

**3GPP TSG RAN WG1 Meeting #44
Denver, USA, 13 – 17 February, 2006**

R1-060756

Agenda item 3
Title: **Approved Report (v.1.0.0) of 3GPP TSG RAN WG1 LTE Ad Hoc meeting in Helsinki (Helsinki, Finland, 23 – 25 January, 2006)**
Document for: **Information**
Source: **RAN1 Secretary**



Notes:
All timestamps in this document are in GMT+2H unless otherwise noted.

Fact Summary

Meeting: **3GPP TSG RAN WG1 LTE Ad Hoc Meeting**
Dates: **23rd through 25th January, 2006**
Venue: **High Tech Centre (HTC), Helsinki, Finland**
Host: **Nokia**
Attendees: **175 delegates**
Documents: **263 (including some withdrawn and post-meeting artefacts)**

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Executive summary

WG RAN1 LTE Ad Hoc meeting took place in High Tech Centre, Helsinki, Finland. The meeting started at 9:00 on Monday 23rd and finished at 17:00 on Wednesday 25th January 2006.

This meeting mainly focused on the Downlink discussion, so the all contributions for Uplink were not treated due to lack of time. On the discussion for the description of OFDMA downlink, the key technologies of Layer 1 were discussed and the discussion reached to the agreement on some aspects such as reference signal structure, resource unit size and resource blocks allocation, link adaptation. Also, for HARQ operation, the discussion points were pointed out and they will be discussed with RAN2 in March joint meeting. With reflect to the agreement, some text proposals for reference-signal structure, scheduling, link adaptation, Physical resource block size and allocation and HARQ were agreed to be included in TR25.814. In addition, some text proposals for channel mapping and transmission diversity were also agreed.

Furthermore, the inclusion 1.6 MHz BW to the current spectrum allocations, which was proposed in the TSG-RAN#30 meeting, was discussed in this meeting. The conclusion of the discussion on 1.6 MHz BW was that we keep current spectrum allocations for the study item phase, and discuss actual spectrum allocations in the work item. The discussion and conclusion were captured in the draft LS to TSG-RAN endorsed by this meeting.

The number of contributions for this meeting was 257 (not including the withdrawn documents), and those documents were categorized as followed.

Agenda Item	Input Document	Discussed Document
Liaison Statement	7	4
Evolved UTRA and UTRAN (Physical Layer): Downlink		
Contributions reflecting results from e-mail reflector discussions	0	0
Basic Transmission Scheme	110	58
Physical Layer Procedures	77	34
Physical Layer Measurements	4	2
Downlink related UE Capability	9	1
Evolved UTRA and UTRAN (Physical Layer): Uplink		
Contributions reflecting results from e-mail reflector discussions	0	0
Basic Transmission Scheme	24	0
Physical Layer Procedures	22	0
Physical Layer Measurements	0	0
Uplink related UE Capability	1	0

1. Opening of the meeting

23/01/2006 09:00

RAN1 Chairman, Mr. Dirk Gerstenberger and welcomed the participants to the RAN WG1 LTE Ad Hoc meeting and opened the meeting at 09.00.

Mr. Antti Toskala welcomed the delegates on behalf of the Host Company, Nokia.

1.1 Call for IPR

23/01/2006 09:05

The Chairman drew attention to Members' obligations under the 3GPP Partner Organizations' IPR policies. Every Individual Member organization is obliged to declare to the Partner Organization or Organizations of which it is a member any IPR owned by the Individual Member or any other organization which is or is likely to become essential to the work of 3GPP.

The attention of the members of this Technical Specification Group is drawn to the fact **that 3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners to **inform their respective Organizational Partners of Essential IPRs they become aware of.**

The members take note that they are hereby invited:

- to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.
- to notify the Director-General, or the Chairman of their **respective** Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms (e.g. see the ETSI IPR forms <http://webapp.etsi.org/lpr/>).

2 Approval of the agenda

R1-060001 Draft Agenda

(RAN1 Chairman)

23/01/2006 09:05 Presented by Mr. Dirk Gerstenberger.

Discussion (Question / Comment): Mr. Chairman explained the plane and schedule of this meeting.

Nortel commented that cell search has the great impact to the physical channel obligation and it also related to the other group discussion. RAN1 Chairman clarified that the about MIMO we must decide the high level principle until March, but we will focus this topic in the next meeting and if some party is very interested in the topics, the conference call should take place.

Decision: This document was approved.

3. Summary of LTE decisions from TSG RAN#30

R1-060002 Summary of LTE decisions from TSG RAN#30

(RAN1 Chairman)

23/01/2006 09:25 Presented by Mr. Dirk Gerstenberger.

Discussion (Question / Comment): Chairman said that although we have the very challenging schedule, we don't plan to have additional meetings in April, just joint meeting with RAN2. But there might be Ad Hoc meeting in October.

Decision: This document was noted.

4. Liaison statement handling

R1-060003 LS on Time Plan for FS on 3GPP System Architecture Evolution (To: RAN, SA, SA1, SA3, RAN1, RAN2, RAN3) (SA WG2, Vodafone)

23/01/2006 09:30 Presented by Mr. Yannick Le Pezennee from Vodafone group

Discussion (Question / Comment):

Decision: This document was noted

R1-060004 LS on "RRM for LTE" (To: RAN1, Cc: RAN2, RAN4) (RAN WG3, Siemens)

23/01/2006 09:35 Presented by Dr. Joern Krause from Siemens

Discussion (Question / Comment):

Decision: This document was noted. RAN1 chairman commented that we will address this LS after the discussion on RRM have taken place (This meeting, no reply LS) It was decided to do e-mail discussion until Denver meeting. (Siemens moderates).

R1-060061 LTE L1 related questions to RAN1 (To: RAN1) (RAN WG2, Samsung)

23/01/2006 09:43 Presented by Mr. Juho Lee from Samsung.

Discussion (Question / Comment): Chairman commented that we will try to address this LS in Denver meeting. Ericsson and Philips commented that we had better discuss this topic on a couple of time, not just on Denver meeting.

Decision: This document was noted. It was decided to do Email discussion until Denver meeting to try to answer the questions (Ericsson moderates)

R1-060062 LS on Clarifications on Layer 1- Layer 2 Interface (To: RAN1) (RAN WG2, Motorola)

23/01/2006 09:50 Presented by Mr. Jean-Aicard Fabien from Motorola.

Discussion (Question / Comment):

Mr. Chairman mentioned that we discuss these topics on Joint meeting also some topics such as resource element will be discussed here. We should try to reply in Denver meeting,

Decision: This document was noted. Reply in February meeting,

Not treated.

The following documents were not treated because the reply LS on this topics would be discussed in February meeting.

R1-060206 Input for RAN1 Answer on LS on "RRM for LTE" from RAN3 (Alcatel)

In the LS [R3-060085] RAN3 supplies some detailed questions on the inter-cell radio resource management requirements stemming from the application of interference mitigation techniques. Since the interference co-ordination proposed by Alcatel represents one example of such an interference mitigation technique, it appears to be a suitable approach to evaluate the RAN3 questions with regard to interference co-ordination

R1-060207 Input for RAN1 Answer on LS on "LS on Clarifications on Layer 1- Layer 2 Interface" from RAN2 (Alcatel)

LS [R2-060061] from RAN2 raises several aspects concerning the relationship between radio resource management and layer 1 procedures. In the context of this document only one but decisive point shall be raised: the minimum size of (frequency) resource blocks.

R1-060143 Random Access considerations and discussion of L1 questions from RAN2 (Philips)

The LS [R2-060144, R1-060061] also poses a number of questions relating to Random Access transmissions. In this paper we provide some initial discussion of some of the factors affecting some of these questions

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