per subframe for 1.28 Mcps TDD.

[Explanation of difference:]

1.28 Mcps TDD has a different frame structure than 3.84 Mcps TDD. Each 10ms radio frame consists of two 5ms subframes.

No further modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.5.5 RF parameters

It is proposed to remove the Chip rate capability parameter and to indicate the support of 1.28 Mcps TDD and / or 3.84 Mcps TDD by the Multi-Mode related parameters.

5.6 Multi-mode related parameters

For simplification, it is proposed to replace the parameter Support of UTRA FDD/TDD by three separate parameters Support of UTRA FDD, Support of UTRA TDD 3.84 Mcps and Support of UTRA TDD 1.28 Mcps:

Support of UTRA FDD

Defines whether UTRA FDD is supported.

Support of UTRA TDD 3.84 Mcps

Defines whether UTRA TDD 3.84 Mcps is supported.

Support of UTRA TDD 1.28 Mcps

Defines whether UTRA TDD 1.28 Mcps is supported.

5.7 Multi-RAT related parameters

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.8 LCS related parameters

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

5.9 Measurement related capabilities

No modifications for 1.28 Mcps TDD are required compared to 3.84 Mcps TDD.

6 Possible UE radio access capability parameter settings

Note: This section needs to be reviewed by WG1 and WG2.

6.1 Value ranges

Compared to [1], table 6.1 contains additional rows for TDD 1.28Mcps physical channel parameters in uplink, TDD physical channel parameters in downlink and TDD 1.28Mcps RF parameters. Furthermore, some restructuring of the multi-mode related parameters was required. The parameter Support of UTRA FDD/TDD was replaced by three separate parameters Support of UTRA FDD, Support of UTRA TDD 3.84Mcps and Support of UTRA TDD 1.28Mcps. Therefore, the parameter Chip rate capability of the RF parameters is no longer needed.

Table 6.1: UE radio access capability parameter value ranges

		UE radio access capability parameter	Value range
PDCP parameters		Header compression algorithm supported	Yes/No
RLC parameters		Total RLC AM buffer size	2,10,50,100,150,500,1000 kBytes
		Maximum number of AM entities	3,4,5,6,8,16,32
PHY parameters	Transport channel parameters in downlink	Maximum sum of number of bits of all transport blocks received in TTIs that end within the same arbitrary interval of length T<10 ms	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840
		Maximum sum of number of bits of all convolutionally coded transport blocks received in TTIs that end within the same arbitrary interval of length T<10 ms	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840
		Maximum sum of number of bits of all turbo coded transport blocks received in TTIs that end within the same arbitrary interval of length T<10 ms	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840
		Maximum number of simultaneous transport channels	4, 8, 16, 32
		Maximum number of simultaneous CCTrCH	1, 2, 3, 4, 5, 6, 7, 8
		Maximum total number of transport blocks received within TTIs that end within the same 10 ms interval	4, 8, 16, 32, 48, 64, 96, 128, 256, 512
		Maximum number of TFC in the TFCS	16, 32, 48, 64, 96, 128, 256, 512, 1024
		Maximum number of TF	32, 64, 128, 256, 512, 1024
		Support for turbo decoding	Yes/No
	Transport channel parameters in uplink	Maximum sum of number of bits of all transport blocks transmitted in TTIs that start at the same time	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840
		Maximum sum of number of bits of all convolutionally coded transport blocks transmitted in TTIs that start at the same time	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840
		Maximum sum of number of bits of all turbo coded transport blocks transmitted in TTIs that start at the same time	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840
		Maximum number of simultaneous transport channels	2, 4, 8, 16, 32
		Maximum number of simultaneous CCTrCH of DCH type (TDD only)	1, 2, 3, 4, 5, 6, 7, 8
		Maximum total number of transport blocks transmitted within TTIs that start at the same time	2, 4, 8, 16, 32, 48, 64, 96, 128, 256, 512
		Maximum number of TFC in the TFCS	4, 8, 16, 32, 48, 64, 96, 128, 256, 512, 1024
		Maximum number of TF	32, 64, 128, 256, 512, 1024
		Support for turbo encoding	Yes/No
	FDD Physical channel parameters in downlink	Maximum number of DPCH/PDSCH codes to be simultaneously received	1, 2, 3, 4, 5, 6, 7, 8
		Maximum number of physical channel bits received in any 10 ms interval (DPCH, PDSCH, S-CCPCH)	600, 1200, 2400, 3600, 4800, 7200, 9600, 14400, 19200, 28800, 38400, 48000, 57600, 67200, 76800
		Support for SF 512	Yes/No
		Support of PDSCH	Yes/No
		Simultaneous reception of SCCPCH and DPCH	Yes/No
		Simultaneous reception of SCCPCH, DPCH and PDSCH	Yes/No

		UE radio access capability parameter	Value range
		Maximum number of simultaneous S-CCPCH radio links	1 NOTE: Only the value 1 is part of R99
	FDD Physical channel parameters in uplink	Maximum number of DPDCH bits transmitted per 10 ms	600, 1200, 2400, 4800, 960, 19200, 28800, 38400, 48000, 57600
		Support of PCPCH	Yes/No
	TDD 3.84 Mcps physical channel parameters in downlink	Maximum number of timeslots per frame	1..14
		Maximum number of physical channels per frame	1,2,3..,224
		Minimum SF	16, 1
		Support of PDSCH	Yes/No
	TDD 3.84 Mcps physical channel parameters in uplink	Maximum Number of timeslots per frame	1..14
		Maximum number of physical channels per timeslot	1, 2
		Minimum SF	16,8,4,2,1
		Support of PUSCH	Yes/No
	TDD 1.28 Mcps physical channel parameters in downlink	Maximum number of timeslots per subframe	1..6
		Maximum number of physical channels per subframe	1,2,3..,96
		Minimum SF	16,1
		Support of PDSCH	Yes/no
		Support of 8PSK	Yes/No
	TDD 1.28 Mcps physical channel parameters in uplink	Maximum Number of timeslots per subframe	1..6
		Maximum number of physical channels per timeslot	1,2
		Minimum SF	16,8,4,2,1
		Support of PUSCH	Yes/no
RF parameters	FDD RF parameters	UE power class (25.101 subclause 6.2.1)	3, 4 NOTE: Only power classes 3 and 4 are part of R99
		Tx/Rx frequency separation (25.101 subclause 5.3) . NOTE: Not applicable if UE is not operating in frequency band a	190 MHz 174.8-205.2 MHz 134.8-245.2 MHz
	TDD 3.84 Mcps RF parameters	UE power class (25.102)	2,3 NOTE: Only power classes 2 and 3 are part of R99
		Radio frequency bands (25.102)	a), b), c), a+b), a+c), a+b+c)
	TDD 1.28 Mcps RF parameters	UE power class (25.102)	ffs
		Radio frequency bands (25.102)	a), b), c), a+b), a+c), a+b+c)
Multi-mode related parameters		Support of UTRA FDD	Yes/No
		Support of UTRA TDD 3.84 Mcps	Yes/No
		Support of UTRA TDD 1.28 Mcps	Yes/No
Multi-RAT related parameters		Support of GSM	Yes/No
		Support of multi-carrier	Yes/No
LCS related parameters		Standalone location method(s) supported	Yes/No
		Network assisted GPS support	Network based / UE based / Both/ None
		GPS reference time capable	Yes/No
		Support for IPDL	Yes/No
		Support for OTDOA UE based method	Yes/No

	UE radio access capability parameter	Value range
Measurement related capabilities	Need for downlink compressed mode	Yes/No (per frequency band, UTRA mode and RAT)
	Need for uplink compressed mode	Yes/No (per frequency band, UTRA mode and RAT)

6.2 Reference UE radio access capability combinations

6.2.1 Combinations of common UE Radio Access Parameters for UL and DL

6.2.2 Combinations of UE Radio Access Parameters for DL

6.2.3 Combinations of UE Radio Access Parameters for UL

7 Usage of UE radio access capabilities

7.1 Examples of reference radio access bearers

7.2 Example mappings between reference RABs and capability combinations

8 Mandatory UE radio access capabilities

9 History

Document history		
Version	**Date**	**Comment**
0.0.0	August 2000	Created
0.0.1	August 2000	Sections updated according to RAN2#15

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TSG-RAN Working Group 2 (Radio L2 and Radio L3) ***R2-001872***
Sophia Antipolis, France, 21 – 25 August, 2000

Agenda item: 7.1.6

Source: Ericsson

Title: Proposed Technical Report on Radio Access Bearer Support Enhancements

Document for: Decision

RAN WG2 is the leading working group for the work item on Radio Access Bearer Support Enhancements for Release 2000 as agreed during TSG RAN#7. The attached document is a proposal for a TR on this topic.

3G TR ab.cde V0.0.0 (2000-08)

Technical Report

3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Radio Acces Bearer Support Enhancements (Release 2000)

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- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document is a technical report that summarises the work on the UTRAN Release 2000 work item “Radio Access Bearer Support Enhancements”. The increasing interest in IP based services demands special optimisation of the means by which a radio access bearer can be provided by UTRAN. The work item~~s~~ comprises of four areas of study:

1) Robust header compression

2) PDCP multiplexing

3) Variable Iu frame formats and unequal error protection

4) Channel type switching per logical channel

Each study area includes the requirements of the proposed feature, a description of the basic mechanism and a discussion of the issues involved. A recommended solution is provided and impacts to other RAN WGs are analysed.

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.

[1] 3G TS 25.322: "RLC Protocol Specification".

[2] 3G TS 25.323: "PDCP Protocol Specification".

[3] 3G TS 25.331: "RRC Protocol Specification".

[4] 3G TS 25.413: "UTRAN Iu Interface: RANAP Signalling".

[5] 3G TS 25.415: "UTRAN Iu Interface: CN-RAN User Plane Protocol".

[6] Internet-Draft (work in progress), July 2000, <draft-ietf-rohc-rtp-01.txt>: "RObust Header Compression (ROHC)".

http://search.ietf.org/internet-drafts/draft-ietf-rohc-lower-layer-guidelines-00.txt

[7] IETF RFC 1144, Februaury 1990: " Compressing TCP/IP Headers for Low-Speed Serial Links ".

[8] IETF RFC 2507, Februaury 1999: " IP Header Compression ".

[9] IETF RFC 2508, Februaury 1999: " Compressing IP/UDP/RTP Headers for Low-Speed Serial Links ".

[10] IETF RFC 2509, Februaury 1999: " IP Header Compression over PPP ".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions 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:

4 Requirements

5 Study Areas

5.1 Robust header compression

5.2 PDCP multiplexing

5.3 Variable Iu frame formats and unequal error protection

The work on this item should be done in 3GPP TSG RAN WG3.

5.4 Channel type switching per logical channel

6 Impacts on RAN WGs

6.1 WG1

6.2 WG2

6.3 WG3

6.4 WG4

7 Recommendations

~~x~~8. Release 99 Specification Impacts

History

Document history		
Date	**Version**	**Comment**
21st August 2000	0.0.0	First draft

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Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New

TSG-RAN Working Group 2 ***R2-xxxx***
Sophia Antipolis, France, 21-25 August 2000

Agenda item:

Source: RAN WG2

Title: Status Report to RAN#9 of Study item "High Speed Downlink Packet Access"

Document for: approval

This is the rapporteur's report on the progress made so far in RAN (WG1 and WG2) on the Study Item "High Speed Downlink Packet Access". RAN WG2 leads this Study item.

Following approval in RAN#8, a technical report TR 25.950 titled "High Speed Downlink Packet Access" was started with an outline as agreed in RAN WG2#13.

RAN WG2

~~In RAN WG2#14 there was not sufficient time to address this agenda item due to the need to address~~ pending R99 issues. In RAN WG2#15, a contribution suggesting work allocation between RAN WG1 and RAN WG2 was presented and agreed. Work allocations to the other RAN WGs will be identified as progress is made in RAN WG2. The agreed work allocation is as follows:

RAN WG1:

1. Adaptive Modulation and Coding - Feasibility of multi-level modulation and coding schemes.
2. H-ARQ - link performance of different H-ARQ mechanism - Chase Combining, Incremental Redundancy, etc.
3. Frame size - one of the outputs of study item 2 above (H-ARQ link performance) should be an optimum frame size.
4. Reverse control channel - frame formats and need for multiple DPCH.
5. Implications on mobile station requirements.
6. Simulation assumptions for link and system simulations.

RAN WG2:

1. Protocol architecture.
2. H-ARQ - protocol, messaging, etc.
3. Fast cell selection.

RAN WG1

In RAN WG1#15, contributions were presented on Link level and System evaluation simulation assumptions to be considered in the design and evaluation of techniques for HSDPA. General agreement was reached on these contributions; a few issues related to transport block size, reverse link capacity and terminology were identified and will be addressed in future contributions. There were also contributions on the issues that need to be considered in the design of HSDPA and new techniques for inclusion into the TR in addition to those already identified. In addition, system level results were presented for discussion based on independent system level evaluation assumptions.

Source: TSG-RAN WG2

Title: Status Report of Study Item "Improved Common DL for Cell_FACH State"

This document provides a status report of the study item 'Improved Common DL for Cell-FACH State' . RAN2 is the leading working group for this study item. The work in RAN2 and RAN1 has started.

RAN2 has decided to present this study item report to RAN #9 for information. The status of each involved WG is summarised below:

RAN WG2:

At RAN2#15, RAN2 discussed several contributions describing the perceived benefits of applying closed loop power control (CLPC) for FACH messages sent to individual UEs in FDD mode. Benefits were described in comparison to using PDSCH for same service. Gains in DL capacity and decreased infrastructure were claimed. RAN2 noted that the assumptions for operation of DCH/DCH+PDSCH, while correct for FDD, did not utilise certain signalling efficiencies which are currently included in TDD mode. RAN2 expects that FDD mode will be corrected soon to take advantage of SFN_Time_Info for PDSCH scheduling. Therefore, RAN2 did not accept the proposed benefits of CLPC for FACH. A related contribution describing offset CPCH to increase UL signalling capacity was also noted.

RAN WG1:

At both RAN1#14 and RAN1#15, RAN1 discussed several contributions describing the downlink capacity gains of CLPC for FACH. The contributions described the link level simulations which demonstrate significant DL capacity gains when applying CLPC to FACH. The contributions further identified implementation errors in OLPC of FACH due to inaccuracy in the periodic measurement of CPICH RSCP by UEs in Cell-FACH state. RAN1 agreed to the FACH OLPC error and the performance gains for the CLPC FACH link level cases that were presented. RAN1 did not agree on performance gains at the system level. RAN1 also noted that RAN2 discussions will compare the proposed CLPC FACH to PDSCH and other existing channels and will decide on overall benefits.

TSG-RAN Working Group 2 (Radio L2 and Radio L3) ***R2-xxxx***
Sophia Antipolis, France, 21-25 August 2000

Agenda item:

Source: RAN WG2

Title: Status Report of Work Item “Improved usage of downlink resource in FDD for CCTrCHs of dedicated type”

Document for: Approval

This document provides a status report of the work item ‘Improved usage of downlink resource in FDD for CCTrCHs of dedicated type ‘. TSG-RAN WG2 is the leading working group for this work item. The status of each involved WG is summarised below

There was no activity on this WI.

Source: TSG-RAN WG2

Title: Status Report of Work Item “Hybrid ARQ Type II / III”

This document provides a status report of the work item ‘Hybrid ARQ II / III‘ . TSG-RAN WG2 is the leading working group for this work item. The work in RAN1, RAN2 and RAN3 was started. Technical reports covering HARQ II / III in RAN2 and RAN3 were contributed. Most of the work was done by RAN2 that captured proposals for HARQ Type II / III models for Release 2000.

RAN2 decided to present the report on HARQ to RAN #9 for information. The status of each involved WG is summarised below:

RAN WG2:

In TSG-RAN WG2 Paris, France 3rd to 7th July the technical report for HARQ II / III was created. In TSG-RAN WG2 Sophia Antipolis , France 21st to 25th August 2000 the technical Report TR 25.835 was extended. In the Technical Report 3 models for HARQ Type II / III are described. The TR is provided to the TSG-RAN plenary for information.

The deadline for completely new proposals was set for WG2#16, after which there would be work on existing proposals and no completely new proposals would be accepted any longer.

RAN WG1:

(From R1-00-1162, for details see there) Because of the various concerns raised in the several contributions, there is currently no recommendation by WG1 on how to proceed with the work item HARQ. As WG1 anticipates severe impacts for the physical layer when HARQ is to be supported, WG1 recommends WG2 to take into account the concerns raised in WG1 and to closely coordinate the further process. WG1 prepared some material for possible inclusion in the Technical report 25.385 which is under the responsibility of WG2 if found appropriate by WG2 and provided that assumptions of WG1 are in line with WG2’s current assumptions.

RAN WG3:

At RAN3#14 (Helsinki, 3rd to 7th July 2000) RAN3 decided to provide a TR for Hybrid ARQ Type II/III, because the expected changes in RAN3 are not negligible. The RAN3 TR covers only the RAN3 aspects. At RAN3#15 (Berlin, 21st to 24th August 2000) the TR R3-002063 ‘Proposal for Technical Report on Hybrid ARQ Type II/III Iub/Iur aspects’ was submitted. The significant changes in some RAN3 specifications are indicated in this initial TR. After WG2 will have described the accepted model of Hybrid ARQ Type II/III WG3 will proceed with a precise description of Iub/Iur aspects.

TSG-RAN Working Group 2 (Radio L2 and Radio L3) ***R2-xxxx***
Sophia Antipolis, France, 21-25 August 2000

Agenda item:

Source: RAN WG2

Title: Status Report of Work Item "UE positioning in UTRA FDD"

Document for: Approval

This document provides a status report of the work item 'UE positioning in UTRA FDD'. TSG-RAN WG2 is the leading working group for this work item. The status of each involved WG is summarised below

General

The radio interface for release 99 methods is stable. The work to add the Iub/Iur support in release 00 progressed in 25.305 on the stage 2 for these interfaces, but work should gradually move to RAN WG3. This is the first priority for LCS release 00. Second priority is the addition of new methods for release 00.

A decision was taken to remove from 25.305 release 99 everything which is not supported in release 99, and move it to the two TRs on TDD and FDD for release 00. The release 99 version of 25.305 will contain also the stage 2 for Iub/Iur interfaces to cover release 99 methods, although stage 3 will be performed in RAN WG3 for release 00 only (as decided in RAN Plenary in March 00).

RAN WG2:

At TSG-RAN WG2 Sophia Antipolis, France 21st to 25th August 2000, the adhoc concentrated on prioritising and identifying additional work needed to complete 25.305. Individual tasks were assigned to various companies, with a goal of completing TS 25.305 by RAN #10, in particular regarding the stage 2 for the Iub/Iur interfaces.

RAN WG1:

Work in RAN WG1 appears to be stable with respect to LCS. A procedure to allow LCS demand a measurement (OTDOA) needs to be developed.

RAN WG3:

Work in RAN WG3 appears to be stable with respect to the Iu interface. The most urgent task to be performed in release 00 is the support on the Iub/Iur interfaces of the methods supported on the radio interface release 99.

Source: TSG-RAN WG2

Title: Status Report of Work Item “UE positioning in UTRA TDD”

This document provides a status report of the work item ‘UE positioning in UTRA TDD‘. TSG-RAN WG2 is the leading working group for this work item. A technical reports covering UE positioning in UTRA TDD was contributed.

The status of each involved WG is summarised below:

RAN WG2:

In TSG-RAN WG2 Sophia Antipolis, France 21st to 25th August 2000 the technical report UE positioning in UTRA TDD was created. It was agreed to remove non release '99 methods from TS 25.305 and incorporate them in the technical report.

RAN WG1:

Work in RAN WG1 was initiated by a liaison sent by RAN WG2 during RAN WG2 meeting #15 in Sophia Antipolis.

RAN WG3:

No work is done within RAN WG3 regarding release 2000 methods/enhancements.

Source: TSG-RAN WG2

Title: Status Report to RAN#9 of Work Item “RAB Support Enhancements”

This is the rapporteur's report on the progress made so far in RAN (WG2 and WG3) on the Work Item (WI) "Radio Access Bearer Support Enhancements". RAN WG2 leads this WI.

Following approval in RAN#7, a technical report TR 25.abc titled " Radio Access Bearer Support Enhancements" was started with an outline as agreed in RAN WG2#15 (R2-001872).

RAN WG2

The work so far has been on the robust header compression component of this work item. RAN2 appointed a Liaison Officer in RAN2#12 to the IETF ROHC WG, as a complement to their Liaison Officer to 3GPP. This has proven to work well given the different working styles of the two standardisation bodies.

RAN2 has been in contact with the IETF ROHC WG since RAN2#12 and has monitored their work to see if a robust header compression algorithm will be standardised for R00. The current status of the ROHC group looks promising and the algorithm is quite stable. The ROHC draft will require a lot of editorial work and this is expected to be completed around September/October for submission to the IESG for approval as a proposed standard in the IETF.

In RAN2#15 the background text for the ROHC part of the WI was agreed and contained in contribution R2-001820.

RAN WG3

The "Variable Iu frame formats and unequal error protection" topic is the RAN3 component of this work item. There has been no progress on this work at this stage.