TSG-RAN Meeting #10 ***RP-000554***
Bangkok, Thailand, 6 - 8 December 2000

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

Source: **TSG-RAN WG2**

To: **TSG-RAN**

TSG-RAN Working Group 2 ***R2-xxxx***
Sophia Antipolis, France, 13-17 November 2000

Agenda item:

Source: RAN WG2

Title: Status Report to RAN#10 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.

RAN WG2

~~In RAN WG2#16 and WG2#17 there was not sufficient time to address this agenda item due to the need to~~ address pending R99 issues. It is has been agreed to set aside time in the beginning of the next WG2 meeting in Edinburgh (January 15-19, 2001) to address this item.

RAN WG1

A separate Adhoc (#24) meeting to deal with the HSDPA issues was held in the last WG1 meeting. Approximately 20 contributions were submitted by different companies on HSDPA. Most of the contributions dealt with link and system simulation results on HSDPA. In addition contributions providing further results on MIMO techniques were presented. A couple of text proposals on AMC, HARQ, MIMO and FCS were also submitted for inclusion into WG#1 TR(25.848). A draft version of the TR (v0.2) was prepared but could not be discussed or approved due to lack of time. It was agreed to have an e-mail discussion over the reflector on the v0.2 of the TR. Based on the outcome of the discussion, the TR has to go through the approval process in the plenary session of the WG1#18 meeting.

Here is the Rapporteur’s RAN#10 status report on the Improved Common DL for Cell_FACH State study item:

Several contibutions were submitted at RAN2#16 and RAN2#17, none were treated. There has been no progress this period due to lack of meeting time and RAN2 priorities.

TSG-RAN Working Group 2 (Radio L2 and Radio L3)

Agenda item:

Source: Rapporteur

Title: Status Report of Work Item"Low chip rate TDD UE Radio Access Capabilities"

Document for: Information

This document provides a status report of the work item 'Low chip rate TDD UE Radio Access Capabilities" .

The Technical Report "1.28Mcps TDD UE radio access capabilities" was created in August 21st-25th during RAN WG2#15 meeting. The documents on UE radio access capability parameters and value range of these parameters for 1.28Mcps TDD were also presented and approved in this meeting.

During RAN2#17 meeting in Sophia-Antipolis, France, 13th-17th , November, some changes were made to this technical report, on "Reference UE radio access capability combinations". It was agreed to incorporate these changes into the TR 25.843, after the changes have been reviewed by RAN1. RAN1 has studied the proposed changes at the meeting RAN1#17 and agreed to update the TR 25.843 accordingly with some requested changes. These changes are now also covered in the updated TR.

TSG-RAN Working Group 2 (Radio L2 and Radio L3)

Agenda item:

Source: Rapporteur

Title: Status Report of Work Item"Low chip rate TDD layer 2 and layer3 Protocol Aspects"

Document for: Information

This document provides a status report of the work item 'Low chip rate TDD layer2 and layer3 Protocol Aspects" .

The Technical Report "UTRA TDD low chip rate option protocol aspects" was created in July 3rd-7th during RAN WG2#14 meeting. In RAN2#14 meeting and RAN2#15 meeting, the description on services and functions of layer1, layer2, layer3 , key procedure, measurement, simultaneous physical channel combination, model and primitive of physical layer in 1.28Mcps TDD were agreed and added to the technical report.

During RAN2#16 meeting in Beijing ,China, sections on handover procedures, cell (re)selections, AC/ASC concept, MAC functions for 1.28Mcps TDD and compressed mode to monitor 1.28Mcps TDD were agreed and incorporated into this technical report.

During RAN2#17 meeting in Sophia-antipolis, France, 13th-17th , November, editorial corrections are made on this technical report and the respective changes were agreed, the report has been updated

TSG-RAN Working Group 2 (Radio L2 and Radio L3) ***R2-xxxx***
Meeting #10, Bangkok, Tailand, 6-9 December 2000

Agenda item:

Source: Rapporteur

Title: Status Report to RAN#10 of Work Item “RAB Support Enhancements”

Document for: Information

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 25.844 titled " Radio Access Bearer Support Enhancements" was started with an outline as agreed in RAN WG2#15 (R2-001872).

RAN WG2

Since the last RAN meeting (RAN#9) major progress as been made in the IETF ROHC WG on the ROHC protocol (http://www.ietf.org/internet-drafts/draft-ietf-rohc-rtp-06.txt). The latest version is ROHC 06 and it is this version that is planned to be submitted to the Internet Engineering Steering Group (IESG) for approval for ROHC to be on the proposed standards track. This will mean that ROHC will receive an RFC number.

The TR has been updated with the latest version that was available before RAN2#17, ROHC 05. Updates to the TR required to reflect ROHC 06 are considered to be minimal.

There is only minor work to be done on the Robust Header Compression part of the TR and CRs could be written to include ROHC in Release 4.

A new issue has been included in the TR to include Header Removal as a study area in the report. All work for this in the TR will be done by GERAN.

The work on PDCP multiplexing and Channel type switching per logical channel has not started.

RAN WG3

The "Variable Iu frame formats and unequal error protection" topic is the RAN3 component of this work item. There has been little work on this issue at this time.

TSG-RAN Working Group 2 (Radio L2 and Radio L3)

Agenda item:

Source: Rapporteur

Title: Status Report of Work Item “UE positioning enhancements”

Document for: Information

This document provides a status report of the work item ‘UE positioning enhancements‘. TSG-RAN WG2 is the leading working group for this work item. A technical report was created. The TR shall be used for evaluation of new methods and enhancements of existing methods, respectively. The enhancements/new methods that will be agreed upon shall be added to the Release 4 stage 2 description of UE positioning, which shall build the basis for stage 3 work in Release 5.

The status of each involved WG is summarised below:

RAN WG2:

In TSG-RAN #9 it was decided to replace the two WIs UE positioning in UTRA TDD and FDD with one titled as UE positioning enhancements. During TSG-RAN WG2 meeting in Bejing, China 9th to 13th October the technical report was created. It was agreed to study the performance of the existing OTDOA method and of a OTDOA method based on listening to the synchronisation channel in more detail.

During RAN WG2 meeting #17 in Sophia Antipolis, France 13th to 17th November, received results from RAN WG1 have shown that the existing OTDOA method as well as an OTDOA method based on SCH listening do not provide sufficient accuracy. Siemens presented a proposal for an IPDL scheme very similar to the one used in FDD. The proposed scheme was agreed within RAN WG2, a descriptive text was added to the technical report and a detailed investigation was initiated in RAN WG1 by a liaison.

Additionally there was a contribution from Qualcomm on an enhancement to GPS, called DGPS-A. There was no decision on that topic. However, it was agreed to incorporate a descriptive text into the TR for information. Further investigations are necessary especially regarding the improvement compared to the existing DGPS-E method.

RAN WG1:

Work in RAN WG1 was initiated by a liaison sent by RAN WG2 during RAN WG2 meeting #15 in Sophia Antipolis. During RAN WG1 meeting #15 in Berlin, Germany 22nd to 25th August, the performance of the existing OTDOA method and of OTDOA based on SCH listening was studied. The results sent back to RAN WG2 have shown that these methods do not provide sufficient accuracy.

After initiation by RAN WG2, RAN WG1 studied the proposed IPDL scheme during their meeting #17, 10th to 25th November in Stockholm, Sweden. RAN WG1 agreed that the proposed IPDL mechanism is feasible from physical layer point of view. First simulation results have shown that IPDLs provide a significant performance improvement.

Before the two WIs on UE positioning enhancements on TDD and FDD were replaced with one WI in RAN #9, RAN WG2 initiated work within RAN WG1 with a liaison sent during RAN WG2 #15. During their

meeting #17, RAN WG1 also agreed that OTDOA-PE can be used either in conjunction with IPDL idle periods or as a stand alone method and that it has the potential to significantly improve positioning accuracy compared to IPDL.

RAN WG3:

The enhancements/new methods will be covered by RAN WG2 in Release 4 stage 2 description of UE positioning. This will build the basis for stage 3 work in Release 5. RAN WG3 will only be involved in stage 3 work, therefore no work is necessary within RAN WG3 for this WI.