

3GPP TSG RAN WG1 Meeting #46
Tallinn, Estonia, 28 August – 01 September, 2006

R1-062448

Agenda item 3

Title: Approved Report of 3GPP TSG RAN WG1 #45 meeting in Shanghai
(Shanghai, China, 08 – 12 May, 2006)

Document for: Information

Source: MCC



Notes: All timestamps in this document are in GMT+8H unless otherwise noted.

Fact Summary

Meeting: 3GPP TSG RAN WG1 #45 Meeting

Dates: 8th through 12th May, 2006

Venue: Shanghai Everbright Convention & Exhibition Centre International Hotel,
Shanghai, China

Host: CATT/CCSA

Attendees: 225 delegates

Documents: 547 (including some withdrawn and post-meeting artefacts)

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Executive summary

RAN WG1#45 meeting took place in Shanghai Everbright Convention & Exhibition Centre International Hotel in Shanghai, China. The meeting started at 9:15 on Monday 08th May and finished at 17:10 on Friday 12th May.

On the first day, after treating incoming LS and some CRs for Rel-6 and Rel-7, the documents for TDD Enhanced Uplink for 1.28 Mcps, 3.84 Mcps, and 7.68 Mcps were treated and some topics and the related text proposals and CRs were agreed.

In addition, on Monday, MIMO for UTRA (Rel-7 WI) was treated and the discussion continued after the midnight. For TDD, RARC was agreed to specify the MIMO scheme, but the discussion could not agree whether to PARC or D-TxAA for FDD. After the offline discussion during the week, this item was discussed again on Friday. The compromised scheme, Dual-codeword MIMO based on D-TxAA, with the weights being signalled on the HS-SCCH in the downlink (R1-061634), was proposed and agreed as RAN1. The RAN1 decision will be informed to RAN#32 by RAN1 Chairman and also the LS was sent to RAN (R1-061636)

On Tuesday, parallel sessions took place. One was the session for Continuous Connectivity, Extended WCDMA Cell Range and Scope of future FD HSPA Evolution. The other was the session for LTE about the items discussed on the e-mail reflector before the meeting. As for both of sessions, the discussion could reach to the agreement of conclusion and way forward, and then the related text proposal was agreed.

On Wednesday, LTE MIMO was discussed with parallel to main session and the discussion could reach to the agreement of conclusion and way forward, and then the related text proposal was agreed. From Wednesday, main session discussed LTE DL/UL evaluation results and LTE target fulfilment on TR25.912. The discussion could reach to the agreement of text proposals for TR25.814 and the endorsement of text proposals on target fulfilment for TR25.912. The LTE physical layer description was discussed on the reflector after the meeting and the text proposal for TR25.912 was completed in R1-061646. Then, the study on LTE layer 1 aspects for LTE Study Item has provided all the inputs requested by RAN so that SI completion can be considered at the next RAN plenary, RAN#32 (RAN#32 will make a decision on the completion of LTE SI.)

The number of contributions for this meeting was 516 (without including withdrawn contributions), and those documents were categorized as followed.

Agenda Item	Input Document	Discussed Document
Liaison Statement	21	21
Maintenance of R99, Rel4, Rel5, Rel6, Rel7	26	26
TDD Enhanced Uplink	34	34
MIMO in UTRA (Rel-7 WI)	26	26
Continuous Connectivity for Packet Data Users	43	32
Extended WCDMA Cell Range	1	1
Scope of future FDD HSPA Evolution	1	1
Evolved UTRA and UTRAN (Physical Layer): Outcome from e-mail discussion and related contributions	164	64
Evolved UTRA and UTRAN (Physical Layer): Text Proposals for 25.814	66	1
Evolved UTRA and UTRAN (Physical Layer): RAN1 studies related to RAN2 Joint session in Athens	18	1
Evolved UTRA and UTRAN (Physical Layer): Text Proposal on DL Evaluation Results (Chapter 8 in 25.814)	8	5
Evolved UTRA and UTRAN (Physical Layer): Text Proposal on UL Evaluation Results (Chapter 10 in TR25.814)	10	4
Evolved UTRA and UTRAN (Physical Layer): Contributions on Fulfilment on LTE Targets from TR25.912	54	42
Evolved UTRA and UTRAN (Physical Layer): Text Proposals for TR25.912 on LTE Target Fulfilment	19	19
Evolved UTRA and UTRAN (Physical Layer): Text Proposal on LTE Physical Layer Description for TR25.912, Chapter 7	2	2
Evolved UTRA and UTRAN (Physical Layer): TR and others	12	8

1. Opening of the meeting

08/05/2006 09:15

RAN1 Chairman, Mr. Dirk Gerstenberger and welcomed the participants to the RAN WG1 #45 meeting and opened the meeting at 09.15.

Mr. Ke Wang from CATT welcomed the delegates on behalf of CATT/CCSA

1.1 Call for IPR

08/05/2006 09:20

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/Ipr/>).

2. Approval of the agenda

R1-061105 Draft Agenda for RAN1#45

(RAN1 Chairman)

08/05/2006 09:20 Presented by Mr. Dirk Gerstenberger.

Discussion (Question / Comment):

Mr. Chairman showed the schedule for this week.

Decision: This document was approved.

3. Approval of the minutes from the previous meetings

R1-061106 Draft Report from RAN1#44bis Meeting

(MCC Support)

08/05/2006 09:30 Presented by Mr. Yoshikazu Ishii.

Decision: This document was approved in R1-061641

R1-061108 Draft Report from RAN1/RAN2 Joint meeting in Athens

(MCC Support)

08/05/2006 09:30 Presented by Mr. Yoshikazu Ishii.

Decision: This document was approved in R1-061642

R1-061641 Approved Report from RAN1#44bis Meeting

(MCC Support)

R1-061642 Approved Report from RAN1/RAN2 Joint meeting in Athens(MCC Support)

4. Liaison statement handling

R1-061109 LS on UE measurement and reception capabilities for LTE (To: RAN1, RAN4) (RAN WG2, Motorola)

08/05/2006 09:35 Presented by Mr. Jean-Aicard Fabien from Motorola.

Discussion (Question / Comment):

It was commented that what parts are related to RAN1 because some of questions seems to be related to architecture. Jean-Aicard Fabien commented that some parts of questions are related to mobility, scheduling and some are related to RAN4.

Mr. Chairman clarified about the way forwards to this LS that after treating the documents related to this LS.

Motorola moderates the offline discussion and make the draft reply LS.

Decision: This document was noted.

R1-061154 Discussion and draft answers on LS R1-061109 (LG Electronics)

08/05/2006 09:40 Presented by Dr. Joon Kui Ahn.

Discussion (Question / Comment):

Decision: This document was noted.

R1-061297 L1 UE measurement to support intra E-UTRA mobility (NEC Group, NTT DoCoMo)

08/05/2006 09:45 Presented by Mr. Thanh Bui from NEC

Discussion (Question / Comment):

Mr. Chairman clarified that special scenario which was discussed in RAN2 reflector should not be included in the reply LS.

Decision: This document was noted.

R1-061298 Proposed response to RAN2 LS in [R1-061109] (NEC Group, NTT DoCoMo)

Decision: This document was noted without presentation.

R1-061313 UE capabilities and spectrum allocation scenarios concerning the LS R1-061109 (Samsung)

08/05/2006 10: 00Presented by Dr. Joonyoung Cho

Discussion (Question / Comment):

Decision: This document was noted.

R1-061345 E-UTRA UE Measurements and Capabilities (Ericsson)

08/05/2006 10:05 Presented by Dr. Stefan Parkvall

Discussion (Question / Comment):

Decision: This document was noted.

R1-061488 Deployment of different E-UTRA bandwidth options (Nokia)

08/05/2006 10:10 Presented by Mr. Asbjorn Grovlen

Discussion (Question / Comment):

Decision: This document was noted.

Mr. Chairman suggested the offline discussion based on the next summary of related document and making Draft LS in R1-061552. (Drafting session at 14:00, Breakout room)

R1-061552 Draft LS on UE measurement and reception capabilities for LTE (Motorola)

10/05/2006 17:05 Presented by Mr. Jean-Aicard Fabien

Discussion (Question / Comment):

Thanh Bui from NEC pointed that cell E also has identical centre frequency.

Regarding the answer to the second question, Evelyn Le Strat from Nortel raised a concern on the answer for question 2 that the sentence is contradict, not necessary and beneficial and commented that actually such a measurement is very beneficial but it make UE very complex. Also she commented that she expressed opposition totally, but If this LS is send now, it's not end decision the view must be current view and must be further studied. For this measurement, some people pointed out the measurement gaps should be discussed.

Decision: This draft is agreed with some modification in R1-061598

R1-061539 LS on Real Time Gaming Requirements (To: RAN2, Cc: RAN1, RAN3, RAN4, SA4) (SA WG1, Siemens)

08/05/2006 10:20 Presented by Mr. Thomas Chapman from Siemens.

Discussion (Question / Comment):

Juho Lee from Samsung asked a question whether FER is L1 or L2. Mr. Chairman commented to the question that SA1 don't think that.

Decision: This document was noted.

R1-061540 Liaison Statement on the Vocabulary TR, TR 21.905 (To: All 3GPP WGs)
(SA WG1, Motorola)

08/05/2006 10: Presented by Mr. Jean-Aicard Fabien from Motorola.

Discussion (Question / Comment):

Hidetoshi Suzuki from Panasonic commented that in the current RAN1 specification, the terminologies related to this LS should not to be modified anything if essentially necessary. Mr. Chairman clarified that his assumption is that we don't modify anything in the current RAN1 specs.

Decision: This document was noted.

R1-061622 Reply LS on quality of service for voice handover (WG SA4, NEC)

12/05/2006 16:45 Presented by Mr. Thanh Bui from NEC

Discussion (Question / Comment):

Mr. Chairman commented that this LS is related to Continuous Connectivity so that the technical points in this document had better be taken care.

Decision: This document was noted.

R1-061625 Response LS on UE measurement and reception capabilities for LTE
(To:RAN2, Cc: RAN1) (WG RAN4, Motorola)

12/05/2006 16:48 Presented by Mr. Jean-Aicard Fabien from Motorola

Discussion (Question / Comment):

Decision: This document was noted.

Outgoing LS

- | | | |
|------------------|---|------------------|
| R1-061598 | LS on UE measurement and reception capabilities for LTE
(To:RAN2, Cc: RAN4) | (RAN WG1) |
| R1-061599 | LS on Random Access burst message size for LTE
(To:RAN2) | (RAN WG1) |
| R1-061603 | LS on SFN operation for E-MBMS
(To:RAN3, Cc: RAN2, RAN4) | (RAN WG1) |
| R1-061632 | LS on Reconfiguration of EUDCH
(To RAN2, RAN3, RAN4) | (RAN WG1) |
| R1-061633 | LS on the signature sequence index allocation for E-HICH and E-RGCH
(To: RAN3, Cc: RAN2) | (RAN WG1) |
| R1-061635 | LS on introduction of an Optional Noise Floor Indication for E-DCH RRM
(To: RAN3) | (RAN WG1) |
| R1-061636 | LS on Rel-7 MIMO Conclusions (To: RAN) | (RAN WG1) |
| R1-061637 | LS on introduction of an E-DCH Node B measurement for RRM
(To: RAN2, RAN3, RAN4) | (RAN WG1) |
| R1-061644 | LS on feedback regarding the concepts for "Continuous connectivity for packet data users" (To: RAN2, RAN3, RAN4) | (RAN WG1) |

5. Maintenance of R99, Rel4, Rel5, Rel6, Rel7

The overview of discussion and conclusion on this section is as followed:

1. It was agreed that UE behaviour unspecified around reconfiguration (R1-061143) and the decision was sent to other RAN WGs in R1-061632.
2. It was agreed that SF/2 method is not supported for E-DCH (R1-061254)
3. CRs to TS25.212 and 25.214 (Rel-6 and Rel-7) for Clarification of E-TFCI terminology were agreed by RAN1.
4. CRs to TS25.225 (Rel-6 and Rel-7) for Clarify the reference point for LCR TDD TA were agreed by RAN1.
5. CR to TS25.223 (Rel-7) for Correction of the values of weight factors was agreed by RAN1.
6. The measurement for E-DCH, "E-DCH Node B measurement for RRM" and "Optional noise floor indication to the RNC" was discussed and these measurement methods were endorsed by RAN1 and LSs were sent to the related RAN WGs.

5.1 R99 CRs + shadow CRs

No document

5.2 Rel4 CRs + shadow CRs

No document

5.3 Rel5 CRs + shadow CRs

No document

5.4 Rel6 CRs + shadow CRs

R1-061143 Reconfiguration of EUDCH (Panasonic)

08/05/2006 11:15 Presented by Mr. Hidetoshi Suzuki

Discussion (Question / Comment):

Decision: This document was agreed that RAN1 agree the same way of the handling with HSDPA, i.e. UE behaviour unspecified around reconfiguration. It was decided to inform RAN1 decision to other RAN WGs and make a draft LS in R1-061556.

R1-061556 Draft LS on Reconfiguration of EUDCH (Panasonic)

12/05/2006 12:10 Presented by Mr. Hidetoshi Suzuki

Discussion (Question / Comment):

Decision: The draft LS was agreed in R1-061632.

R1-061254 SF reduction on compressed mode for 10ms TTI E-DCH (ZTE)

08/05/2006 11:20 Presented by Mr. Zhisong Zuo

Discussion (Question / Comment):

Nokia and Siemens commented that the description in the section mention on the related CR is not unclear but the proposal is not unclear to be specified. Also Mr. Chairman commented that we already defined that in the set of CR and we don't need to specify repeatedly the same thing.

Decision: It was agreed that SF/2 method is not supported for E-DCH and the CRs related to this contribution were not agreed.

R1-061255 25.212CR0233(Rel-6,F)"Clarification of compressed mode by reducing the spreading factor by 2 for E-DCH" (ZTE)

Decision: This CR was not agreed.

R1-061256 25.212CR0234(Rel-7,A)"Clarification of compressed mode by reducing the spreading factor by 2 for E-DCH" (ZTE)

Decision: This CR was not agreed.

R1-061293 25.212CR0235 (Rel-6, F)"Clarification of E-TFCI terminology"
(Siemens, Panasonic, Samsung)

08/05/2006 11:35 Presented by Dr. Thomas Chapman from Siemens

Decision: This CR was agreed.

R1-061294 25.212CR0236 (Rel-7, A)"Clarification of E-TFCI terminology"
(Siemens, Panasonic, Samsung)

Decision: This CR was agreed.

R1-061295 25.214CR0419 (Rel-6, F)"Clarification of E-TFCI terminology"
(Siemens, Panasonic, Samsung)

Decision: This CR was agreed.

R1-061296 25.214CR0420 (Rel-7, A)"Clarification of E-TFCI terminology"
(Siemens, Panasonic, Samsung)

Decision: This CR was agreed. (RAN2 set of linked CRs).

R1-061299 25.211CR0228(Rel-6, F)"Clarification of the signature sequence index
allocation for E-HICH and E-RGCH"
(NEC Group)

08/05/2006 11:37 Presented by Ms. Nahoko Kuroda

Discussion (Question / Comment):

Karri Ranta-aho pointed out that this is the same as the discussion on the ZTE contribution and the proposal is not necessary to specified. Mr. Chairman commented the related discussion is better in RAN3.

Decision: CR is not agreed. And the conclusion was decided to be sent to RAN3 in R1-061557.

R1-061300 25.211CR0229(Rel-7, A)"Clarification of the signature sequence index
allocation for E-HICH and E-RGCH"
(NEC Group)

Decision: CR is not agreed.

R1-061557 Draft LS on the signature sequence index allocation for E-HICH and E-RGCH
(NEC Group)

This document was revised before presenting.

R1-061569 Draft LS on the signature sequence index allocation for E-HICH and E-RGCH
(NEC Group)

12/05/2006 12:12 Presented by Ms. Nahoko Kuroda

Discussion (Question / Comment):

Decision: This LS was agreed in R1-061633 with revision of meeting schedule.

R1-061218 25.225 CR0080 (Rel-6, F)"Clarify the reference point for LCR TDD TA"
(CATT)

08/05/2006 09:45 Presented by Mr. Ke Wang.

Discussion (Question / Comment):

Decision: This CR was agreed.

R1-061219 25.225 CR0081 (Rel-7, A)"Clarify the reference point for LCR TDD TA"
(CATT)

Decision: This CR was agreed.

5.5 Rel7 CRs

R1-061408 25.212CR0237 (Rel-7, F)"CRC size for Stand-alone Scheduling Information"
(Huawei)

08/05/2006 11: 45 Presented by Mr. Gaoke Du

Discussion (Question / Comment):

Nokia, Ericsson, Qualcomm and Samsung raised the objection to this proposal that we already agreed the CRC size and the gain from this proposal is not sure considering the impact on scheduling information.

Decision: CR was not agreed.

R1-061343 Introduction of an E-DCH related Node B measurement for RRM purposes
(Siemens)

08/05/2006 11:55 Presented by Dr. Joern Krause

Discussion (Question / Comment):

Rainer Bachl from Lucent commented that regarding the split of the served and non serve UE. it is difficult to measure non served UE and also regarding the combination of two measurement on one report, also such a report is difficult and should be redefined in RAN3.

Joern Krause commented that they not sure such difficulty and limitation on the reposting and also they discuss this proposal in RAN3.

Karri Ranta-aho from Nokia commented that we already proposed such kind measure on MAC level last year but that was not agreed so that they are not sure that it is necessary to specify the physical layer measurement

Johan Bergman from Ericsson commented that regarding the separation of scheduled and non scheduled EDCH, they support to the relative report.

Decision: This document was noted.

R1-061344 25.215CR0170(Rel-7, C) "Introduction of a Node B measurement for E-DCH RRM" (Siemens)

08/05/2006 09: Presented by Dr. Joern Krause

Discussion (Question / Comment):

Decision: After the offline discussion, this document was revised in R1-061616.

R1-061616 25.215CR0170r1(Rel-7, C) "Introduction of a Node B measurement for E-DCH RRM" (Siemens)

12/05/2006 09: Presented by Dr. Joern Krause

Discussion (Question / Comment):

Juho Lee from Samsung raised a concern how NodeB distinguish the scheduled part and non-scheduled part.

Karri Ranta-aho from Nokia expressed a wonder that after the last meeting he contacted to the RAN2 delegates but still he is not sure the benefit of this measurement from existing measurement contact with RAN2.

To these comments, Joern commented that we already discussed offline after the last meeting, so they should raised such comments at that time. The discussion continued long, still Juho expressed that this CR is not for Rel-7 but Rel-6 and we had better come back in August. For the long discussion, RAN1 Chairman commented that he doesn't intend to postpone the decision for three months and also the definition of this measurement is already clear.

Decision: This CR was conditionally agreed, provided there are no technical concerns raised on the reflector until 26 May. After the meeting, some comments were raised. Samsung pointed out the complexity of implementation and testing for NodeB implementation and also pointed out that the E-DCH provided bit rate measurement is reported per scheduling priority and hence we already have a means to serve for the purpose of the proposed measurement. Nokia commented that this CR can be considered as technically correct, but the question raised is whether introducing the new measurement it to the spec is really needed and worth the time and effort.

On the other hand, Ericsson commented that it is most straightforward to introduce the proposed measurement, which in their view captures precisely the quantity of interest, rather than going for a total E-DCH power measurement and relying on being able to extract the quantity of interest afterwards. Also Nortel commented that at the previous two meetings we did see some benefits in introducing this new measurement to improve UL CAC, similarly to the transmitted carrier power of non HS- channels that we have for DL and this is a node B measurement so no one is mandated to implement it, E-DCH provided bit rate can be used as an alternative if it is believed to be sufficient. In addition, they commented that they would like to stick to a measurement covering only the scheduled part of the E-DCH received power and non scheduled part should be considered as existing channels which power is not managed by the node B.

Finally, contributor, Siemens decided to move the discussion for this CR to RAN#32 taking account of these comments.

R1-061615 Draft LS on introduction of an E-DCH Node B measurement for RRM (To RAN2/3/4) (Siemens)

12/05/2006 51:45 Presented by Dr. Joern Krause

Discussion (Question / Comment):

Decision: This draft LS was agreed in R1-061637

R1-061447 Measurement in support of EDCH scheduling (Lucent Technologies)

08/05/2006 12:15 Presented by Dr. Rainer Bachl

Discussion (Question / Comment):

Karri Ranta-aho commented that with related to sentence at the end of Chapter 2 and Figure 1 Non E-DCH traffic is accounted separately from the others

Siemens raised a concern that they cannot fully understand this proposal.

Decision: This document was revised in R1-061570 after the offline discussion. The R1-061670 was withdrawn after the offline discussion.

R1-061448 25.215CR0171(Rel-7, C) "Measurement on "Received Non-E-DCH to total power ratio" (Lucent Technologies)

08/05/2006 09: Presented by Dr. Rainer Bachl

Discussion (Question / Comment):

Decision: This CR was not agreed

R1-061483 Optional Noise Floor Indication to the RNC (Ericsson)

08/05/2006 14:00 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Joern Krause from Siemens raised a concern that if the proposal is not measurement, just the reference from Node B to RNC.

Hidetoshi Suzuki from Panasonic commented that he wonder whether the case of the different measurement and different definition of the reference still useful to have this measurement.

Mr. Chairman commented that this discussion is also indicated to RAN3 with related to the discussion on the E-DCH power measurement.

Decision: This document was noted and it was decided to finalize offline discussion on EDCH measurement, then send an LS to RAN3 with the results and include also the status of discussion on the noise floor indication in R1-061624.

**R1-061624 Draft LS on introduction of an Optional Noise Floor Indication
for E-DCH RRM (To: RAN3) (Ericsson)**

12/05/2006 13:50 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Joern Krause from Siemens asked if the received noise is just noise level or sum of noise level and intercell interference. and for later case, it could not be distinguish and is not clear. The sentence is modified for making this point clear.

Decision: This LS was agreed with modification in R1-061635.

**R1-061429 25.223CR0040(Rel-7, F)"Correction of The values of weight factors"
 (IPWireless)**

08/05/2006 14:15 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This CR was agreed.

Withdrawn

R1-061558 Draft LS to RAN3 related to E-DCH measurements (Siemens)
R1-061570 Measurement in support of EDCH scheduling (Lucent Technologies)

5.6 Other

R1-061489 HSDPA Cell Repointing (Qualcomm Europe)

08/05/2006 14:15 Presented by Mr. Juan Montojo

Discussion (Question / Comment):

Karri Ranta-aho from Nokia raised a wonder the proposal is not exactly same but this issue already agreed at the last year.

Qualcomm clarified that this is also submitted in RAN2 at this meeting. Mr. Chairman suggested we just noted and discussed more in RAN2.

Decision: This document was noted.

6. TDD Enhanced Uplink

The overview of discussion and conclusion on this section is as followed:

1. 1.28 Mcps TDD Enhanced Uplink

- Skeleton TR was agreed in R1-061220.
- Three text proposals regarding basic physical layer structure, Node-B controlled uplink scheduling and modulation to TR were agreed.

2. 3.84 Mcps TDD Enhanced Uplink

- The latest TR 25.826 is v1.2.0 in R1-061649.
- CRs for 25.201, 25.221, 25.223, 25.224, and 25.225 as for "Introduction of E-DCH for 3.84Mcps TDD" were agreed by RAN1. (Note: These CRs will be submitted to RAN plenary for approval with waiting for one missing CR for 25.222, so maybe the set of CRs will be submitted to RAN#33 (2006 September))

3. 7.68 Mcps TDD Enhanced Uplink

- Draft set of CRs to TDD specification as for "Introduction of E-DCH for 7.68Mcps TDD" was noted.

6.1 1.28 Mcps TDD Enhanced Uplink

R1-061137 Random access control for 1.28Mcps TDD Enhanced Uplink (ZTE)

08/05/2006 14:30 Presented by Mr. Hui Chen

Discussion (Question / Comment):

CATT and TD-Tech raised a concern that this proposal related RAN2, MAC should not be specified just in RAN1. Also Mr. Chairman commented that the decision on the RAN1 is a little bit premature so it is better to discuss with the RAN2 and send the LS to RAN2.

Decision: It was decided to send the LS to RAN2 to request RAN2's confirmation and make the draft LS in RAN1-061560.

R1-061560 LS on Random access control for 1.28Mcps TDD Enhanced Uplink(ZTE)

12/05/2006 16:10 Presented by Mr. Hui Chen

Discussion (Question / Comment):

Decision: This document was agreed.

R1-061138 Random access physical channel for 1.28Mcps TDD Enhanced Uplink (ZTE)

08/05/2006 14:50 Presented by Mr. Hui Chen

Discussion (Question / Comment):

CATT and TD-Tech also raised a concern on the proposal.

Decision: This TP was not agreed and continue the discussion.

R1-061139 Enhanced uplink power control for 1.28Mcps TDD Enhanced Uplink (ZTE)

08/05/2006 14:55 Presented by Mr. Hui Chen

Discussion (Question / Comment):

CATT raised concerns the details on this proposal, but the ZTE answered that they proposed just the scheme and the details are FFS

Decision: This TP was not agreed and continue the discussion.

R1-061220 Draft TR Physical Layer Aspects for 1.28Mcps TDD HSUPA (CATT)

08/05/2006 14:30 Presented by Mr. Ke Wang.

Discussion (Question / Comment):

Decision: This skeleton TR was agreed. The TR number, 25.827 was allocated after the meeting.

R1-061221 Text Proposal for basic physical layer structure for 1.28Mcps TDD Enhanced Uplink (CATT)

08/05/2006 14:33 Presented by Ms. Xueyuan Gao.

Discussion (Question / Comment):

Decision: This TP was agreed.

R1-061222 Support for Node-B Controlled Uplink Scheduling and Text Proposal for TR 25.XXX (CATT)

08/05/2006 15:05 Presented by Ms. Xueyuan Gao.

Discussion (Question / Comment):

Nicholas Anderson from IPWireless raised his wonder on the last sentence of Chapter 7.2 "to the serving cell scheduler via the associated uplink signalling channels (E-UCCH and E-RUCCH)." that RAN2 already decided for HCR-TDD the information is sent by the higher layer so that we should consider the similarity between HCR and LCR. Mr. Chairman suggested sending the LS to RAN2 and getting the guidance on this issue.

Decision: The TP was agreed without "via the associated uplink signalling channels (E-UCCH and E-RUCCH)." at the end of 7.1 and Draft LS to RAN2 in R1-061561 to request guidance on how to signal the information.

R1-061561 LS on Uplink Control Signalling for 1.28Mcps TDD Enhanced Uplink (CATT)

12/05/2006 16:12 Presented by Ms. Xueyuan Gao.

Discussion (Question / Comment):

Decision: This LS was approved.

R1-061223 HARQ schemes for 1.28Mcps TDD Enhanced Uplink (CATT)

08/05/2006 15:10 Presented by Ms. Xueyuan Gao.

Discussion (Question / Comment):

It was clarified by CATT that the same topic is submitted in RAN2 at this meeting. Mr. Chairman suggested we wait for the RAN2 discussion and decision on this topic.

Decision: It was decided to wait for the outcome of RAN2 discussion on this topic.

R1-061224 Modulation for 1.28Mcps TDD Enhanced Uplink (CATT)

08/05/2006 15:20 Presented by Mr. Ke Wang.

Discussion (Question / Comment):

TD-Tech commented that we can consider 64 QAM. CATT and also Mr. Chairman clarified that this issue already was discussed on the SI phase and we don't need to go back to that in WI phase. TD Tech pointed out that multi-code PAR performance with 16QAM modulation accounted for their motivation not to consider it as EUL modulation scheme for 1.28Mcps TDD in order to loose UE PA backoff requirement.

Decision: This TP was agreed.

R1-061535 20ms TTI Co-existence with 5ms TTI for E-DCH of LCR TDD (ZTE)

08/05/2006 09: Presented by Mr. Hui Chen

Discussion (Question / Comment):

Mr. Chairman raised a wonder on the 4 times TTI what is the motivation multimedia file on TTI compared with FTP. not VoIP

Decision: It was decided that the proponent will provide simulation results and analysis that motivates the introduction of 20ms TTI.

Withdrawn

R1-061225 LCR TDD: E-HICH structure and coding (CATT)

R1-061226 LCR TDD E-HICH: Simulation Results (CATT)

6.2 3.84 Mcps TDD Enhanced Uplink

R1-061412 TR25.826 v1.0.1 (IPWireless)

08/05/2006 16:15 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This was endorsed as v1.1.0 in R1-061562.

R1-061562 TR25.826 v1.1.0 (IPWireless)

R1-061640 TR25.826 v1.1.1 (IPWireless)

Decision: This version captured the text proposal agreed at RAN1#45 meeting. This was endorsed as v1.2.0 in R1-061649

R1-061649 TR25.826 v1.2.0 (IPWireless)

R1-061413 Updates to TR25.826 (IPWireless)

08/05/2006 16:17 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Serge from Qualcomm raised a wonder on the revision of the E-UCCH that there no any evaluation because this is stage 2 not stage 3. Mr. Chairman suggested the proponent provided the simulation results before the final conclusion on this WI.

Decision: Regarding E-UCCH, simulation results on the coding performance should be provided before a final conclusion is taken. This TP was agreed. The way forward is to provide v1.1.1 for email approval (Update v2.0.0), when the above issue is resolved. For approval in the next plenary, consider the above issue and the progress on the other WGs.

Tim from Philips raised a question this TDD WI is concluded individually or with 7.68 Mcps, Mr. Chairman commented that TDD topics should be separately concluded

R1-061414 25.201CR0024(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

08/05/2006 16:35 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Serge from Qualcomm commented that the channel allocation on dedicated channel regarding E-HICH. It should be consistent to FDD. IPWireless clarified that E-HICH is common channel and E-DCH is dedicated

Decision: This CR was revised in R1-061567 according to the comments.

R1-061567 25.201CR0024r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

12/05/2006 16:30 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This CR was agreed.

R1-061415 25.221CR0137(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

08/05/2006 16:45 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Serge Willenegger from Qualcomm raised a couple comments.

Decision: This CR was revised in R1-061563 according to the comments.

R1-061563 25.221CR0137r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

12/05/2006 16:31 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This CR was agreed.

R1-061417 25.223CR0039(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

08/05/2006 09:50 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Serge Willenegger from Qualcomm raised a couple comments.

Decision: This CR was revised in R1-061564 according to the comments.

R1-061564 25.223CR0039r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

12/05/2006 16:32 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This CR was agreed.

R1-061418 25.224CR0151(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD" (IPWireless)

08/05/2006 16:50 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Serge Willenegger commented that E-HCIH is the common and different from FDD so that the same name as FDD is a little bit confused and it should be changed to the different from TDD

Decision: This CR was revised in R1-061565 according to the comments.

R1-061565 25.224CR0151r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"
(IPWireless)

12/05/2006 16:33 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This CR was agreed.

R1-061419 25.225CR0082(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"
(IPWireless)

08/05/2006 17:05 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

As same as the previous CR, the name, E-HICH should be modified.

Decision: This CR was revised in R1-061566 according to the comments.

R1-061566 25.225CR0082r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"
(IPWireless)

12/05/2006 16:34 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Decision: This CR was agreed.

R1-061420 Draft CR to TS 25.222 - Introduction of E-DCH for 3.84Mcps TDD
(IPWireless)

08/05/2006 09: Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

The some details of E-DCH is not included so it's a draft LS.

Decision: This document was noted.

Withdrawn

R1-061416 25.222CR0128(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"
(IPWireless)

6.3 7.68 Mcps TDD Enhanced Uplink

R1-061421 Overview of changes for TDD E-DCH operation at 7.68Mcps (IPWireless)

08/05/2006 17:15 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Also the same comment on section 6.2 should be consider

Decision: This document was noted.

R1-061422 Draft CR to TS 25.201 - Introduction of E-DCH for 7.68Mcps TDD(IPWireless)

Decision: This document was noted without presentation

R1-061423 Draft CR to TS 25.221 - Introduction of E-DCH for 7.68Mcps TDD(IPWireless)

Decision: This document was noted without presentation

R1-061424 Draft CR to TS 25.222 - Introduction of E-DCH for 7.68Mcps TDD(IPWireless)

Decision: This document was noted without presentation

R1-061425 Draft CR to TS 25.223 - Introduction of E-DCH for 7.68Mcps TDD(IPWireless)

Decision: This document was noted without presentation

R1-061426 Draft CR to TS 25.224 - Introduction of E-DCH for 7.68Mcps TDD(IPWireless)

Decision: This document was noted without presentation

R1-061427 Draft CR to TS 25.225 - Introduction of E-DCH for 7.68Mcps TDD(IPWireless)

Decision: This document was noted without presentation

The set of draft CRs is updated to be aligned to the CRs on section 6.2

7. MIMO in UTRA (Rel'7 Work Item)

The overview of discussion and conclusion on this section is as followed:

The decision from Monday session of MIMO in UTRA

RAN1 has studied two MIMO proposals, PARC and D-TxAA, with respect to

- Performance gain
- Complexity increase
- Backward compatibility (impact on legacy UEs)

Relative to 1x2 single stream transmission, and in line with the scenario and way forward defined by RAN.

PARC and D-TxAA (both with R99 Tx Diversity fallback) with or without MMSE or SIC showed

- Similar performance gain (demonstrated with PARC without R99 fallback)
- Similar complexity increase
- Negligible performance impact on legacy UEs

Considering the performance gain (partly based on cell throughput improvement, and partly based on user throughput improvement) vs the complexity increase, RAN1 recommends the specification of the MIMO feature.

RAN1 recommends to specify the MIMO scheme

- For TDD: PARC
- For FDD: Multi-codeword principle (RAN1 could not agree whether to use PARC or D-TxAA)

During the week after Monday session, the offline discussion for compromising above two schemes for FDD took place. On the final day, MIMO in UTRA was discussed again and the discussion could reach to RAN1 agreement on the selection of one MIMO scheme for FDD.

Final Conclusion (RAN1 Chairman informed to RAN in next RAN Plenary and also LS will be sent to RAN in R1-061636):

- For UTRA TDD: the PARC scheme was agreed.
- For UTRA FDD: Dual-codeword MIMO based on D-TxAA, with the weights being signalled on the HS-SCCH in the downlink, was agreed.

Performance

R1-061119 D-TxAA and PARC performance comparison with LMMSE receiver

(Nokia)

08/05/2006 17:30 Presented by Mr. Karri Ranta-aho

Discussion (Question / Comment):

Decision: This document was noted.

R1-061120 HSDPA MIMO system performance results

(Nokia)

08/05/2006 17:45 Presented by Mr. Karri Ranta-aho

Discussion (Question / Comment):

A lot of commented from Ericsson and Qualcomm the CQI report simulation and the CQI adaptation on the single stream (switching point of the rank with SIC) and perfect SIC performance.

Also it was pointed out that the difference of the reference case (1X2) between each company. Nokia commented that it is depending on the isolation scenario between cells (sectors).

Karri Ranta-aho clarified that the number of users per cell is 20 and the isolation scenario is the same for both case in this simulation.

Decision: This document was noted.

R1-061180 Investigation on Throughput Improvement by Rel. 7 MIMO (NTT DoCoMo)

08/05/2006 18:05 Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

Aris Papasakellariou commented on the this proposal don't considered the antenna verification so the conclusion will be changed if considered. Kenichi Higuchi commented that yes the antenna verification is more advantage to the DxTAA.

Also Aris commented that considering the real path timing detection and channel estimation, the conclusion will be changed the MIMO gain would be increasing.

Bo Göransson from Ericsson commented on the number of multicodes on HS-PDSCH. considering the evaluation on the low SNR region.

Kenichi commented that the they actually evaluate only 10 code but at low SNR region is Tx Div is better than MIMO although they don't know SNR on that turning point.

Josef Blanz from Qualcomm raised a wonder on the equation of SINR calculation, equation 4.

Decision: This document was noted.

R1-061205 W-CDMA MIMO with FTP Traffic (Motorola)

08/05/2006 18:30 Presented by Mr. Mark Harrison.

Discussion (Question / Comment):

Josef Blanz from Qualcomm asked some questions and commented on the scheduling on this document

Decision: This document was noted.

R1-061206 D-TxAA, PARC, and Single Antenna Systems in Urban Microcells (Motorola)

08/05/2006 18:43 Presented by Mr. Mark Harrison.

Discussion (Question / Comment):

The long discussion was about the switching of single and two streams considering the signalling.

Josef commented that the scheduler on the simulation is not sure in details and how many bit feedback to BS It was clarified that FBI is 2bit by slot.

Decision: This document was noted.

R1-061348 Link level evaluation of D-TxAA (Ericsson)

08/05/2006 19:00 Presented by Dr. Bo Göransson

Discussion (Question / Comment):

It was clarified that the perfect antenna verification is assumed on this simulation

Decision: This document was noted.

R1-061349 System level results for Rel-7 MIMO schemes (Ericsson)

This document was revised before presentation.

R1-061553 System level results for Rel-7 MIMO schemes (Ericsson)

08/05/2006 17:05 Presented by Dr. Bo Göransson

Discussion (Question / Comment):

Decision: This document was noted.

R1-061554 System level results for Rel-7 MIMO schemes incl. C/I cap (Ericsson)

08/05/2006 19:10 Presented by Dr. Bo Göransson

Discussion (Question / Comment):

Decision: This document was noted.

R1-061432 Link Level Performance SIC Receiver for MIMO Rel.7 WCDMA (Texas Instruments)

08/05/2006 19:40 Presented by Mr. Aris Papasakellariou

Discussion (Question / Comment):

Josef raised a wonder on the simulation assumption that voice interferers cancellation was not defined and taken by anybody so far. Also he asked what kind of SIC. It was answered that ADC is 8bit.

Decision: This document was noted.

R1-061430 System Level Comparison of PARC and Dual-stream TxAA For MIMO in Release 7 HSDPA (Texas Instruments)

08/05/2006 19:50 Presented by Mr. Aris Papasakellariou

Discussion (Question / Comment):

About feedback and how to design the signalling, there were questions and discussion but Mr. Chairman clarified that those are not main point on this item now.

Decision: This document was noted.

R1-061490 System level simulation results for MIMO HSDPA (Qualcomm Europe)

08/05/2006 20:00 Presented by Dr. Josef Blanz

Discussion (Question / Comment):

Nokia asked if MU-MIMO is considered in this contribution. Josef clarified that for the linear PARC two antenna, two streams, Node B can schedule two UEs simultaneously and the benefit is the multi-user scheduling across antenna and across code.

Decision: This document was noted.

R1-061491 Cell and User Throughput Comparison for 2x2 MIMO: D-TxAA and PARC
(Qualcomm Europe)

08/05/2006 20:15 Presented by Dr. Josef Blanz

Discussion (Question / Comment):

The discussion was on the UL signalling related to MIMO and the complexity due to that.

Motorola and Nokia commented that complexity is depending on the how rate and how speed the signalings are

Decision: This document was noted.

R1-061428 System Simulation Results for the MIMO Urban Micro Scenario (TDD)
(IPWireless)

08/05/2006 20:25 Presented by Mr. Nicholas Anderson

Discussion (Question / Comment):

Mark Harrison from Motorola expressed his wonder that the cell throughput is larger for the round robin case than the full buffer case.

Decision: This document was noted.

Impact on legacy UEs

R1-061346 Impact of MIMO transmission on the performance of legacy channel reception
in a non-MIMO capable UE (Ericsson)

08/05/2006 20:30 Presented by Dr. Bo Göransson

Discussion (Question / Comment):

The discussion was on the difference between the fall back case and not.

Decision: This document was noted.

Complexity, details

R1-061347 Complexity and performance trade-offs of MIMO transmission schemes
(Ericsson)

08/05/2006 09: Presented by Dr. Bo Göransson

Discussion (Question / Comment):

The complexity considering the interference and the complexity due to signalling were discussed.

Decision: This document was noted.

R1-061492 Complexity of MIMO HSDPA receivers (Qualcomm Europe)

08/05/2006 22:30 Presented by Dr. Josef Blanz

Discussion (Question / Comment):

Aris Papasakellariou from TI raised a concern on the complexity related to IR buffer, HARQ buffer for SIC. Lucent and Qualcomm raised a concern that the baseband processing is not significant problem and the complexity is the same for both type of receivers

Decision: This document was noted.

R1-061542 Implementation Issues of SIC Receiver for MIMO Rel.7 WCDMA
(Texas Instruments)

08/05/2006 09: Presented by Dr. Eko Onggosanusi

Discussion (Question / Comment):

The discussion was on the latency for SIC. Josef Blanz expressed his wonder why SIC increase latency and it might be due to the different assumption of delay.

Mr. Chairman commented that we don't include the receiver type in requirement. Panasonic commented that although specification does not explicitly says the receiver type, RAN4 specification requires specific reference receiver but RAN1 Chairman clarified that it's key point but our answer is what kind of gain can be obtained by MIMO.

Decision: This document was noted.

Way forwards

R1-061301 Consideration on UTRA MIMO scheme (NEC Group)

Decision: This document was noted.

Bo Göransson from Ericsson commented that we have the same view on the two group , i.e. we agreed the Multi-codeword principally and the antenna verification make the comparison of two scheme confused so that he proposed that for FDD, RAN1 recommend Multiple-codeword principle without requirement of the antenna verification. To the proposal, Karri Ranta-aho raised a concern that they would agree One Scheme, T-DxAA or nothing else so that they don't want the compromised conclusion. RAN1 Chairman commented that taking the discussion so far into account we don't select one scheme and if we continue offline discussion until the end of this week we could not conclude on the selection of one scheme.

Aris Papasakellariou from TI suggested that the table of comparison should be sent to RAN as the helpful information for RAN final decision.

Also Takehiro Nakamura from NTT DoCoMo commented that from the operator view it is quite difficult for RAN1 to make a decision so that LS including the performance and complexity results for both scheme should be sent to RAN for asking RAN to make a decision. Also some companies expressed their supports to Nakamura-san view.

Manook Soghomonian from 3 commented and proposed that from the operator view, we want MIMO for service evolution but now the two schemes are almost same so that both scheme will specified and the operator choose the one scheme.

The long discussion on the forth point continued and Mr. Chairman commented that the forth point might be totally open but if we take some conclusion, it could be helpful for the discussion on RAN.

On the final day, 12th May, the MIMO way forward which was discussed offline after Monday session was presented and the compromise MIMO scheme was agreed by RAN1.

R1-061621 Draft LS on Rel-7 MIMO Conclusions

(Nokia Broadcom, Ericsson, Intel, Lucent, NEC, NTT DoCoMo, Orange, Panasonic, Samsung, T-Mobile, Texas Instruments, Vodafone)

12/05/2006 14:15 Presented by Mr. Karri Ranta-aho

Discussion (Question / Comment):

Siemens expressed their support to this LS. Add Siemens.

The draft LS was revised with reflect to discussion on R1-061634.

Decision: This LS was approved with some modification in R1-061636

R1-061634 Rel-7 MIMO Way Forward

(Nokia, Ericsson, Motorola, Cingular, 3, Texas Instruments)

12/05/2006 14:10 Presented by Mr. Karri Ranta-aho

Discussion (Question / Comment):

Serge Willenegger from Qualcomm commented that it's a good news to choose one option and we can allow this proposal but anyway we need to discuss the wording on this document.

In addition to the listed supporting companies, T-mobile and Samsung expressed their support to this proposal.

Rainer Bachl from Lucent asked if PARC is still option. RAN1 Chairman clarified that DxTAA is RAN1 selection.

Karri Ranta-aho suggested the RAN1 selection should be reflected to LS and describe more information, so that In the LS, "D-TxAA, with the weights being signalled on the HS-SCCH in the downlink, was agreed" was added . But some companies raised concerns that the proposed scheme has still unclear because this time is the first proposal.

Stefan Parkvall commented that the added description a little bit detail and we need more time to study more detail.

RAN1 Chairman commented the we might not need the details and actually coming back this Monday actually we didn't have any proposal, but the description can be more clear to RAN plenary and RAN Chairman.

After the long discussion, the selection of MIMO scheme by RAN1 and the description of the LS to RAN Plenary was agreed and then RAN1 Chair expressed his appreciation to all delegates for their long discussion for Rel-7 MIMO.

Decision: This document was noted.

Withdrawn

R1-061121 Way forward for Rel-7 MIMO

(Nokia)

R1-061431 Implementation Issues of SIC Receiver for MIMO Rel.7 WCDMA

(Texas Instruments)

R1-061407 CQI Feedback Scheme for MIMO-HSDPA

(Huawei)

R1-061458 W-CDMA MIMO Issues

(Motorola)

8. Continuous Connectivity for Packet Data Users

The overview of discussion and conclusion on this section is as followed:

1. 8 Text proposals were agreed to be included in TR25.903
2. It was agreed to replace the abbreviation "ConCon" with "CPC".
3. The latest TR25.903 is version 0.5.0 (This version will be submitted to RAN#32 as v1.0.0 for information.

Replace the Abbreviation 'ConCon' with 'CPC'

UL DPCCH slot format

R1-061352 New DPCCH Slot Format: Link-Level Performance (Ericsson)

09/05/2006 10:10 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Matthew Baker from Philips commented that they have another TP in the next document and some wording should be modified. During this week, these TPs would be modified to merged

Joern Krause from Siemens commented on the editorial error of section 4.1.2.3 used twice.

Decision: See below

R1-061457 Further evaluation of slot formats for Continuous Connectivity (Philips)

08/05/2006 10:15 Presented by Mr. Matthew Baker

Discussion (Question / Comment):

It was clarified that the new slot format is related to SIR reduction, and is also compatible with DPCCH gating..

Decision for R1-061352 and R1-061457: It was decided to agree TP 3 from R1-061457 and TP2 from R1-061352 and merge TP1 from 1352 and 1457 and new text proposal is R1-061571.

R1-061571 TP on Combined text proposals on slot formats for Continuous Connectivity (Ericsson, Philips)

12/05/2006 16:15 Presented by Mr. Matthew Baker

Discussion (Question / Comment):

Decision: This TP was agreed.

UL SIR target reduction

R1-061389 UE battery life improvement with SIR target reduction and CQI reduction (Siemens)

09/05/2006 11:15 Presented by Mr. Mieszko Chmiel

Discussion (Question / Comment):

Karri Ranta-aho from Nokia raised a concern on the model of power consumption that in the transmitter there was no linier relation between the transmitter power reduction and power consumption reduction so that 3dB transmitter power has not impact of 3dB power consumption reduction.

Decision: This document was noted. PA power consumption does not scale linierly with the TX code power.

R1-061390 HS-DPCCH performance for beta boosting concept and TPs (Siemens)

09/05/2006 11:25 Presented by Mr. Mieszko Chmiel

Discussion (Question / Comment):

Johan Bergman for Ericsson and Matthew Baker from Philips answered and commented that why the UL DPCCH boosting is removed and any simulation of comparison with and without DPCCH boosting. The answer was that the gain is enough with just HS-DPCCH boosting.

Johan and Matthew proposed to change the text proposal to keep DPCCH boosting.

RAN1 chairman pointed out ACK/NACK issue and it is more critical than CQI.

Karri Ranta-aho suggested that the proponent should provide more analysis on ACK/NACK.

Decision: It was decided to provide further results of ACK/NACK and SHO, consider also PA backoff and to revise TP to define SIR used in the simulations, reflect CQI investigations and don't exclude DPCCH offset boosting in R1-061573.

R1-061573 TP on HS-DPCCH performance for beta boosting concept (Siemens)

12/05/2006 16:20 Presented by Mr. Mieszko Chmiel

Discussion (Question / Comment):

Decision: This TP was agreed.

R1-061453 Update on summary tables for L2 signaling (Lucent Technologies)

09/05/2006 12:00 Presented by Mr. Sridhar Gollamudi

Discussion (Question / Comment):

Jean-Aicard Fabien from Motorola why non-serving Node B reduces CQI. The answer was that actually not need, but anyway, it's CQI reduction.

Decision: This table was revised in R1-061574.

R1-061574 Update on summary tables for L2 signaling (Lucent Technologies)

12/05/2006 12:00 Presented by Dr. Rainer Bachl

Discussion (Question / Comment):

Decision: This TP was agreed.

UL DPCCH gating

R1-061500 Impact of ConCon concepts on DCH search (Qualcomm Europe)

09/05/2006 12:15 Presented by Mr. Juan Montojo

Discussion (Question / Comment):

The concern and concerns were on DCH searching.

Decision: This document was noted.

R1-061306 Power balancing mechanism with DPCCH gating (NEC Group)

09/05/2006 13:45 Presented by Ms. Nahoko Kuroda

Discussion (Question / Comment):

Decision: This document was noted.

R1-061353 UL DPCCH Gating: Realistic VoIP Example (Ericsson)

09/05/2006 13:50 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Nokia commented that they completely agree to this TP.

Decision: This TP was agreed.

R1-061354 UL DPCCH Gating: Further Link-Level Performance Results (Ericsson)

09/05/2006 13:55 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Joern Krause from Siemens asked what the gain is. The answer was that the gain is the term of overhead.

Mr. Chairman confirm that the results except for conclusion would be captured TR so that TP would be prepared.

Decision: This document was noted and it was decided to prepare a TP to include the results for the next meeting.

R1-061355 UL DPCCH Gating: Further System-Level Performance Results (Ericsson)

09/05/2006 14:03 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

This topic was already captured in the previous TO except for a higher velocity.

It was clarified that the gating is between packet active modes.

Decision: This document was noted and it was decided to prepare the TP for a higher velocity for the next meeting.

R1-061356 UL DPCCH Gating: Impact of Gating Gap Length (Ericsson)

09/05/2006 14:10 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

It was asked on the power setting after the gap that the first transmission is the same power as the last one before gap. The answer was yes.

Decision: This document was noted.

R1-061476 TP on uplink 10 ms TTI VoIP capacity with UL DPCCH gating (Nokia)

09/05/2006 14:20 Presented by Mr. Karri Ranta-aho

Discussion (Question / Comment):

Decision: This TP was agreed.

R1-061497 UL VoIP capacity with DPCCH gating (Qualcomm Europe)

09/05/2006 14: 30 Presented by Mr. Juan Montojo

Discussion (Question / Comment):

Decision: This document was noted.

R1-061358 F-DPCCH Gating During Periods of UL DPCCH Gating (Ericsson)

09/05/2006 14:30 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Juan Montojo from Qualcomm expressed his wonder on capacity gain by the F-DPCCH gating how to calculate gain from the saving the F-DPCCH gating.

The issue on the power setting on the UL missing and the detection mechanism was discussed.

- Decision:** The text proposal was revised in R1-061575 with offline discussion.
- R1-061575 TP on F-DPCH Gating During Periods of UL DPCCCH Gating (Ericsson)**
12/05/2006 16:23 Presented by Mr. Johan Bergman
Discussion (Question / Comment):
Decision: This TP was agreed.
- R1-061474 On DRX possibility (Nokia) (Resubmission of R1-061023)**
09/05/2006 14:55 Presented by Mr. Karri Ranta-aho
Discussion (Question / Comment):
It was clarified that when no data transmission DRX is both of UL/DL.
Nokia commented that for capturing this topic into TR, Qualcomm submitted document for around this topic so that it should be checked.
Decision: This document was noted.
- R1-061475 UE tx and rx parts power consumption improvement with DTX and DRX (Nokia) (Resubmission of R1-061024)**
09/05/2006 15: 00 Presented by Mr. Karri Ranta-aho
Discussion (Question / Comment):
Matthew Baker commented about wording that the power consumption improvement is better changed to battery life improvement. Joern Krause commented that we don't talk about "idle mode".at all.
Decision: This TP was revised in R1-061576 (wording for battery improvement and "idle" users)
- R1-061576 UE tx and rx parts power consumption improvement with DTX and DRX (Nokia)**
12/05/2006 16: 24 Presented by Mr. Karri Ranta-aho
Discussion (Question / Comment):
Decision: This TP was agreed.
- R1-061478 Signalling for enhanced continuous PS connectivity (Qualcomm Europe, Nokia)**
09/05/2006 15:10 Presented by Mr. Juan Montojo
Discussion (Question / Comment):
Discussion topic was on DTRX procedure. Joern expressed a wonder on the procedure.
Jean-Aicard Fabien from Motorola asked if two signalling on this scheme are put on the HS-SCCH. The answer was that it could be on HS-SCCH and also could be DL physical channel
In addition, Jean-Aicard commented that this scheme also checked by RAN2. Qualcomm clarified that the same document is submitted to RAN2 and RAN3 as well.
Decision: It was decided to prepare a TP with an improved description for next meeting.
- R1-061495 Further details of DRX proposal (Qualcomm Europe)**
09/05/2006 16:15 Presented by Mr. Juan Montojo
Discussion (Question / Comment):
Joern Krause raised his wonder on the DRX is switch UE side. It was clarified that DRX is for whole receivers.
Decision: This TP was agreed.
- R1-061498 Signalling in support of DTX/DRX (Qualcomm Europe)**
09/05/2006 16:30 Presented by Mr. Juan Montojo
Discussion (Question / Comment):
Decision: This document was noted.
- R1-061499 TP for Signalling in support of DTX/DRX (Qualcomm Europe)**
09/05/2006 16:35 Presented by Mr. Juan Montojo
Discussion (Question / Comment):
Matthew Baker commented that the relation of CQI report to the existing CQI reporting, it should be more clarified.
It was clarified that this is not related to R1-061478, not same.
The discussion point was the operation on the active period (to active user). Karri Ranta-aho suggested that more detail analysis is need for clarification.
Decision: It was decided to revise the TP for next meeting.
- R1-061403 Further details on Fully DTX'ed concept for ConCon (Huawei)**
09/05/2006 16:55 Presented by Mr. Deng Zhongmin
Discussion (Question / Comment):
The concerns were raised on the different of two schemes, Fully DTX'ed and Gating. Mr. Chairman commented that only difference is the time scale between two schemes. Qualcomm and Nokia raised a concern on the difference that just long gating gap.

Juan Montojo commented that T2 value of the Nokia/Qualcomm contribution is captured in this document and if not, it should be captured because the new concept has to be in line with the existing concept.

Decision: This document was noted.

R1-061404 Further Link simulation results on Fully DTX'ed concept for ConCon (Huawei)

09/05/2006 17:10 Presented by Mr. Deng Zhongmin

Discussion (Question / Comment):

The concern for this scheme was raised on the operation during Soft handover.

Decision: This document was noted.

R1-061405 Further System simulation results on Fully DTX'ed concept for ConCon (Huawei)

09/05/2006 17:25 Presented by Mr. Deng Zhongmin

Discussion (Question / Comment):

The comparison with and without ConCon between two schemes for VoIP scenario is more helpful.

Nokia and Ericsson raised a concern on set up simulation.

Mr. Chairman commented that we already captured the gating proposal in the TR so that there are no reason to specify the same scheme twice with fully DTX'ed.

Karri Ranta-aho proposed to consider fully DTX'ed as the parameterization of the gating concept by longer gating period and longer DPCCH preamble.

Huawei accepted the proposal.

Decision: This document was noted.

R1-061406 TP for 25.903 on Fully DTX'ed concept for ConCon (Huawei)

Decision: This document was noted without presentation.

It was decided to prepare a TP for next meeting to reflect the proposal as parameterization of the Gating concept, i.e. by longer gating period and longer DPCCH preamble.

HS-SCCH format (Not treated due to lack of time)

- | | | |
|------------------|---|--|
| R1-061359 | Reduced HS-SCCH: DL VoIP Capacity Gain | (Ericsson) |
| R1-061496 | DL VoIP capacity analysis for regular HS-SCCH operation, HS-SCCH less operation and new HS-SCCH format | (Qualcomm Europe) |
| R1-061411 | Optimization of HS-SCCH for VoIP over HSDPA | (Lucent Technologies) |
| R1-061446 | Text proposal for "Restricted HS-SCCH" | (Lucent Technologies) |
| R1-061302 | Comments on the proposals to modify HS-SCCH for VoIP | (NEC Group) |
| R1-061545 | Comments on the proposals to modify HS-SCCH for VoIP | (NEC Group) (Revision of R1-061302) |
| R1-061303 | TP on Clarification for "HS-SCCH less operation | (NEC Group) |
| R1-061304 | TP on Clarification for "Restricted HS-SCCH operation | (NEC Group) |
| R1-061305 | TP on further simplification for "Restricted HS-SCCH operation | (NEC Group) |

Other issues

R1-061351 Replace the Abbreviation 'ConCon' with 'CPC' in TR 25.903(Ericsson)

09/05/2006 17:45 Presented by Mr. Johan Bergman

Discussion (Question / Comment):

Decision: This was agreed.

R1-061410 PA Backoff Requirements for HSUPA (Freescale Semiconductor)

09/05/2006 17:50 Presented by Dr. Wes McCoy

Discussion (Question / Comment):

Chairman raised a concern that what to work on this WI considering this contribution. Considering PA Backoff new requirement, the proposal is all work again. He is also afraid of the WI delay by taking this proposal.

Decision: This document was noted.

After the discussion, Joern Krause from Siemens commented as editor that he would like to sift the completion date to this September to October and also he proposed to send the latest TR with agreed TP to other WGs after this meeting and request them to send the comments.

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Tallinn, Estonia, 28 August – 01 September, 2006

R1-062448

To the proposal, Mr. Chairman raised a concern that we should focus the direction to one scheme and inform to RAN2/3 for their discussion and making CR. Indeed what we can wait from them by send the current version. Finally continue the offline discussion during this week.

On the final day, it was decided to update TR in R1-061638 and send LS to other WGs to ask for feedback on the concepts until August (R1-061639). Both for email approval until 19 May.

R1-061638 TR 25.903 v0.4.1 (Editor, Siemens)

Decision: This document was endorsed as version 0.5.0 in R1-061643.

R1-061643 TR 25.903 v0.5.0 (Editor, Siemens)

Decision: This document will be submitted to RAN#32 Plenary meeting for information as version 1.0.0.

**R1-061639 DRAFT LS on feedback regarding the concepts for
"Continuous connectivity for packet data users" (Siemens)**

Decision: This document was approved in R1-061644.

Withdrawn

R1-061357 DTX/DRX Control Signalling (Ericsson)

R1-061477 Further HSDPA VoIP results (Nokia)

9. Extended WCDMA Cell Range

R1-061360 **Extended WCDMA Cell Range - RAN1 Impact**

(Ericsson)

09/05/2006 18:15 Presented by Mr. Johan Bergman.

Discussion (Question / Comment):

Although some comments were raised, most of companies support to the conclusion on this document.

Decision: No LI issues identified.

10. Scope of future FDD HSPA Evolution

R1-061462 Scope of Future FDD HSPA Evolution

(Motorola)

08/05/2006 18:25 Presented by Mr. Jianzhong Zhang

Discussion (Question / Comment):

This document is for discussion, open.

Evelyne Le Strat from Nortel commented that it's SI not WI and Improvement of MBMS is SI and also what we discuss for UL MIMO, MU, beamforming, SU with two antenna, single antenna (V-MIMO).

Motorola answered to this comment that regarding MIMO they don't any proposal here and this proposal is for the future discussion.

RAN1 Chairman commented that in SI phase we investigate what kind area should be consider for HSPA and the first step is taken in RAN, perhaps in next plenary meeting this topic will be discussed.

Dirk Kistowski from T-Mobile commented that from operator view backward compatibility is quite important and for higher layer, delay reduction is important.

Motorola clarified they submit the same contribution to RAN2 as well.

Some companies raised a concern to MBMS is included in HSPA evolution.

Also Evelyne expressed her wonder on the DCH removal.

Decision: This document was noted.

Withdrawn

R1-061449 Performance targets for HSPA evolution

(Lucent Technologies)

R1-061450 Some physical layer enhancements for achieving HSPA Evolution requirements

(Lucent Technologies)

11. Evolved UTRA and UTRAN (Physical Layer)

The overview of discussion and conclusion on this section is as followed:

1. E-mail discussion before RAN#45 and the related Ad Hoc session

- UL/DL Control signaling
 - Downlink scheduling information**
 - o Scalability of control signaling time/frequency resources
 - At least via RRC signaling, possibly more dynamic.
 - To what extent is the UE supposed to do blind detection of the resources used for control signaling?
 - o Possible structures for cat 1
 - Joint coding (at least cat 1) of groups of users, possibly more than one jointly coded region
 - Cat 2 and 3 possibly handled differently than cat 1
 - Separate coding
 - Multiple control channels, each informing one UE about the assigned resources
 - Including the UE ID in the scheduled resource blocks
 - Multiplexing schemes**
 - o FDM (possibly scattered)
 - Coverage benefit in large cells due to trading of power between data and control (control coverage vs. data rate)
 - o TDM
 - Possibility for micro-sleep
 - Multiple antennas**
 - o Possibility to beamform/precode control information?
 - How to inform the UE about the precoding used?
- RACH
 - o The message size for both asynchronous and synchronous random access burst was discussed in detail and the recommendation out of the discussion is given below:
 - a. Non-synchronized access burst:**
There will be no explicit message part for non-synchronized random access. However, there is a possibility of sending the message implicitly using the preamble sequence. The maximum number of implicit message bits is between 4 and 8. The detail on how the message will be implicitly sent with the preamble is FFS.
 - b. Synchronized access burst:**
Only 24 bits can be sent per user per sub-frame which translates to a data rate of 48 kbps. However, RAN1 still needs to investigate the throughput of synchronized random access
 - o A LS was sent to RAN#2 (R1#061584) notifying them of the message size recommendation from RAN#1.
 - o Text Proposal captured the RACH session was agreed in R1-061614.
- Cell Search and BCH
 - o The feasibility of hierarchical and/or non-hierarchical SCH scheme was discussed based on the simulation results and we can draw conclusion that both hierarchical and non-hierarchical SCHs are possible schemes. So clearly we can say that cell search is feasible.
 - o The selection of the SCH structure should be determined taking into account following issues.
 - Cell search time performance in presence of inter-cell interference and frequency offset
 - UE complexity
 - Overhead
 - o Text Proposal captured the E-mail discussion was agreed in R1-061185
 - o Text Proposal captured the RACH session was agreed in R1-061608.
- MBMS
 - o New Contributions

- Cell specific reference signal
 - Security and service differentiation
 - Further details on cell common reference signal
 - Noted without presentation (overhead 11-16%) and Continue discussion via email
 - Text Proposal captured the RACH e-mail discussion and ad hoc session was agreed in R1-061593
- MIMO, Tx Diversity and beamforming
 - Agreed Conclusion on LTE MIMO
 - DL SM will be supported.
 - Further details to continue in WI.
 - DL non-SM tx diversity will be supported.
 - Further details to continue in WI.
 - Orthogonal reference signal for support of UL multi-user SM will be supported (already mentioned in 25.912)
 - Further details to continue in WI.
 - If the UE has only single power amplifier and two tx antennas, the antenna switching/selection is the only option that will be further studied in WI.
 - If the UE has two power amplifiers and two tx antennas, it is FFS if any kind of non-SM tx diversity techniques as well as UL single user SM techniques will be supported.
 - Text Proposal for System level simulation for UL virtual MIMO was agreed in R1-0611
 - System level channel models for E-UTRA evaluations was agreed in R1-061594

2. Text Proposals on DL/UL Evaluation Results for TR 25.814

- DL Evaluation Results
 - Summary of LTE DL evaluation results : Agreed TP, R1-061631
- UL Evaluation Results
 - Summary of LTE UL evaluation results : Agreed TP, R1-061609
 - Further evaluation results for SC-FDMA : Agreed TP, R1-061239
- Other Agreed Text proposal for TR25.814
 - Peak rate : R1-061585
 - U-Plane Latency : R1-061602
- The latest TR 25.814 : Version 1.5.0 to be sent to RAN#32 for approval (v2.0.0)

3. Discussion and Text Proposals on fulfillment of LTE targets from TR25.912

- RAN1 Endorsed text proposals to TR25.912 (to be sent to RAN#32)
- Peak data rates (Chapter 13.1 of TR25.912) : R1-061612
 - User Throughput (Chapter 13.2 of TR25.912) : R1-061590 for DL, R1-061591 for UL
 - Spectrum efficiency (Chapter 13.4 of TR25.912) : R1-061588 for DL, R1-061589 for UL
 - Coverage (Chapter 13.7 of TR25.912) : R1-061628
 - Further enhanced MBMS (Chapter 13.8 of TR25.912) : R1-061627
 - Network synchronization on L1 aspects (Chapter 13.9 of TR25.912) : R1-061619
 - Complexity on L1 aspects (Chapter 12.1 of TR25.912) : R1-061620
 - C/U plane latency on L1 aspects (Chapter 13.2, 13.3 of TR25.912) R1-061602

4. Discussion and Text Proposals on LTE Physical Layer Description

- RAN1 Endorsed text proposal to TR25.912 (to be sent to RAN#32)
- LTE Physical Layer Description (Chapter 7 of TR25.912) : R1-061646

R1-061110 TR25.814 v.1.2.3 Physical Layer Aspects for Evolved UTRA

(Editor, NTT DoCoMo)

10/05/2006 09:28 Presented by Dr. Sadayuki Abeta

Discussion (Question / Comment):

Decision: This document was endorsed as v1.3.0 in R1-061582.

R1-061582 TR25.814 v.1.3.0 Physical Layer Aspects for Evolved UTRA
(Editor, NTT DoCoMo)

After the meeting, the version-up TR capturing the agreed text proposal at RAN1#45 was submitted in R1-061645 on the RAN1 reflector.

R1-061645 TR25.814 v.1.3.2 Physical Layer Aspects for Evolved UTRA
(Editor, NTT DoCoMo)

Decision: This document was endorsed as version 1.4.0 in R1-061647.

R1-061647 TR25.814 v.1.4.0 Physical Layer Aspects for Evolved UTRA
(Editor, NTT DoCoMo)

Decision: After the endorsement, it was found that some agreed texts have not been captured so that this document was updated to version 1.4.1 in R1-061650

R1-061650 TR25.814 v.1.4.1 Physical Layer Aspects for Evolved UTRA
(Editor, NTT DoCoMo)

Decision: This document was endorsed as version 1.5.0 in R1-061651.

R1-061651 TR25.814 v.1.5.0 Physical Layer Aspects for Evolved UTRA
(Editor, NTT DoCoMo)

R1-061107 E-UTRA Physical Layer Framework for Evaluation (Vodafone, NTT DoCoMo, Orange, TIM, T-Mobile, Ericsson, Qualcomm, Motorola, Nokia, Nortel, Samsung, Siemens)

This document was revised with reflected to comments on e-mail reflector before the meeting.

R1-061118 E-UTRA Physical Layer Framework for Evaluation (Vodafone, NTT DoCoMo, Orange, Telecom Italia, T-Mobile, Ericsson, Qualcomm, Motorola, Nokia, Nortel, Samsung, Siemens, Cingular)

10/05/2006 09:35 Presented by Mr. Adam Pollard from Vodafone.

Discussion (Question / Comment):

Mr. Chairman suggested that this set of system simulation parameters should be captured on Annex of TR 25.814. InterDigital commented that for MIMO, 1X2 should be captured in this set.

RAN1 Chairman clarified that this set is very important for comparison of system simulation agreed by 10 companies not decision and also 2X2 is already captured in reference case in TR.

Aris from TI commented that some points are not decided and there is the difference among companies.

Mr. Chairman commented that definitely it's better to be captured all parameter from all companies and be agreed by all, but its target is very high considering the completion of SI so that now we take this set because almost 10 companies agreed it.

Shen Jia from RITT raised a concern that regarding inter-cell interference cancellation, Interference Rejection Combining (IRC) is not showed in detail so far and also they proposed IDMA.

Matthew Baker suggested that it should be need to describe more clarification about IRC. So it was decided to add the reference of IRC.

Decision: It was decided that this set of parameter is included in TR 25.814 as A3 & add reference for IRC.

Not treated due to lack of time

R1-061201 Performance Comparison between Turbo Code and LDPC Code for Shared Data Channel in E-UTRA Downlink (NTT DoCoMo, NEC, Sharp, Toshiba Corporation)

R1-061202 UE Capability in E-UTRA Downlink (NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation)

R1-061203 Frequency Domain Channel-Dependent Scheduling with Adaptive Transmission Bandwidth of Pilot Channel for CQI Measurement for E-UTRA Uplink (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation)

R1-061204 Investigations on Adaptive Control of Roll-off Factor for DFT-Spread OFDM based SC-FDMA in Uplink (NTT DoCoMo, NEC, Sharp, Toshiba Corporation)

11.1 Outcome from email discussions and related contributions

11.1.1 UL/DL Control signalling

This agenda was discussed on second day parallel to the session in breakout room (AI 8, 9, 10)

R1-061579 Summary of discussion on UL/DL Control Signalling (Ericsson)

11/05/2006 09:20 Presented by Dr. Stefan Parkvall

Discussion (Question / Comment): The summary on the session is as followed.

Decision: This document was endorsed by RAN1.

Summary

Downlink scheduling information

- Scalability of control signaling time/frequency resources
 - At least via RRC signaling, possibly more dynamic.
 - To what extent is the UE supposed to do blind detection of the resources used for control signaling?
- Possible structures for cat 1
 - Joint coding (at least cat 1) of groups of users, possibly more than one jointly coded region
 - Cat 2 and 3 possibly handled differently than cat 1
 - Separate coding
 - Multiple control channels, each informing one UE about the assigned resources
 - Including the UE ID in the scheduled resource blocks

Multiplexing schemes

- FDM (possibly scattered)
 - Coverage benefit in large cells due to trading of power between data and control (control coverage vs. data rate)
- TDM
 - Possibility for micro-sleep

Multiple antennas

- Possibility to beamform/precode control information?
 - How to inform the UE about the precoding used?

Summary of e-mail discussions

R1-061364 E-UTRA Control Signaling - Summary of e-mail discussions (Ericsson)

Presented by Dr. Stefan Parkvall

Decision: This document was noted.

R1-061365 E-UTRA Downlink Control Signaling (Ericsson)

Presented by Dr. Stefan Parkvall

Decision: This document was noted.

R1-061366 E-UTRA Uplink Control Signaling (Ericsson)

Presented by Dr. Stefan Parkvall

Decision: This document was noted.

Transmission structure (joint coding, separate coding,...)

R1-061181 L1/L2 Control Channel Structure for E-UTRA Downlink (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation)

This document was revised before presentation

R1-061544 L1/L2 Control Channel Structure for E-UTRA Downlink (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation) (Revision of R1-061181)

Decision: This document was noted.

R1-061287 Signalling for downlink resource allocation (Siemens)

Decision: This document was noted.

R1-061163 Downlink Control Channel Coding (Motorola)

Decision: This document was noted.

Not treated due to lack of time

R1-061433 Shared Control Channel Structure for E-UTRA Downlink (Texas Instruments)

R1-061307 Physical channel mapping & power control for SCCH (NEC Group, NTT DoCoMo)

R1-061288 TP on downlink resource allocation signalling (Siemens)

R1-061289 Joint coding vs individual coding for downlink resource allocation (Siemens)

R1-061395 Signaling for DL resource assignment indication (ETRI)

R1-061257 Considerations on downlink shared control signalling (ZTE)

R1-061258 TP: Downlink Control Signalling resource division (ZTE)

R1-061308 Resource Allocation Signalling for EUTRA (NEC Group)

R1-061399 E-UTRA Uplink Resource Assignment Indication signaling (Huawei)

R1-061136 UE Identity in L1/L2 Downlink Control Signalling (Sharp)

Discussion related to coverage and link performance

R1-061278 Optimum Combination of Channel Coding Rate and Repetition Factor for L1/L2 Control Channel in E-UTRA Downlink (NTT DoCoMo)

Decision: This document was noted.

R1-061315 Downlink Control Signalling Overhead Evaluation (Samsung)

Decision: This document was noted.

R1-061501 Link Analysis for control channel in support of DL-SCH (Qualcomm Europe)

Decision: This document was noted.

R1-061275 Performance comparison between beam-forming and CDD for control channel (CATT)

Decision: This document was noted.

Not treated due to lack of time

R1-061164 Downlink Control Channel Modulation and Coding (Motorola)

R1-061502 Link Analysis for DL control channel for UL scheduling (Qualcomm Europe)

Not treated due to lack of time

Transmission of control information in UL

R1-061183 L1/L2 Control Channel Structure for E-UTRA Uplink (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation)

R1-061314 Uplink ACK/NACK performance: FDM vs TDM (Samsung)

R1-061517 Link Analysis of ACK channel in UL (Qualcomm Europe)

R1-061518 Link Analysis of CQI channel in UL (Qualcomm Europe)

R1-061519 Link Analysis of ASICH in UL (Qualcomm Europe)

R1-061520 Link Analysis for REQCH in UL (Qualcomm Europe)

Cost of DL ACK/NAK

R1-061316 DL ACK/NACK signalling performance evaluation (Samsung)

UL-related signaling in DL

R1-061290 Signalling in DL for UL resource allocation (Siemens)

R1-061291 TP on Signalling in DL for UL resource allocation (Siemens)

Others

R1-061363	Uplink Transport Format Selection in E-UTRA	(Ericsson)
R1-061466	DL and UL control signalling considerations	(Motorola)
R1-061468	Uplink Control Signaling Considerations for E-UTRA	(Motorola)
R1-061484	Distributed transmission in E-UTRA downlink	(Philips)
R1-061182	Distributed FDMA Transmission for Shared Data Channel in E-UTRA	
	Downlink (NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, Motorola, NEC, Nokia, Panasonic, Sharp, Toshiba Corporation)	
R1-061246	Unified uplink CQI signaling by efficient labeling	(Huawei)
R1-061485	CQI Signalling Occasions	(Philips)
R1-061534	E-UTRA Uplink and Downlink Control Signaling – Text Proposal	(Intel Corporation)
R1-061165	Downlink Acknowledgement and Group Transmit Indicator Channels	(Motorola)
R1-061572	UL Scheduling Scheme for LTE	(Panasonic)
Withdrawn		
R1-061241	DL control signaling for LTE	(Nokia)

11.1.2 RACH

This agenda was discussed on second day parallel to the session in breakout room (AI 8, 9, 10)

R1-061604 Summary of discussion on RACH (Motorola)

11/05/2006 09:25 Presented by Dr. Amitava Ghosh

Discussion (Question / Comment): The summary of the session was as followed.

Decision: This document was endorsed by RAN1. It was decided to prepare a TP for TR25.814 in R1-061607. And also the LS regarding message size was decided to be sent to RAN2 (Draft LS in R1-061584)

Summary

In the joint RAN1-RAN2 meeting the following action items were assigned to RAN1:

- Study signatures/sequences for random access channel
- Study collision probability for random access
- Study best way/cost to keep L1 synchronization
- Confirm message size for synchronous/asynchronous random access.

The message size for both asynchronous and synchronous random access burst was discussed in detail and the recommendation out of the discussion is given below:

a. Non-synchronized access burst:

There will be no explicit message part for non-synchronized random access. However, there is a possibility of sending the message implicitly using the preamble sequence. The maximum number of implicit message bits is between 4 and 8. The detail on how the message will be implicitly sent with the preamble is FFS.

b. Synchronized access burst:

Only 24 bits can be sent per user per sub-frame which translates to a data rate of 48 kbps. However, RAN1 still needs to investigate the throughput of synchronized random access

A LS was sent to RAN#2 (R1#061584) notifying them of the message size recommendation from RAN#1.

There were several contributions related to random access sequence design, random access for TDD etc. which were not treated due to time limitation.

R1-061584 LS on Random Access burst message size for LTE (Motorola)

10/05/2006 17:30 Presented by Dr. Amitava Ghosh

Discussion (Question / Comment):

Thag Hai from CATT pointed out that meeting number is not correct in the last sentence.

Decision: This LS was approved as final version in R1-061599 with modification of the meeting number.

R1-061607 Random Access Channel Text proposal based on ad-hoc discussion (Motorola)

11/05/2006 11:46 Presented by Dr. Amitava Ghosh

Discussion (Question / Comment):

Oskar Mauritz from Huawei commented that in the first section, the sentence means a message is definitely sent. In order to consider the case a message is not sent, “may” is added.

The new part of the figure, the upper green area was discussed long. It was asked if this is just for RACH. It was clarified that this area is just the deserved one so that one is just for RACH but the other is for data when it is not used for RACH.

Decision: This TP was revised with reflected to comments in R1-061614 (Update figure)

R1-061614 Random Access Channel Text proposal based on ad-hoc discussion (Motorola)

12/05/2006 12:15 Presented by Dr. Amitava Ghosh

Discussion (Question / Comment):

Decision: This TP was agreed.

Summary of the E-mail discussion

R1-061177 Summary of RACH e-mail reflector discussion (Motorola)

Presented by Dr. Amitava Ghosh

Decision: This document was noted.

Number of bits in RACH

R1-061166 Random Access Payload Size (Motorola)

Decision: This document was noted.

**R1-061184 Random Access Channel Structure for E-UTRA Uplink
(NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation)**

Decision: This document was noted.

R1-061227 On the design of non-synchronized RACH (Nortel)

Decision: This document was noted.

R1-061317 Random access message transmission (Samsung)

Decision: This document was noted.

R1-061522 Random Access evaluation (Qualcomm Europe)

Decision: This document was noted.

R1-061367 E-UTRA Scalability of Random Access Preamble (Ericsson)

Decision: This document was noted.

R1-061368 E-UTRA Random Access Slot Length (Ericsson)

Decision: This document was noted.

Not treated due to lack of time

R1-061114 Random access design for E-UTRA uplink (Panasonic)

R1-061228 On the period of L1 synchronization RACH (Nortel)

R1-061260 Random access preamble and message (ZTE)

R1-061261 TP: Random access preamble and message (ZTE)
R1-061369 LTE random-access capacity and collision probability (Ericsson)

Sync RACH (Not Treated due to lack of time)

R1-061167 Synchronized Random Access Channel Design (Motorola)
R1-061370 On synchronous random access (Ericsson)

RACH procedure

R1-061393 Random Access procedure for E-UTRA (Texas Instruments)
Decision: This document was noted.

Not treated due to lack of time

Preamble Sequence

R1-061168 Preamble Sequence Design for Random Access of E-UTRA (Motorola)
R1-061247 System performances of RACH preamble designs for E-UTRA (Huawei)

Others

R1-061116 Diversity for Random Access (ETRI)
R1-061141 Performance of Transmit Antenna Switch for Random Access (SHRCWC, RITT)
R1-061392 Random Access preamble design for E-UTRA (Texas Instruments)

TDD

R1-061159 Random access preamble design for EUTRA TDD (TD Tech)
R1-061269 Further on the non-synchronization random access procedure for EUTRA TDD (CATT, RITT)

Withdrawn

R1-061394 Handover and inter-cell load balancing analysis: impact on Random Access load (Texas Instruments)

11.1.3 Cell Search (Feasibility of hierarchical and/or non-hierarchical), BCH

This agenda was discussed on second day parallel to the session in breakout room (AI 8, 9, 10)

R1-061596 Summary of discussion on Cell Search (NTT DoCoMo)

11/05/2006 09:30 Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

Decision: This document was endorsed by RAN1. It was decided to prepare a TP for TR25.814 with these conclusions (remove example) in R1-061608.

R1-061608 TP from Cell Search Session (NTT DoCoMo)

12/05/2006 17:05 Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

Decision: The TP was agreed.

Summary

The feasibility of hierarchical and/or non-hierarchical SCH scheme was discussed based on the simulation results. The summary of the discussion is below

• Hierarchical SCH

- May achieve better cell search time performance than non-hierarchical SCH in low SNR region (e.g. SNR < 0 dB)
- Examples of the cell search time shown during the discussion
 - ✓ When SNR = 0 dB, 90% cell search time is approximately 50 msec
 - ✓ When SNR = -5 dB, 90% cell search time is approximately 50 msec

- **Non-hierarchical SCH**

- May achieve better cell search time performance than hierarchical SCH in high SNR region (e.g. SNR > 0 dB)
- Examples of the cell search time shown during the discussion
 - ✓ When SNR = 0 dB, 90% cell search time is approximately 30 msec
 - ✓ When SNR = -5 dB, 90% cell search time is approximately 110 msec

Therefore, we can draw conclusion that both hierarchical and non-hierarchical SCHs are possible schemes. So clearly we can say that cell search is feasible.

The selection of the SCH structure should be determined taking into account following issues.

- Cell search time performance in presence of inter-cell interference and frequency offset
- UE complexity
- Overhead

Summary from e-mail discussion to be prepared by Kenichi Higuchi

R1-061185 Text Proposal on Cell Search in Evolved UTRA (NTT DoCoMo)

Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

Decision: This document was agreed.

Feasibility of hierarchical and/or non-hierarchical SCH

R1-061117 Comparison of One-SCH and Two-SCH Schemes for EUTRA Cell Search (ETRI)

Decision: This document was noted.

R1-061187 Comparison on Cell Search Time Performance between SCH-Replica Based and Auto-Correlation Based Detections in E-UTRA Downlink (NTT DoCoMo , Fujitsu, Mitsubishi Electric, NEC, Panasonic, Toshiba Corporation)

Decision: This document was noted.

R1-061248 Cell search times of hierarchical and non-hierarchical SCH signals (Huawei)

Decision: This document was noted.

R1-061435 Comparison between repetitive and non-repetitive SCH structure for E-UTRA (Texas Instruments)

Decision: This document was noted.

Not treated de to lack of time

Neighbouring cell search (Cell re-selection)

R1-061237 LTE Cell Search (Nokia)

R1-061188 Neighboring Cell Search Method for Connected and Idle Mode in E-UTRA Downlink (NTT DoCoMo)

R1-061318 Cell search issues and views (Samsung)

SCH Structure

R1-061135 Cell Search Scheme in E-UTRA Downlink (Sharp)

R1-061140 Consideration on Multi-cell Interference for SCH Design in Cell Search and TP (SHRCWC, RITT)

R1-061144 Three-Step Initial Cell Search and System Acquisition for E-UTRA (Chunghwa Telecom Laboratories: CHTTL)

R1-061145 Aspects of Cell Search for E-UTRA Downlink (Chunghwa Telecom Laboratories: CHTTL)

R1-061160 Cell search and identification of Cell ID for EUTRA TDD (TD Tech)

- R1-061186** SCH Structure and Cell Search Method for E-UTRA Downlink
(NTT DoCoMo)
- R1-061268** SCH Structure and Cell Search Method for E-UTRA TDD system
(CATT, RITT)
- R1-061434** Proposal for DL SYNC channel (SCH) for E-UTRA
(Texas Instruments)
- R1-061436** Transmit diversity schemes for SCH E-UTRA (Texas Instruments)
- R1-061437** Performance of Timing Acquisition and Cell Specific Info Detection in Tightly Synchronized Network for E-UTRA
(Texas Instruments)

BCH bandwidth

- R1-061319** Performance Comparison between 1.25 MHz and 5 MHz BCH Transmission Bandwidths
(Samsung)

Others

- R1-061265** Further considerations on cell search information mapping (ZTE)
- R1-061271** The impact of frequency offset on modulation performance for EUTRA TDD
(CATT)
- R1-061283** Initial cell search and long-CP sub-frame structure
(Fujitsu)

11.1.4 MBMS

This agenda was discussed on second day parallel to the session in breakout room (AI 8, 9, 10)

- R1-061592** Summary of discussion on MBMS (Qualcomm Europe)

11/05/2006 09:40 Presented by Mr. Serge Willenegger.

Discussion (Question / Comment): The summary of the session is as followed.

Decision: This document was endorsed by RAN1.

- R1-061593** Text proposal from MBMS discussions (Qualcomm Europe)

11/05/2006 09: Presented by Dr. Durga Malldi

Discussion (Question / Comment):

Decision: This TP was agreed

Summary

Email Discussion

- R1-061546
 - MBMS Discussion Summary
 - ⇒ Agreed
 - R1-061547
 - MBMS TP from Email discussions
- ⇒ Improve integration of new text on FDM/TDM aspect
- ⇒ Rest of the text is agreed

New contributions

- Cell specific reference signal (R1-061264)
 - ⇒ Questions raised on the reason for the high additional diversity gain given that SFN already provides significant diversity.
 - ⇒ Question on feasibility of interpolation given FDM/TDM structure under consideration
 - ⇒ Noted. Toshiba to take comments into account and provide additional results.
- Security and service differentiation
 - ⇒ Brief presentation of R1-061134
 - ⇒ Noted
 - Proponents should first consider whether E-MBMS security discussed as part of SAE has any issue and if so convince SA WG4 and RAN WG2 the issue needs to be solved at L1.
- Further details on cell common reference signal
 - ⇒ R1-061189, R1-061512, R1-061438
 - ⇒ Noted without presentation (overhead 11-16%)
 - ⇒ Continue discussion via email

- ⇒ Comment that some common scenarios should be defined to decide on further design details
- MIMO MBMS
 - ⇒ To be discuss together with 11.1.5

From Email Discussion

R1-061546 MBMS Discussions Summary (Qualcomm Europe)

Decision: This document was agreed in MBMS session

R1-061547 MBMS TP from Email discussions (Qualcomm Europe)

08/05/2006 09: Presented by Mr. Juan Montojo

Discussion (Question / Comment):

Decision: This TP was revised in R1-061593

Cell Specific reference signal

R1-061264 Further Study on Reference Signal Structure for MBMS (Toshiba Corporation)

Decision: This document was noted.

Security and service differentiation

R1-061134 Security and service differentiation in MBMS from physical layer perspective (HighDimension Ltd)

Decision: This document was noted.

Further details on cell common reference signal

R1-061189 Investigations on Cell-Common Pilot Channel Structure for MBMS in E-UTRA Downlink (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation)

Decision: This document was noted without presentation.

R1-061512 Link Analysis of Reference Signals for SFN (Multi-Cell) MBMS (Qualcomm Europe)

Decision: This document was noted without presentation.

R1-061438 E-MBMS Reference Signal Structure and TP (Texas Instruments)

Decision: This document was noted without presentation.

Not Treated due to lack of time

R1-061400 Multi-antenna schemes for E-MBMS with Text Proposal (Huawei)

11.1.5 MIMO, Tx diversity and beamforming

This agenda was discussed on second day parallel to the session in breakout room (AI 8, 9, 10)

R1-061606 Summary of MIMO Session (Samsung)

11/05/2006 10:05 Presented by Dr. Juho Lee

Discussion (Question / Comment):

Nicholas Anderson expressed a wonder that for TDD, Non-precoded common reference signal together with the precoded dedicated reference signal in a subframe is not possible. But it was clarified that it is on discussion.

Decision: This document was endorsed by RAN1.

Conclusion

Terminology

Spatial multiplexing (SM): DL, UL

Non-SM: DL, UL

Agreed Conclusion on LTE MIMO

- DL SM will be supported.
 - Further details to continue in WI.
- DL non-SM tx diversity will be supported.
 - Further details to continue in WI.
- Orthogonal reference signal for support of UL multi-user SM will be supported (already mentioned in 25.912)
 - Further details to continue in WI.
- If the UE has only single power amplifier and two tx antennas, the antenna switching/selection is the only option that will be further studied in WI.
- If the UE has two power amplifiers and two tx antennas, it is FFS if any kind of non-SM tx diversity techniques as well as UL single user SM techniques will be supported.

Summary of email discussion

R1-061325 Summary of LTE MIMO email discussion (Samsung)
Decision: This document was noted.

Channel model

R1-061371 Update of polarization description in link level channel model (Ericsson)
Decision: This document was noted.

R1-061372 System level channel models for E-UTRA evaluations (Ericsson)
Decision: This document was revised in R1-061594.

R1-061594 System level channel models for E-UTRA evaluations (Ericsson)
Decision: **This document was agreed**

DL Spatial Multiplexing (SM) at Node B tx (Not treated)

R1-061309 Consideration on LTE MIMO scheme (NEC Group)

Way forward on the precoding:

- Specification should support linear precoding.
- Try to figure out
 - the possible ideal upper bound of the performance e.g. via increasing the codebook size or via non-codebook based approach.
 - the exact type of precoding.
 - the required feedback signalling.

Linear precoding only?: **Yes**

Precoding applied on reference signal (Not treated)

R1-061270 Further consideration on the reference symbol of Beamforming for EUTRA TDD (CATT)

Way forward on the reference signal w.r.t the precoding

- It was perceived that the common reference signal, which can be used by some UEs for the downlink CQI estimation and/or the selection of the preferred pre-coding vector(s), should not be pre-coded (or beamformed) for FDD. The UE is supposed to take into account the pre-coding when estimating the CQI relevant for the pre-coded signal.
- Non-precoded common reference signal together with the precoded dedicated reference signal in a subframe?
 - If Yes,

- ◆ What will be the consequence on the overall system design?
- If No,
 - ◆ How to separate the two types of reference signals? E.g. TDM? Or cell-specific system configuration?
 - What is the impact on e.g. CQI estimation?
 - ◆ Precoding on control signalling?
 - Discussion on joint vs separate coding of the L1/L2 control signalling should take into account the precoding of the control signalling.
 - In case of the separate coding, precoded control signalling in block-localized manner?

Unitary precoding vs non-unitary precoding (in case of codebook-based approach)

Unitary: $A^H \times A = A \times A^H = I$.

Non-unitary

Codebook-based precoding vs non-codebook-based precoding

R1-061128 System-level Evaluation of MIMO with Unitary Precoding

(Intel Corporation)

Decision: This document was noted.

R1-061126 Scalable precoding and implementation complexities (Intel Corporation)

Decision: This document was noted.

R1-061439 Evaluation of Codebook-based Pre-coding For LTE MIMO Systems

(Texas Instruments)

Decision: This document was noted.

R1-061321 Performance Evaluation of PU2RC with Different Codebook Sizes(Samsung)

Decision: This document was noted.

**R1-061274 Clarifications of the dynamic beam-forming/pre-coding method in TDD mode
and text proposal (CATT, RITT)**

Decision: This document was noted.

Number of codewords (Not treated)

R1-061127 Comparison between single and multiple codewords for precoded MIMO

(Intel Corporation)

Way forward

Try to figure out the performance in terms of # of codewords for unicast from a single UE perspective:

- single codeword regardless the number of Node B tx antennas for 2x2, 4x4, 4x2 or
- multiple codewords up to 2 with 2 tx antennas and 2 or 4 with 4 tx antennas
- Link adaptation mechanism should be clearly described.

Consider complexity aspects for Node B as well as UE.

UE feedback information

R1-061150 Interference-aware MIMO feedback: A Text Proposal (Intel Corporation)

Decision: This document was noted.

R1-061441 Feedback reduction for rank 1 pre-coding for E-UTRA downlink

(Texas Instruments)

Decision: This document was noted.

Way forward

- Feedback information generation mechanism and the expected feedback overhead should be clearly described for each MIMO proposal.
- Investigate the required resolution of MIMO related feedback
 - Feedback per each RB or per group of RBs

- Feedback signalling period

Link adaptation (for the streams to a UE)

R1-061125 **Text proposal for modulation and power adaptation of MIMO systems**
(Intel Corporation)

Decision: This document was noted.

R1-061209 **Evaluation of localized and distributed carrier mappings for EUTRA Downlink**
MIMO and text proposal **(Freescale Semiconductor)**

Decision: This document was noted.

R1-061196 **Link Adaptation Scheme for MIMO Transmission in E-UTRA Downlink**
(NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp,
Toshiba Corporation)

Decision: This document was noted.

SM schemes (Single user (SU)-SM, multiuser (SU)-SM, etc)

R1-061323 **Dynamic Switching between Single and Multi-User MIMO** **(Samsung)**

Decision: This document was noted.

R1-061324 **Performance Evaluation of Multi-User vs. Single User MIMO** **(Samsung)**

Decision: This document was noted.

R1-061504 **Link Analysis of Single User MIMO - Impact of Precoding on S-VAP**
(Qualcomm Europe)

Decision: This document was noted.

R1-061505 **Link Analysis of Single User MIMO - Single Codeword vs. Multi Codeword**
MIMO with HARQ Resynchronization **(Qualcomm Europe)**

Decision: This document was noted.

Not Treated due to lack of time

R1-061152 **Simulation Results of Coded MIMO-OFDM for E-UTRA Downlink**
(Philips)

R1-061210 **Evaluation of EUTRA schemes for Downlink Open loop MIMO and text**
proposal **(Freescale Semiconductor)**

R1-061580 **Text Proposal in Antenna Selection on Antenna Selection for**
DL Open Loop MIMO **(Freescale Semiconductor, Samsung, LG Electronics)**

R1-061211 **Evaluation of Antenna Selection for Downlink Open loop MIMO schemes with**
four transmit antennas and text proposal **(Freescale Semiconductor)**

R1-061229 **DL Adaptive STTD/SM Performance Evaluation for E-UTRA** **(Nortel)**

R1-061320 **Link Performance of Multi-User MIMO** **(Samsung)**

R1-061386 **Combined spatial multiplexing and CDD for 4 transmit antennas** **(ETRI)**

R1-061387 **Text Proposal for the combined spatial multiplexing and CDD**
(ETRI, Samsung)

R1-061440 **System Level Simulation Results for Per Group Rate Control In E-UTRA**
Downlink **(Texas Instruments)**

R1-061503 **Link Analysis of Single User MIMO - S-VAP vs. S-PARC** **(Qualcomm Europe)**

R1-061513 **System Analysis of DL Single User MIMO OFDMA**
(Qualcomm Europe)

R1-061230 **Text Proposal for System Performance of DL Adaptive MIMO for E-UTRA**
(Nortel)

R1-061527 **TP on Link Analysis of DL-SCH for Single User MIMO**
(Qualcomm Europe)

R1-061529 **TP on Unicast System Throughput of DL Single User MIMO OFDMA**
(Qualcomm Europe)

Control signalling

Not Treated due to lack of time

R1-061190 MIMO Scheme in E-UTRA Downlink - Signaling Aspect (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation)

DL non-SM at Node B tx

R1-061249 Benefits of the generalized CSD scheme in E-UTRA (Huawei)

Decision: This document was noted.

R1-061250 Evaluation of DL control channel for multiple antenna Node B's (Huawei)

Decision: This document was noted.

Not Treated due to lack of time

R1-061129 Stem-level Evaluation of Open-loop Transmit Diversity Schemes (Intel Corporation)

R1-061192 Channel Dependent Scheduling with Cyclic Delay Diversity (NTT DoCoMo)

R1-061233 Performance evaluation of STTD and cyclic shift diversity in the presence of Inter-cell/sector interference in Downlink MIMO systems for LTE (Nortel)

R1-061245 On 2 Antenna Open Loop Downlink TX Diversity (Nokia)

R1-061322 TP on Cyclic Delay Diversity for Scheduling Gains (Samsung, ETRI, NTT DoCoMo)

This document was revised in R1-061577 before the presentation.

R1-061577 TP on Cyclic Delay Diversity for Scheduling Gains (Samsung, ETRI, NTT DoCoMo, Intel)

R1-061388 Combined STBC and CDD for unicast traffic in 4 transmit antennas (ETRI, Samsung)

UL SM at Node B rx

R1-061231 SC-FDMA based Multi-user MIMO System Level Performance Evaluation for E-UTRA UL (Nortel)

Decision: This document was noted.

R1-061232 Text Proposal for System level simulation for UL virtual MIMO (Nortel)

Presented by Dr. Jianming

Discussion (Question / Comment):

Decision: This TP was revised in R1-061605 to clarify the simulation assumptions e.g. Case 1, 2, and 3 etc.

R1-061605 Text Proposal for System level simulation for UL virtual MIMO (Nortel)

11/05/2006 10:20 Presented by Dr. Jianming Wu

Discussion (Question / Comment):

The results of reference case in table 10.1.2.3-2

It was clarified that the type of receiver is MMSE for both case.

Durga Malladi from Qualcomm pointed out that the reference case is not 1X2 but 2X2 considering the content in R1-061231.

Some companies raise wonders on the results on the reference case whether all RB are used, frequency multiplexed and same users.

Decision: It was continue discussion offline and revised (if agreed offline) in R1-061611

R1-061611 Text Proposal for System level simulation for UL virtual MIMO (Nortel)

11/05/2006 16:30 Presented by Dr. Jianming Wu

Discussion (Question / Comment):

Decision: This document was agreed.

Not Treated due to lack of time

R1-061191 Reference Signal Structure for Uplink MIMO in E-UTRA (NTT DoCoMo)

UL non-SM @ Node B rx

Not Treated due to lack of time

- R1-061122 Performance evaluation of STBC/SFBC schemes in E-UTRA Uplink (Alcatel)
R1-061123 Effect of different ST/SF coding and mapping schemes on the PAPR of the SC-FDMA in E-UTRA Uplink (Alcatel)

Others

Not Treated due to lack of time

- R1-061124 Text proposal for reference signal design in Downlink MIMO (Intel Corporation)
R1-061146 Impact of Mobility on the Performance of LTE MIMO Schemes (Chunghwa Telecom Laboratories: CHTTL)
R1-061151 MIMO resource definition for E-UTRA (Philips)
R1-061212 Evaluation of Synchronous and Asynchronous HARQ for Downlink MIMO (Freescale Semiconductor)
R1-061216 Evaluation of E-UTRA downlink MIMO reference-signal structures and text proposal (Freescale Semiconductor)
This document was revised in R1-061583 before the meeting
R1-061583 Evaluation of E-UTRA downlink MIMO reference-signal structures and text proposal (Freescale Semiconductor)
R1-061262 Load dependent feedback for MIMO LTE (Siemens)
R1-061263 Reference-signal arrangement for E-UTRA Downlink MIMO (Siemens)

Withdrawn

- R1-061459 Simulation Results Update on Alcatel MIMO Scheme for DL LTE (Alcatel)
R1-061217 Evaluation of E-MBMS MIMO reference-signal structures and text proposal (Freescale Semiconductor)

11.2 Text Proposal for 25.814

Not Treated due to lack of time

- R1-061272 The numerology of 1.6MHz bandwidth for EUTRA LCR-based TDD frame structure (CATT, RITT, TD-Tech)

11.2.1 UL Reference Signals

All documents for AI, 11.2.1 were not treated due to lack of time.

- R1-061153 Uplink Reference Signal Design Based on TTI Grouping (Mitsubishi Electric)
R1-061155 Uplink reference signal for channel quality measurement (LG Electronics)
R1-061174 Text proposal for uplink sounding in EUTRA (Motorola)
R1-061175 Text proposal for direct channel feedback in EUTRA (Motorola)
R1-061176 E-UTRA SC-FDMA Uplink Pilot/Reference Signal Design & TP (Motorola)
R1-061235 Uplink Adaptive Transmission with TP (Nortel)
R1-061240 UL reference signal structure and text proposal (Nokia)
R1-061266 Interference Mitigation Comparisons between FDM and CDM in Uplink Reference Design (ZTE)
R1-061267 TP: Interference Mitigation for Uplink Reference Design (ZTE)

- R1-061273** Further clarifications of the uplink reference signal requirement for downlink pre-coding in TDD mode (CATT, RITT)
- R1-061284** Cubic Metric properties of CAZAC sequences (Fujitsu)
- R1-061310** Reference signal multiplexing for EUTRA uplink (NEC Group, NTT DoCoMo)
- R1-061311** Considerations on uplink pilot design using CAZAC sequences (NEC Group)
- R1-061326** Reference signal structure for EUTRA uplink and TP (Samsung)
- R1-061398** Uplink Reference Signals Structure with TP (Huawei)
- R1-061452** Text Proposal for Precoded FDM Reference Signal for SC-FDMA (Lucent Technologies)
- R1-061454** Text proposal for reference signals when no data is transmitted in uplink (Lucent Technologies)
- R1-061479** Design Considerations for E-UTRA Uplink Reference Signals and TP (InterDigital)
- R1-061486** Uplink Pilot: Link and System Level Considerations & Text Proposal (Texas Instruments)
- This document was revised before the presentation
- R1-061623** Uplink Pilot: Link and System Level Considerations & Text Proposal (Texas Instruments)
- Withdrawn**
- R1-061373** E-UTRA Uplink Reference Signal Structure (Ericsson)

11.2.2 UL/DL Interference Mitigation

- R1-061487** Uplink Interference Mitigation via Power Control (Texas Instruments)
- 12/05/2006 16:35 Presented by Mr. Pierre Bertrand
- Discussion (Question / Comment):**
- Decision:** This document was noted.

Not Treated due to lack of time

- R1-061178** Combination of ICI cancellation and coordination: performance and TP (RITT, Huawei)
- R1-061543** Combination of ICI cancellation and coordination: performance and TP (RITT, Huawei) (Revision of R1-061178)
- R1-061374** Downlink inter-cell interference co-ordination/avoidance – evaluation of frequency reuse (Ericsson)
- R1-061375** Uplink inter-cell interference co-ordination/avoidance – evaluation of frequency reuse (Ericsson)
- R1-061391** Downlink Interference Coordination (Siemens)
- R1-061541** TPs on way forward on interference coordination (Siemens, Texas Instruments)
- This document was revised in R1-061578 before the presentation
- R1-061578** TPs on way forward on interference coordination (Siemens, Texas Instruments, Alcatel, Nokia, Nortel)

Withdrawn

- R1-061456** Way forward on interference-coordination TP (Alcatel, Nokia)

11.2.3 Other text proposal for 25.814

All documents for AI, 11.2.3 were not treated due to lack of time.

R1-061149	Text Proposal for downlink OFDMA resource allocation and mapping rules for distributed mode users in E-UTRA, with discussion on control information (Intel Corporation)
R1-061156	Performance comparison of localized and distributed SC-FDMA (LG Electronics)
R1-061161	TP on localized and distributed SC-FDMA (LG Electronics)
R1-061171	Overhead Analysis and Resource Assignment for Uplink CQI Feedback Channel and TP (Motorola)
R1-061172	EUTRA Uplink Control Signaling + TP (Motorola)
R1-061173	EUTRA Downlink Distributed Multiplexing and Mapping Rules TP (Motorola, NTT DoCoMo)
R1-061193	Multiplexing Method for Orthogonal Reference signals for E-UTRA Uplink (NTT DoCoMo)
R1-061194	Orthogonal Reference Signal Structure for Sectorized Beams in E-UTRA Downlink (NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp)
R1-061195	Link Adaptation Scheme for Single-antenna Transmission in E-UTRA Downlink (NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation)
R1-061197	TP on Fast Transmission Power Control for L1/L2 Control Channel in E-UTRA Uplink (NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation)
R1-061207	Interference and Open Loop Transmit Diversity Reception (with TP) (Motorola)
R1-061251	Text proposal on RACH preamble design for E-UTRA (Huawei)
R1-061252	Text proposal on comparison of SCH structures (Huawei)
R1-061253	Text proposal for TR25.814, Section 7.1.3 (Huawei)
R1-061259	Measurement at the Network Side (ZTE)
R1-061285	Introduction of the shortened code concept in Turbo coding (Fujitsu)
R1-061286	Downlink resource multiplexing (Siemens)
R1-061312	CQI reporting (NEC Group)
R1-061327	TP on HARQ (Samsung)
R1-061328	Link Adaptation in Evolved UTRA Downlink and TP (Samsung)
R1-061329	TP on uplink ACK/NACK signaling (Samsung)
R1-061330	Bandwidth and Power Efficiency Evaluation for $\pi/2$ -BPSK and QPSK, and TP (Samsung)
R1-061331	TP on BCH Transmission Bandwidth (Samsung)
R1-061332	TP on Downlink Control Signalling Multiplexing (Samsung)
R1-061333	Link performance of DL distributed transmission (Samsung)
R1-061334	System throughput of DL localized transmission with existence of distributed transmission (Samsung)
R1-061335	TP on downlink data multiplexing (Samsung)
R1-061336	TP on DL ACK/NACK signalling (Samsung)
R1-061378	E-UTRA Bandwidth Flexibility (Ericsson)
R1-061396	Evaluation on Cell-Specific Mapping from D-VRB to PRB and TP (Huawei)
R1-061397	Mapping Scheme from VRB to PRB and TP (Huawei)
R1-061401	Link Performance of D-FDMA and L-FDMA with Frequency Hopping in E-UTRA Uplink (Huawei)
R1-061402	Control channel design in frequency domain (Huawei)
R1-061442	Downlink CQI Reporting Timing in EUTRA Uplink and TP (Texas Instruments)

Withdrawn

11.3 RAN1 studies related to RAN2 joint session in Athens

All documents for AI.11.3.1 were not treated due to lack of time.

11.3.2 PCH design, Paging Indicator need, etc.

All documents for AI, 11.3.2 were not treated due to lack of time.

11.3.3 DL TrCH Mux

All documents for AI.11.3.3 were not treated due to lack of time.

11.3.4 Additional results on UL/DL HARQ

10/05/2006 09: Presented by Dr. Wes MaCoy.

Decision: This document was noted.

Not treated due to lack of time

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- R1-061200 Comparison of Signaling Overhead between Asynchronous and Synchronous Hybrid ARQ for E-UTRA Downlink (NTT DoCoMo)
R1-061234 STBC-HARQ for UMTS LTE Downlink MIMO with TP (Nortel)
R1-061338 Low Overhead Asynchronous Adaptive Hybrid ARQ (Samsung)
R1-061461 Twin Turbo Performance with Swapping Constellation Re-Arrangement and Log-Likelihood based Combining (KDDI)
R1-061508 System Analysis comparing synchronous and asynchronous adaptive HARQ (Qualcomm Europe)

11.4 Text proposals on DL Evaluation Results (Chapter 8 in TR25.814)

- R1-061595 Summary of LTE DL evaluation results (Motorola)
This document was revised before the meeting.
R1-061629 Summary of LTE DL evaluation results (Motorola)
12/05/2006 11:55 Presented by Mr. Robert Love
Discussion (Question / Comment):
It was clarified that there are Scale done on Nokia contribution.
Hidetoshi Suzuki from Panasonic pointed out "Additional benefits from MIMO operation is for further study" in section 8.1.2.2.1 should be removed because these MIMO result is described in DL.
Decision: This document was agreed in R1-061631 with removal of sentence.
R1-061630 Summary of LTE DL evaluation results (Motorola)
R1-061631 Summary of LTE DL evaluation results (Motorola)
12/05/2006 15:00 Presented by Mr. Robert Love
Discussion (Question / Comment):
Decision: This document was agreed.
R1-061585 TP on peak rate for TR 25.814 (Qualcomm)
12/05/2006 09:20 Presented by Mr. Serge Willenegger.
Discussion (Question / Comment):
Decision: This TP was agreed.

Not treated due to lack of time

- R1-061465 LTE Downlink System Performance Evaluation Results TP (Motorola)
R1-061528 TP on Unicast System Throughput for DL SIMO OFDMA (Qualcomm Europe)

Not treated due to lack of time

Control overhead

- R1-061526 TP on Link Analysis for DL control channels (Qualcomm Europe)

Withdrawn

- R1-061339 Text Proposal on Downlink System Performance Evaluation (Samsung)
R1-061361 E-UTRA Target Evaluation - TP on Downlink Results for 25.814 (Ericsson)

11.5 Text proposals on UL Evaluation Results (Chapter 10 in TR25.814)

- R1-061340 Text Proposal on Uplink System Performance Evaluation (Samsung)

10/05/2006 16:25 Presented by Dr. Youn hyoung Heo

Discussion (Question / Comment):

Decision: It was decided to be included in a separate subsection (for results in addition to the agreed simulation cases) in the TR, part of the TP R1-061596.

R1-061587 Summary of LTE UL evaluation results (Motorola)

10/05/2006 18:10 Presented by Mr. Robert Love

Discussion (Question / Comment):

Erik Dahlman from Ericsson expressed a wonder that there is no gain on (6) in table 10. It was clarified that the results from (6) was mis-captured. Also Youn hyoung Hoe commented that the value is not correct in table 10.1.z, 0.01=> 0.014

Decision: This document was revised in R1-061601.

R1-061601 Summary of LTE UL evaluation results (Motorola)

11/05/2006 09:50 Presented by Mr. Robert Love

Discussion (Question / Comment):

It was commented from Nokia that their results was incorrect in table 10.1.1.3.5 with compared to R1-061239.

Decision: This TP was revised in R1-061609 with removal of the results from (3) in 10.1.1.3-5 (already captured in the TP in R1-061239).

R1-061609 Summary of LTE UL evaluation results (Motorola)

11/05/2006 16:30 Presented by Mr. Robert Love

Discussion (Question / Comment):

Decision: This TP was agreed.

Not treated due to lack of time

R1-061158 TP on simulation results for uplink fast frequency domain scheduling (LG Electronics)

R1-061533 Text Proposal on System Analysis for UL SIMO SC-FDMA (Qualcomm Europe)

This document was revised in R1-061597 before the presentation.

R1-061597 Text Proposal on System Analysis for UL SIMO SC-FDMA (Qualcomm Europe)

R1-061531 TP on Link Analysis of SDCH in UL (Qualcomm Europe)

Not treated due to lack of time

Control overhead

R1-061530 TP on Link Analysis of UL control channels (Qualcomm Europe)

R1-061532 TP on Random Access evaluation (Qualcomm Europe)

Withdrawn

R1-061214 Text proposal on carrier mapping for Uplink SC-FDMA (Freescall Semiconductor)

R1-061362 E-UTRA Target Evaluation - TP on Uplink Results for 25.814 (Ericsson)

R1-061464 LTE Uplink System Performance Evaluation Results TP (Motorola)

11.6 Contributions on Fulfilment of LTE Targets from TR 25.912

11.6.1 Targets on Peak data rates

R1-061208 System Level Performance of Precoding in E-UTRA MIMO (Motorola)

10/05/2006 10:00 Presented by Mr. Robert Love.

Discussion (Question / Comment):

It was clarified that this TP is for section of peak data rates, 25.912, but actually also related to MIMO section. Durga Malladi expressed a wonder that non delay of CQI is optimistic.

Decision: This document was noted. DL peak data rate requirement fulfilled. Precoded v.s non-precoded with respected to highest achievable SINR.

R1-061276 Peak data rates for LCR TDD base Frame Structure (CATT)

10/05/2006 10:10 Presented by Mr. Hai Thag.

Discussion (Question / Comment):

RAN1 Chairman commented that for TDD having the other parameters, this showed the fulfilment of requirement so that it should be captured in RAN1 TR and RAN TR.

Serge from Qualcomm asked what the requirement is. It was discussed that on TDD the assumption is whether the DL all/ UL all allocation or not. This assumption could be expected (reconfirm is needed)

Decision: This document was noted. Peak rate requirements fulfilled fro DL and (almost) UL assuming as all-DL or all-UL allocation.

R1-061279 Link-level Simulations on peak data rate in E-UTRA Downlink(NTT DoCoMo)

10/05/2006 10:20 Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

Decision: This document was noted. DL peak data requirement fulfilled

R1-061280 Link-Level Simulations on peak data rate in E-UTRA Uplink (NTT DoCoMo)

10/05/2006 10:25 Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

It was clarified that control signalling OH is excluded for achievement of requirement.

The concern was raised whether 23dB is achievable on UL

Decision: This document was noted. DL peak data requirement fulfilled (excluding Control signalling Overhead)

R1-061380 E-UTRA Peak Data Rates (Ericsson)

10/05/2006 11:15 Presented by Dr. Stefan Parkvall

Discussion (Question / Comment):

Decision: This document was noted. Peak rate requirements fulfilled fro DL and (almost) UL.

R1-061451 Using multiple antennas to achieve LTE downlink performance requirements (Lucent Technologies)

10/05/2006 11:20 Presented by Dr. Haward Huang

Discussion (Question / Comment):

Decision: This document was noted.

Conclusion:

Peak rate requirements fulfilled for DL and (almost) UL. Prepare the TP for 25.912 based on this, include 2/21 reference symbol overhead for DL, and 1/7 reference symbol overhead for UL in the upper row.

Capture additional results (R1-061208, R1-061279/R1-061280, R1-061451) in a TP for 25.814 add also fig 6 in 1481 for UL 1X2 (R1-061585) (See the section 11.4).

11.6.2 Targets on User throughput, Spectrum efficiency, Coverage

Uplink and Downlink

R1-061238 LTE Evaluation results (Nokia)

11/05/2006 12:00 Presented by Mr. Asbjorn Grovlen

Discussion (Question / Comment):

It was clarified that the only one RB (375MHz) is allocated to one users and CQI is for each RB.

Decision: This document was noted.

R1-061277 System Performance Evaluation Results for LCR TDD base Frame Structure (CATT)

10/05/2006 12:00 Presented by Mr. Hai Tang.

Discussion (Question / Comment):

Mr. Chairman commented that the relative gain by beamforming and also the relative gain from Rel-6 is needed.

Christian from Alcatel asked number of cell user is. The answer was 100/cell.

It was clarified that the channel estimation is using uplink sounding method.

Decision: This document was noted.

Uplink

R1-061239 Further evaluation results for SC-FDMA (Nokia)

10/05/2006 11:50 Presented by Mr. Jari Lindholm.

Discussion (Question / Comment):

Motorola asked how many user per sector is and they expressed a wonder that the cell edge throughput is high compared with user throughput. The answer was 5 users per sector.

It was clarified by Nokia that overhead is 10% and RB size is 375KHz.

Also Nokia clarified that the simulation is only one sub-frame.

Aris Papasakellariou from TI asked how the scheduling scheme is and how the gain can be obtained, The answer was that one user is allocated in only one RB in time domain.

It was clarified by Nokia that this document was based on UL results from R1-061238.

Decision: This TP for TR25.814 was agreed.

R1-061115 System level simulation result on SC-FDMA (Panasonic)

10/05/2006 12:10 Presented by Mr. Christian

Discussion (Question / Comment):

Samsung asked if how about scheduling less than 10MHz. It was answered that frequency scheduling and proportional scheduling

Amitava Ghosh from Motorola asked how number OH is and how is the channel estimation. The answer was short block overhead and ideal channel estimation.

Hui Lin from RITT asked if the power control considers inter-cell interference and if considered how assumption is. The answer was that PC is ideal. Durga Malladi from Qualcomm expressed wonders on the operating point of PC that how the power is controlled.

Decision: This document was noted.

R1-061157 Simulation results for uplink fast frequency domain scheduling (LG Electronics)

10/05/2006 12:20 Presented by

Discussion (Question / Comment):

It was clarified that user is 16/sector.

Decision: This document was noted.

R1-061169 LTE Uplink System Performance and comparison to HSUPA and TP (Motorola)

This document was revised before the presentation.

R1-061550 LTE Uplink System Performance and comparison to HSUPA and TP (Motorola)

10/05/2006 09: Presented by Dr. Weimin Ziao

Discussion (Question / Comment):

It was clarified by Motorola that the number of user is 10 per sector.

The long discussion is on the definition of user throughput between two systems.

Youn hyoung Heo from Samsung asked if the channel depending scheduling on HAUPA is not considered. The answer was that that scheduling is considered for both systems.

Decision: This document was noted.

R1-061179 System Simulation Results for the LTE Uplink (RITT, Huawei)

10/05/2006 09: Presented by Mr. Hui Lin from RITT

Discussion (Question / Comment):

Youn hyoung Heo from Samsung expressed her wonder regarding power control why low SNR is for the small cell and high SNR is large cell and it should be the opposite setting. RITT commented that they agree to this.

Decision: This document was noted.

R1-061282 System-Level Simulations on Spectrum Efficiency, User Throughput, and Coverage in E-UTRA Uplink (NTT DoCoMo)

10/05/2006 14:10 Presented by Dr. Kenichi Higuchi

Discussion (Question / Comment):

Durga Malladi from Qualcomm asked why chase combine is considered. IR is better for E-UTRA. The answer was DoCoMo agreed to this and it is just due to simulator of NTT DoCoMo.

Jonn-Kui Ahn from LGE asked why code rate is limited to 1/3 and the higher rate is better for E-UTRA.

Amitava Ghosh commented that the assumption on control signalling OH and CQI measurement, and buffer type is different between DoCoMo and Motorola provide the different results.

Youn hyoung Heo from Samsung asked why closed loop power control is not used for WCDMA and she commented that Open loop for E-DCH does not working correctly.

It was clarified by NTT DoCoMo that Node B measures the interference and informs to UE.

Decision: This document was noted.

R1-061342 LTE uplink system simulation results concerning the LTE target fulfilment (Samsung)

10/05/2006 14:30 Presented by Ms. Youn hyoung Heo

Discussion (Question / Comment):

Decision: This document was noted.

R1-061382 E-UTRA Uplink User Throughput and Spectrum Efficiency Evaluation
(Ericsson)

10/05/2006 14:35 Presented by Dr. Erik Dahlman

Discussion (Question / Comment):

Christian for Alcatel expressed a wonder on the results on Fig 7 and asked if the number of user on each dot on Fig. is same between two systems. Erik commented that I'm not sure but expected different and not necessary to be same. The long discussion was on this issue.

Decision: This document was noted.

R1-061472 LTE Uplink System Performance of VoIP
(Motorola)

This document was revised before the presentation.

R1-061551 LTE Uplink System Performance of VoIP
(Motorola)

10/05/2006 14:55 Presented by Mr. Robert Love

Discussion (Question / Comment):

Decision: This document was noted.

R1-061525 System Analysis for UL SIMO SC-FDMA
(Qualcomm Europe)

10/05/2006 15:00 Presented by Dr. Durga Malladi

Discussion (Question / Comment):

Youn hyoung Heo from Samsung expressed wonders on the value of IOT, 4.5 dB from the 25.912, it is expected 6dB for WCDMA, so she cannot understand the IOT range in this contribution.

Decision: This document was noted.

R1-061481 User Throughput and Spectrum Efficiency for E-UTRA (InterDigital)

10/05/2006 15:15 Presented by Mr. Donald Grieco

Discussion (Question / Comment):

Decision: This document was noted.

R1-061524 Link Analysis of UL overhead
(Qualcomm Europe)

10/05/2006 16:15 Presented by Dr. Durga Malladi

Discussion (Question / Comment):

Decision: This document was noted. This document is related to control signaling discussions in 11.1.1.

Not Treated due to lack of time

R1-061523 Link Analysis of LFDM and IFDM Waveforms (Qualcomm Europe)

R1-061213 System Level Evaluation of localized and distributed carrier mapping for
Uplink SC-FDMA (Freescale Semiconductor)

Downlink

R1-061112 Downlink System Evaluation Results -User Throughput, Spectrum Efficiency
(Mitsubishi Electric)

11/05/2006 12:17 Presented by Mr. Noriyuki Fukui

Discussion (Question / Comment):

Decision: This document was noted.

R1-061170 LTE Downlink System Performance Evaluation Results (Motorola)

R1-061626 LTE Downlink System Performance Evaluation Results (Motorola)

11/05/2006 12:20 Presented by

Discussion (Question / Comment):

Howard from Lucent asked if most of gain is from Frequency scheduling. The answer is yes. It was clarified that most of gain is contributed from frequency scheduling in table 2.

Durga Malladi asked why PL-MIMO can get such a significant gain. It depends on ideal assumption such as channel estimation and full buffer.

It was clarified that in this contribution it's not real OL-MIMO it assumes the D-TxAA and TxAA but no rank adaptation.

It's not really open loop MIMO but it's closed loop such as D-TxAA, or TXAA. But it's no additional rank adaptation.

Decision: This document was noted.

11/05/2006 13:50 Presented by Dr. Kenichi Higuchi

Adam from Vodafone asked how much gain can be expected for EUTRA by MIMO. Higuchi answered that in HSDPA 17% gain can be obtained and considering that for OFDMA shared CH is 100% used compared with for HSDPA 50%, so it can be expected that MIMO gain is more than 20% for E-UTRA. It could be satisfied to the requirement for MIMO gain expected from the simulation results in this contribution, 25%.

It was clarified that all cell has the same activity factor in the simulation.

Decision: This document was noted.

(Samsung)

(Samsung)

Discussion (Question / Comment):

It was clarified that rank adaptation is used for all simulation and it's single code.

Decision: This document was noted.

(Ericsson)

Discussion (Question / Comment):

Decision: This document was noted.

(Texas Instruments)

(Texas Instruments)

Discussion (Question / Comment):

It was clarified that scheduling 1 is assumed only for HSDPA and scheduling 2 is assumed also for E-UTAR and the comparison in table 5 is the same assumption.

It was asked if the in 0.13km case the isolation between neighbouring cells is 6dB. The answer was that the isolation is not efficient for this case.

Decision: This document was noted.

(Alcatel)

Discussion (Question / Comment):

Decision: This document was noted.

with Soft Re-Use Frequency Planning for EUTRA Downlink (Texas Instruments)

Discussion (Question / Comment):

Amitava Ghosh asked if there are any drawbacks due to communication. The answer was that not expected considering the period.

Nicholas Anderson (IPWireless) questioned whether the interfering cell assumed to have been removed by the receiver in the simulations was the strongest mean interferer or the strongest instantaneous interferer. Mr. Anderson suggested that the performance of the interference cancellation scheme might be improved if the strongest instantaneous interferer was removed. It was clarified that it was the strongest mean interferer which was removed in the simulations.

Decision: This document was noted.

Not treated due to lack of time

Control channel overhead

- | | | |
|------------------|---|--------------------------|
| R1-061243 | Impact of DL control signaling overhead on LTE throughput and coverage | |
| | | (Nokia) |
| R1-061509 | Link Analysis of DL overhead | (Qualcomm Europe) |

Not treated due to lack of time

Other

- | | | |
|------------------|---|---|
| R1-061147 | System Evaluation of Intra-Cell Macro Diversity Schemes for E-UTRA Downlink | (Chunghwa Telecom Laboratories: CHTTL) |
| R1-061162 | Improving Spectral Efficiency by Dispersive Coding | (ITRI) |
| R1-061130 | Modify puncturing pattern to improve performance and iterations of release 6 turbo coding | (HighDimension Ltd, CCL/ITRI) |
| R1-061131 | A simple inter-block permutation in channel coding to provide backward compatibility and secure transmission | (HighDimension Ltd) |
| R1-061133 | System performance impact of release 6 turbo coding tail-bits removal | (HighDimension Ltd) |
| R1-061463 | System simulation results with non-static TTI | (Motorola) |
| R1-061521 | Link Analysis for SDCH in UL | (Qualcomm Europe) |
|
 | | |
| R1-061506 | System Analysis of the Impact of CQI Reporting Period in DL SIMO OFDMA | (Qualcomm Europe) |
| R1-061507 | System Analysis of the Impact of Number of Sub-bands in DL SIMO OFDMA | (Qualcomm Europe) |

Withdrawn

- | | | |
|------------------|---|------------------------------|
| R1-061113 | Ordered transmission scheme for LDPC-coded symbols | (Mitsubishi Electric) |
| R1-061467 | Uplink Control Signaling Considerations for E-UTRA | (Motorola) |

11.6.3 Targets on Further enhanced MBMS

- | | | |
|------------------|--|----------------------------|
| R1-061292 | MBMS throughput performance | (Siemens) |
| | 10/05/2006 17:45 Presented by Dr. Thomas Chapman | |
| | Discussion (Question / Comment): | |
| | Decision: This document was noted. | |
| R1-061383 | E-UTRA Broadcast Performance Evaluation | (Ericsson) |
| | 10/05/2006 17:48 Presented by Dr. Stefan Parkvall | |
| | Discussion (Question / Comment): | |
| | Decision: This document was noted. | |
| R1-061445 | E-MBMS Performance: Data Rates and Coverage | (Texas Instruments) |
| | 10/05/2006 17:50 Presented by Mr. Aris Papasakellariou | |
| | Discussion (Question / Comment): | |

Stefan Parkvall from Ericsson commented that considering TR 25.803 section 14.2.4 (MBMS TR) the comparison statement in conclusion is not correct.

The difference to Ericsson's paper was discussed. The OH is same, 16% for both. Stefan pointed out the difference is channel estimation.

Decision: This document was noted.

After treating documents, Thomas Chapman from Siemens proposed that RAN1 view for SFN operation should be informed to RAN3. Evelyn Le Strat from Nortel raised a concern that SFN is not specified in RAN1 so at first it should be discussed and the definition is specified in RAN1. But Mr. Chairman commented that it's already obvious in RAN1 because it has been treated in Rel6 MBMS.

So it was decided to make draft LS to RAN3 in R1-061600.

R1-061600 [Draft] LS on SFN operation for E-MBMS (Siemens)

10/05/2006 18:45 Presented by Dr. Thomas Chapman

Discussion (Question / Comment):

Aris from TI expressed a wonder that "a few of a few microseconds" is not clear, actually CP is 16.67 us.

Kenichi Higuchi from NTT DoCoMo asked what the last sentence is meaning. Mr. Chairman clarified that UE don't need to know which cells the signal is received from, which is meaning tight synchronization but now we don't mean to discuss the scheme for synchronization.

It was added to copy to RAN2/RAN4.

Decision: This document was approved with some modifications in R1-061603.

For capturing the results from the MBMS session in TR25.814, The tdoc number, R1-061613 was allocated, but after that it was clear that the results were already captured in TR so R1-061613 was withdrawn.

Withdrawn

R1-061613 TP on E-MBMS for TR25.814 (Qualcomm Europe)

11.6.4 Targets on Network Synchronization

No Document

11.6.5 Targets on Complexity

R1-061236 Fulfilment of LTE Complexity Requirements, L1 aspects (Nokia)

11/05/2006 17:50 Presented by Mr. Asbjorn Grovlen

Discussion (Question / Comment):

Evelyn Le Strat from Nortel raised a concern on the point of antenna configuration that the number of antenna is necessary to know and just one MIMO scheme is not practical. Regarding this topic, many companies express a wonder on this sentence. It was clarified by Chairman that we don't never conclude this point also this is on RAN level decision.

Next, the point of Minimum UE receiver and transmitter bandwidth was discussed.

Regarding the sentence " only two UE bandwidth capabilities should be allowed: 10 and 20 MHz", Nokia clarified that it's for mobility and intend to receive SCH located centre in 20MHz so that 20 MHz is just for reception.

Hidetoshi Suzuki commented that MIMO capability could be separated between DL and UL.

Taking the current status on MIMO discussion into account, Chairman clarified that he don't intend to decide detail now and will decide when each topic is decided in each session so that Mr. Chairman suggested more discussion on this contribution including wording.

Decision: This document was noted. Continue offline discussion and revised in R1-061620 as for 11.7.7.

R1-061469 UE Complexity analysis for study item report (Motorola)

11/05/2006 18:10 Presented by Mr. Jean

Discussion (Question / Comment):

Regarding Table X, the long discussion continued.

Chairman commented that we have not decided about MIMO yes/no and clarified that the input for TR25.912 is more stable. Stefan Parkvall commented that it's much detail, especially TB size and buffer size which are need more discussion and the RAN1 internal discussion is at first and the conclusion more general level should captured

in RAN TR. Also Chairman commented that considering the current status HARQ discussion, TB size and buffer size are premature.

Thanh Bui from NEC also pointed that discussion should be need with MBMS and UE capability. Hidetoshi Suzuki commented that some part of the requirement relates more WI level. Chairman commented that it's not a final specification and some option premature.

Decision: This document was noted. More discussion of the related issues first required.

MIMO

R1-061482 Text Proposal on Results of Complexity Analysis for E-UTRA MIMO (InterDigital)

11/05/2006 18:35 Presented by Mr. Donald Grieco

Discussion (Question / Comment):

RAN1 Chairman and also MIMO adhoc Chairman, Juho Lee suggested continue to discuss this issue on MIMO session.

Decision: This document was noted.

Not treated due to lack of time

R1-061132 Implementation complexity and power consumption concerns in channel coding (HighDimention Ltd)

11.6.6 Targets on C/U plane latency

R1-061470 C/U-plane Latency - Analysis (Motorola)

10/05/2006 18:25 Presented by Mr. Robert Love

Discussion (Question / Comment):

It was clarified that the U-Plane delay is between AGW and UE in IP layer mentioned in section 2.1.

RAN1 Chairman commented that RAN2 also discuss the same topic and the value of process in UE and Node B is a little bit wonder, anyway the outputs from RAN1 and RAN2 will be captured in RAN1 TR with be aligned with each other.

Decision: It was decided to make TP for RAN1 TR in R1-061602 included also latency results without retransmission

R1-061602 U-Plane Latency – Text Proposal (Motorola)

11/05/2006 11:30 Presented by Mr. Robert Love

Discussion (Question / Comment):

This document is also for 11.7.6 (Taken to RAN Plenary)

Decision: This TP was agreed fro T25.814 and endorsed for TR25.912.

11.7 Text proposals for TR 25.912 on LTE Target Fulfilment

11.7.1 Chapter 13.1: Peak data rates

R1-061510 TP for TR 25.912 on evaluation of E-UTRA peak rates (Qualcomm Europe)

10/05/2006 11: 30 Presented by Mr. Serge Willenegger

Discussion (Question / Comment):

RAN1 Chairman suggested the conclusion of section 11.6.1 should be captured in this document.

It was clarified that code rate is 1 in this results of table.

Farooq from Samsung expressed his wonder whether the results with OH/with OH should be included in this TP.

Erik Dahlman from Ericsson commented that the results also included the reference symbol. Chairman commented to this issue that discussion on OH is still now on going, for clarification, the results of with/without OH is better also the information of the reference symbol should be described in this document.

Decision: Revision in R1-061586 to include also results in CATT and R=1

R1-061586 TP for TR 25.912 on evaluation of E-UTRA peak rates (Qualcomm Europe)

This document was revised before the meeting.

R1-061610 TP for TR 25.912 on evaluation of E-UTRA peak rates (Qualcomm Europe)

11/05/2006 11: 35 Presented by Mr. Serge Willenegger

Discussion (Question / Comment):

It was added "frame" before format.

Decision: The TP was endorsed with modification in R1-061612.

R1-061612 TP for TR 25.912 on evaluation of E-UTRA peak rates (Qualcomm Europe)

11.7.2 Chapter 13.2: User throughput

R1-061590 E-UTRA Target Evaluation - TP on DL User Throughput for 25.912
(Ericsson, Motorola)

12/05/2006 09: Presented by Dr. Erik Dahlman from Ericsson

Discussion (Question / Comment):

Decision: The TP was endorsed by RAN1 with modification ((LTC=>LTE).

R1-061591 E-UTRA Target Evaluation - TP on UL User Throughput for 25.912
(Ericsson, Motorola)

10/05/2006 16:55 Presented by Dr. Erik Dahlman from Ericsson

Discussion (Question / Comment):

Decision: The text proposal was endorsed by RAN1, with addition of "More information can be found in TR 25.814, section 10." add the end of the TP, and replace "as currently defined" with "as defined in this TR".

Withdrawn

R1-061384 E-UTRA Target Evaluation - TP on User Throughput for 25.912
(Ericsson, Motorola)

11.7.3 Chapter 13.4: Spectrum efficiency

R1-061588 E-UTRA Target Evaluation - TP on DL Spectral Efficiency for 25.912
(Ericsson, Motorola)

12/05/2006 09:40 Presented by Dr. Erik Dahlman from Ericsson

Discussion (Question / Comment):

Decision: The text proposal was endorsed by RAN1

R1-061589 E-UTRA Target Evaluation - TP on UL Spectral Efficiency for 25.912
(Ericsson, Motorola)

10/05/2006 16:45 Presented by Dr. from Ericsson

Discussion (Question / Comment):

Asbjorn Grovlen suggested that the reference to more information should be added for clear understanding .

Decision: The text proposal was endorsed by RAN1, with addition of "More information can be found in TR 25.814, section 10." add the end of the TP, and replace "as currently defined" with "as defined in this TR".

Withdrawn

R1-061385 E-UTRA Target Evaluation - TP on Spectral Efficiency for 25.912
(Ericsson, Motorola)

11.7.4 Chapter 13.7: Coverage

R1-061568 E-UTRA targert evaluation: TP on Coverage for TR 25 912 (Nortel, Ericsson)

12/05/2006 11:40 Presented by Ms. Sharat Boumendil

Discussion (Question / Comment):

Decision: The text proposal was endorsed by RAN1 with a few wording modification in R1-061628.

R1-061628 E-UTRA targert evaluation: TP on Coverage for TR 25 912 (Nortel, Ericsson)

11.7.5 Chapter 13.8: Further enhanced MBMS

R1-061511 TP for TR 25.912 on evaluation of ptm in E-UTRA (Qualcomm Europe)

11/05/2006 16:55 Presented by Mr. Serge Willenegger

Discussion (Question / Comment):

Serge commented that we don't need to update the table taking the results from MBMS Tuesday session. Some people raised concerns about super frame structure on the second sentence because we don't have any decision. Also the concern was raised about the sentence of slot structure on the second sentence.

Decision: It was decided to Confirm status of superframe discussion with RAN2 (remove paragraph for now), remove strict slot structure, rewording for single cell case and revise in R1-061617

R1-061617 TP for TR 25.912 on evaluation of ptm in E-UTRA (Qualcomm Europe)

12/05/2006 09:45 Presented by Mr. Serge Willenegger

Discussion (Question / Comment):

After the submitting this version, the contributor received some comments and revised this version. So, for this discussion, the updated version of this document was used. The revised points on update version were as followed. Four cases are identified depending on the network synchronization and content transmission:

- Transmission with synchronous cells
 - Cell common point to multipoint transmission
 - E-UTRA provides significant improvements over Rel-6 MBMS
 - Cell specific point to multipoint transmission
 - E-UTRA is expected to provide marginal improvements over Rel-6 MBMS
- Transmission with asynchronous cells
 - Cell common point to multipoint transmission
 - E-UTRA is expected to perform worse than Rel-6 MBMS with soft combining
 - Cell specific point to multipoint transmission
 - E-UTRA is expected to provide marginal improvements over Rel-6 MBMS

The discussion points are

- The reference case (Rel-6 MBMS with soft combining) as for transmission with asynchronous cells
- "marginal improvements" as for as for cell specific point

It was commented that we don't have any efficient synchronous scheme for soft combining even for Rel-6 and also the selective combining is still left so that just mention "soft combining" is not clear. Nobody would like to see E-UTRA is worse from Rel-6.

The comment for the second point was that the description is not sure and also any significant gain is not actually expected for the cell specific point but we don't have any detail evaluation and need more study. Durga Malladi from Qualcomm commented that in the synchronous case, the marginal gain related to SFN can be expected. But Some people still are not sure, so finally, the TP was agreed on condition that we need further study for cell specific point to multipoint transmission.

Decision: Revised in R1-061627 and endorsed by RAN1

R1-061627 TP for TR 25.912 on evaluation of ptm in E-UTRA (Qualcomm Europe)

11.7.6 Chapter 13.9: Network synchronization

R1-061242 Text proposal for synchronisation aspects for TR 25.912, L1 aspects (Nokia)

This document was revised before presentation.

R1-061555 Text proposal for synchronisation aspects for TR 25.912, L1 aspects (Nokia)

11/05/2006 17:25 Presented by Mr. Jari Lindholm.

Discussion (Question / Comment):

Thomas Salzer from Orange commented on synchronisation method that we keep discussion even though "However, some operators have shown certain scepticism to this approach." is described.

Regarding the sentence "For the purpose of downlink multi-cell transmissions within the same site (eNode B) the transmissions from single eNode B are assumed to be synchronised to enable multi-cell combining of identical data/reference signals", Juho commented that it's technically sure but I want to be more sure. Also Evelyne Le strat commented on this sentence that it's a little far in this stage so it's should be removed.

Decision: This TP was endorsed with modification in R1-061619

R1-061619 Text proposal for synchronisation aspects for TR 25.912, L1 aspects (Nokia)

11.7.7 Chapter 12.1: Complexity

R1-061538 LTE Target Fulfilment: Complexity - Text proposal (Nokia)

This document was revised before the presentation with reflected to the discussion on R1-061236.

R1-061620 Fulfilment of LTE Complexity Requirements, L1 aspects
(Nokia Ericsson, Motorola, Panasonic, Qualcomm Europe, Samsung)

12/05/2006 11:45 Presented by Mr. Jussi Numminen

Discussion (Question / Comment):

It was clarified that system complexity means channel coding and so on.

Decision: This TP was endorsed by RAN1 and this also are included from the complexity section in R1 TR25.814

11.7.8 Chapter 13.2, 13.3: C/U plane latency

R1-061471 C/U-plane Latency - Text proposal (Motorola)

This document was replaced by R1-061602 (Agreed) in section, 11.6.6. So R1-061602 will be sent to RAN Plenary

11.8 Text proposals on LTE Physical Layer Description for TR25.912, Chapter 7

R1-061111 Text proposals on LTE Physical Layer Description for TR 25.912, Chapter 7
(NTT DoCoMo, Ericsson)

12/05/2006 12:20 Presented by Dr. Sadayuki Abeta

Discussion (Question / Comment):

Juho Lee from Samsung raised a concern that he can not understand the current description in many sections because they are not reflected to the agreement in this meeting. If we input agreements in TR25.912, also the some option agreed in RAN1 should be involved.

As for RAN TR25.912, RAN1 Chairman clarified that we don't intend to input open issue in TR25.912 and it's a stage 2 level so RAN expects the more consolidated technical level. We must not input FFS points.

The long discussion continued. Some companies expressed their wonder that the text proposal already has been available for a couple of hours so we could comment earlier. In addition, it was commented that TR 25.912 is the document which catches up the alignment form TR25.814 and we have a big and more detail study, TR25.814. The e-mail discussion for the agreement was proposed by some companies, but at first RAN1 chairman expressed his wonder that the approval on e-mail reflector is complicated and not guaranteed so we should not take it FFS, but due to lack of time during the meeting (already, almost finishing time) he decided to continue discussion on the reflector and approve until the Plenary meeting.

Decision: It was decided to continue discussion on the email reflector with the target to arrive at an agreed text proposal by 24 May. Set of comments from each company to be provided by 18 May on the email reflector, thereafter the discussion should focus on resolving the comments.

New technical proposal not covered yet in 25.814 or decided yet by RAN1 are out of the scope of the L1 description text. The TP should show changes with change marks relative to the existing text in 25.912.

After the discussion on the e-mail reflector, this document was revised in R1-061646.

R1-061646 Text proposals on LTE Physical Layer Description for TR 25.912, Chapter 7
(NTT DoCoMo)

Decision: This text proposal was endorsed by RAN1.

Before ending the meeting, regarding the SI completion of LTE and TR25.912, Mr. RAN1 Chairman and LTE Rapporteur, Mr. Nakamura from NTT DoCoMo commented and clarified as followed.

- TR 25.912 is stage 2 level and a very stable technical report. But we can modify it with CR after approval in the next Plenary.
- RAN 1 Chairman commented that he doesn't think to make a decision of completion of LTE-Study Item now and it's a RAN level decision so that RAN1 Chairman will report the status of LTE L1 aspects on his chairman's report and LTE rapporteur report on the LTE status report to RAN plenary and RAN Plenary will make a decision.
- Also LTE Rapportuer, Mr. Nakamura commented he intend to submit the status report showing the completion level of all RAN WGs and the completion of SI will be made a decision by RAN level.

12. AOB

No any other business

13. Closing of the meeting

12/05/2006 17: 08. RAN1 Chairman, Mr. Dirk Gerstenberger expressed his appreciation to the delegates and the host, CATT/CCSA.

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Annex B: TSG RAN WG1 meetings in 2006

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPRAN1 LTE Ad Hoc	Ad	23 - 25 Jan 2006	Helsinki	FIN
3GPPRAN1#44	WG	13 - 17 Feb 2006	Denver	USA
3GPPRAN1#44bis	WG	27 - 31 Mar 2006	Athens	GR
3GPPRAN1#45	WG	08 - 12 May 2006	Shanghai	CN
3GPPRAN1 LTE Ad Hoc	Ad	27 - 30 June 2006	Cannes	FR
3GPPRAN1#46	WG	28 Aug -01 Sept 2006	Tallinn	Estonia
3GPPRAN1#46bis	WG	09 -13 Oct 2006	Seoul	Korea
3GPPRAN1#47	WG	06 - 10 Nov 2006	Riga	Latvia

MEETING TYPES

AH = Ad Hoc	CM = Chairmen's meeting
JM = Joint	OR = Ordinary
PM = Preparatory Meeting	RG = Rapporteurs Group
RM = Resolution Meeting	SG = Steering Group
ST = Startup Meeting	TG = Task Group
WG = Working Group	XO = Extraordinary

Annex C: List of CRs agreed at RAN1#45

Spec	CR	R	Cat	Rel	R1 Tdoc	Title	Work Item
25.212	0235	-	F	Rel-6	R1-061293	Clarification of E-TFCI terminology	EDCH-Phys
25.212	0236	-	A	Rel-7	R1-061294	Clarification of E-TFCI terminology	EDCH-Phys
25.214	0419	-	F	Rel-6	R1-061295	Clarification of E-TFCI terminology	EDCH-Phys
25.214	0420	-	A	Rel-7	R1-061296	Clarification of E-TFCI terminology	EDCH-Phys
25.225	0080	-	F	Rel-6	R1-061218	Clarify the reference point for LCR TDD TA	LCRTDD-Phys
25.225	0081	-	A	Rel-7	R1-061219	Clarify the reference point for LCR TDD TA	LCRTDD-Phys
25.223	0040	-	F	Rel-7	R1-061429	Correction of The values of weight factors	VHCRTDD-Phys
25.201	0024	1	B	Rel-7	R1-061567	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys
25.221	0137	1	B	Rel-7	R1-061563	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys
25.223	0039	1	B	Rel-7	R1-061564	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys
25.224	0151	1	B	Rel-7	R1-061565	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys
25.225	0082	1	B	Rel-7	R1-061566	Introduction of E-DCH for 3.84Mcps TDD	EDCHTDD-Phys

Annex D: List of Outgoing LSs from RAN1#45

NUMBER	TITLE	Release	To	Cc
R1-061560	LS on Random access control for 1.28Mcps TDD Enhanced Uplink	Rel-7	RAN2	-
R1-061561	LS on Uplink Control Signalling for 1.28Mcps TDD Enhanced Uplink	Rel-7	RAN2	-
R1-061598	LS on UE measurement and reception capabilities for LTE	Rel-7	RAN2	RAN4
R1-061599	LS on Random Access burst message size for LTE	Rel-7	RAN2	-
R1-061603	LS on SFN operation for E-MBMS	Rel-7	RAN3	RAN2, RAN4
R1-061632	LS on Reconfiguration of EUDCH	Rel-6	RAN2, RAN3, RAN4	-
R1-061633	LS on the signature sequence index allocation for E-HICH and E-RGCH	Rel-6	RAN3	RAN2
R1-061635	LS on introduction of an Optional Noise Floor Indication for E-DCH RRM	Rel-7	RAN3	-
R1-061636	LS on Rel-7 MIMO Conclusions	Rel-7	RAN	-
R1-061637	LS on introduction of an E-DCH Node B measurement for RRM	Rel-6	RAN2, RAN3, RAN4	-
R1-061644	LS on feedback regarding the concepts for "Continuous connectivity for packet data users"	Rel-7	RAN2, RAN3, RAN4	-

Annex E: List of Tdocs at RAN1 #45

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061105	Draft Agenda for RAN1#45	RAN1 Chairman	2		08/05/2006	Approved
R1-061106	Draft Report from RAN1#44bis Meeting	MCC Support	3		08/05/2006	Approved in R1-061641
R1-061107	E-UTRA Physical Layer Framework for Evaluation	Vodafone, DoCoMo, Orange, TIM, T-Mobile, Ericsson, Qualcomm, Motorola, Nokia, Nortel, Samsung, Siemens	11			Revised in R1-061118
R1-061108	Draft Report from RAN1/RAN2 Joint Meeting in Athens	MCC Support	3		08/05/2006	Approved in R1-061642
R1-061109	LS on UE measurement and reception capabilities for LTE (To: RAN1, RAN4)	RAN WG2, Motorola	4	= R2-061101	08/05/2006	Noted
R1-061110	TR25.814 v.1.2.3 Physical Layer Aspects for Evolved UTRA	Editor, NTT DoCoMo	11		10/05/2006	Endorsed as v1.3.0 in R1-061582
R1-061111	Text proposals on LTE Physical Layer Description for TR 25.912, Chapter 7	NTT DoCoMo	11.8	R1-061646	12/05/2006	Revised in R1-061646
R1-061112	Downlink System Evaluation Results -User Throughput, Spectrum Efficiency	Mitsubishi Electric	11.6.2		11/05/2006	Noted
~~R1-061113~~	~~Ordered transmission scheme for LDPC-coded symbols~~	~~Mitsubishi Electric~~	~~11.6.2~~			Withdrawn
R1-061114	Random access design for E-UTRA uplink	Panasonic	11.1.2			Not treated
R1-061115	System level simulation result on SC-FDMA	Panasonic	11.6.2		10/05/2006	Noted
R1-061116	Diversity for Random Access	ETRI	11.1.2			Not treated
R1-061117	Comparison of One-SCH and Two-SCH Schemes for EUTRA Cell Search	ETRI	11.1.3		09/05/2006	Noted

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061118	E-UTRA Physical Layer Framework for Evaluation	Vodafone, DoCoMo, Orange, Telecom Italia, T-Mobile, Ericsson, Qualcomm, Motorola, Nokia, Nortel, Samsung, Siemens, Cingular	11	(R1-061107)	10/05/2006	Noted
R1-061119	D-TxAA and PARC performance comparison with LMMSE receiver	Nokia	7		08/05/2006	Noted
R1-061120	HSDPA MIMO system performance results	Nokia	7		08/05/2006	Noted
R1-061121	Way forward for Rel-7 MIMO	Nokia	7			Withdrawn
R1-061122	Performance evaluation of STBC/SFBC schemes in E-UTRA Uplink	Alcatel	11.2.3			Not treated
R1-061123	Effect of different ST/SF coding and mapping schemes on the PAPR of the SC-FDMA in E-UTRA Uplink	Alcatel	11.2.3			Not treated
R1-061124	Text proposal for reference signal design in Downlink MIMO	Intel Corporation	11.2.3			Not treated
R1-061125	Text proposal for modulation and power adaptation of MIMO systems	Intel Corporation	11.2.3		09/05/2006	Noted
R1-061126	Scalable precoding and implementation complexities	Intel Corporation	11.2.3		09/05/2006	Noted
R1-061127	Comparison between single and multiple codewords for precoded MIMO	Intel Corporation	11.6.2			Not treated
R1-061128	System-level Evaluation of MIMO with Unitary Precoding	Intel Corporation	11.6.2		09/05/2006	Noted
R1-061129	System-level Evaluation of Open-loop Transmit Diversity Schemes	Intel Corporation	11.6.5			Not treated
R1-061130	Modify puncturing pattern to improve performance and iterations of release 6 turbo coding	HighDimension Ltd, CCL/ITRI	11.6.2			Not treated
R1-061131	A simple inter-block permutation in channel coding to provide backward compatibility and secure transmission	HighDimension Ltd	11.6.2			Not treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061132	Implementation complexity and power consumption concerns in channel coding	HighDimention Ltd	11.6.5			Not treated
R1-061133	System performance impact of release 6 turbo coding tail-bits removal	HighDimention Ltd	11.6.2			Not treated
R1-061134	Security and service differentiation in MBMS from physical layer perspective	HighDimention Ltd	11.6.3		09/05/2006	Noted
R1-061135	Cell Search Scheme in E-UTRA Downlink	Sharp	11.1.3			Not treated
R1-061136	UE Identity in L1/L2 Downlink Control Signalling	Sharp	11.1.1			Not treated
R1-061137	Random access control for 1.28Mcps TDD Enhanced Uplink	ZTE	6.1		08/05/2006	Noted
R1-061138	Random access physical channel for 1.28Mcps TDD Enhanced Uplink	ZTE	6.1		08/05/2006	TP was not agreed.
R1-061139	Enhanced uplink power control for 1.28Mcps TDD Enhanced Uplink	ZTE	6.1		08/05/2006	TP was not agreed.
R1-061140	Consideration on Multi-cell Interference for SCH Design in Cell Search and TP	SHRCWC, RITT	11.1.3			Not treated
R1-061141	Performance of Transmit Antenna Switch for Random Access	SHRCWC, RITT	11.1.2			Not treated
R1-061142	Solution to mitigate the ACK/NACK misinterpretation	SHRCWC, RITT	11.3.4			Not treated
R1-061143	Reconfiguration of EUDCH	Panasonic	5.4		08/05/2006	Agreed
R1-061144	Three-Step Initial Cell Search and System Acquisition for E-UTRA	Chunghwa Telecom Laboratories (CHTTL)	11.1.3			Not treated
R1-061145	Aspects of Cell Search for E-UTRA Downlink	Chunghwa Telecom Laboratories (CHTTL)	11.1.3			Not treated
R1-061146	Impact of Mobility on the Performance of LTE MIMO Schemes	Chunghwa Telecom Laboratories (CHTTL)	11.1.5			Not treated
R1-061147	System Evaluation of Intra-Cell Macro Diversity Schemes for E-UTRA Downlink	Chunghwa Telecom Laboratories (CHTTL)	11.6.2			Not treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061148	BCH Simulation Results for Capacity Estimation	Siemens	11.3.1			Not treated
R1-061149	Text Proposal for downlink OFDMA resource allocation and mapping rules for distributed mode users in E-UTRA, with discussion on control information	Intel Corporation	11.2.3			Not treated
R1-061150	Interference-aware MIMO feedback: A Text Proposal	Intel Corporation	11.1.5		09/05/2006	Noted
R1-061151	MIMO resource definition for E-UTRA	Philips	11.1.5			Not treated
R1-061152	Simulation Results of Coded MIMO-OFDM for E-UTRA Downlink	Philips	11.1.5			Not treated
R1-061153	Uplink Reference Signal Design Based on TTI Grouping	Mitsubishi Electric	11.2.1			Not treated
R1-061154	Discussion and draft answers on LS R1-061109	LG Electronics	4		08/05/2006	Noted
R1-061155	Uplink reference signal for channel quality measurement	LG Electronics	11.2.1			Not treated
R1-061156	Performance comparison of localized and distributed SC-FDMA	LG Electronics	11.2.3			Not treated
R1-061157	Simulation results for uplink fast frequency domain scheduling	LG Electronics	11.6.2		10/05/2006	Noted
R1-061158	TP on simulation results for uplink fast frequency domain scheduling	LG Electronics	11.5			Not treated
R1-061159	Random access preamble design for EUTRA TDD	TD Tech	11.1.2			Not treated
R1-061160	Cell search and identification of Cell ID for EUTRA TDD	TD Tech	11.1.3			Not treated
R1-061161	TP on localized and distributed SC-FDMA	LG Electronics	11.2.3			Not treated
R1-061162	Improving Spectral Efficiency by Dispersive Coding	ITRI	11.6.2			Not treated
R1-061163	Downlink Control Channel Coding	Motorola	11.1.1		09/05/2006	Noted
R1-061164	Downlink Control Channel Modulation and Coding	Motorola	11.1.1			Not treated
R1-061165	Downlink Acknowledgement and Group Transmit Indicator Channels	Motorola	11.1.1			Not treated
R1-061166	Random Access Payload Size	Motorola	11.1.2		09/05/2006	Noted
R1-061167	Synchronized Random Access Channel Design	Motorola	11.1.2			Not treated

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R1-061168	Preamble Sequence Design for Random Access of E-UTRA	Motorola	11.1.2			Not treated
R1-061169	LTE Uplink System Performance and comparison to HSUPA and TP	Motorola	11.6.2	R1-061550		Revised in R1-061550
R1-061170	LTE Downlink System Performance Evaluation Results	Motorola	11.6.2	R1-061626		Revised in R1-061626
R1-061171	Overhead Analysis and Resource Assignment for Uplink CQI Feedback Channel and TP	Motorola	11.2.3			Not treated
R1-061172	EUTRA Uplink Control Signaling + TP	Motorola	11.2.3			Not treated
R1-061173	EUTRA Downlink Distributed Multiplexing and Mapping Rules TP	Motorola, NTT DoCoMo	11.2.3			Not treated
R1-061174	Text proposal for uplink sounding in EUTRA	Motorola	11.2.1			Not treated
R1-061175	Text proposal for direct channel feedback in EUTRA	Motorola	11.2.1			Not treated
R1-061176	E-UTRA SC-FDMA Uplink Pilot/Reference Signal Design & TP	Motorola	11.2.1			Not treated
R1-061177	Summary of RACH e-mail reflector discussion	Motorola	11.1.2		09/05/2006	Noted
R1-061178	Combination of ICI cancellation and coordination: performance and TP	RITT, Huawei	11.2.2	R1-061543		Not treated. Revised in R1-051543
R1-061179	System Simulation Results for the LTE Uplink	RITT, Huawei	11.6.2		10/05/2006	Noted
R1-061180	Investigation on Throughput Improvement by Rel. 7 MIMO	NTT DoCoMo	7		08/05/2006	Noted
R1-061181	L1/L2 Control Channel Structure for E-UTRA Downlink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation	11.1.1		09/05/2006	Noted

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R1-061182	Distributed FDMA Transmission for Shared Data Channel in E-UTRA Downlink	NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, Motorola, NEC, Nokia, Panasonic, Sharp, Toshiba Corporation	11.1.1			Not treated
R1-061183	L1/L2 Control Channel Structure for E-UTRA Uplink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11.1.1			Not treated
R1-061184	Random Access Channel Structure for E-UTRA Uplink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11.1.2		09/05/2006	Noted
R1-061185	Text Proposal on Cell Search in Evolved UTRA	NTT DoCoMo	11.1.3		09/05/2006	Agreed
R1-061186	SCH Structure and Cell Search Method for E-UTRA Downlink	NTT DoCoMo	11.1.3			Not treated
R1-061187	Comparison on Cell Search Time Performance between SCH-Replica Based and Auto-Correlation Based Detections in E-UTRA Downlink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Toshiba Corporation	11.1.3		09/05/2006	Noted
R1-061188	Neighboring Cell Search Method for Connected and Idle Mode in E-UTRA Downlink	NTT DoCoMo	11.1.3			Not treated

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R1-061189	Investigations on Cell-Common Pilot Channel Structure for MBMS in E-UTRA Downlink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation	11.1.4			Noted
R1-061190	MIMO Scheme in E-UTRA Downlink - Signaling Aspect	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11.1.5			Not treated
R1-061191	Reference Signal Structure for Uplink MIMO in E-UTRA	NTT DoCoMo	11.1.5			
R1-061192	Channel Dependent Scheduling with Cyclic Delay Diversity	NTT DoCoMo	11.1.5			Not treated
R1-061193	Multiplexing Method for Orthogonal Reference signals for E-UTRA Uplink	NTT DoCoMo	11.2.1			Not treated
R1-061194	Orthogonal Reference Signal Structure for Sectorized Beams in E-UTRA Downlink	NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp	11.2.3			Not treated
R1-061195	Link Adaptation Scheme for Single-antenna Transmission in E-UTRA Downlink	NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation	11.2.3			Not treated

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R1-061196	Link Adaptation Scheme for MIMO Transmission in E-UTRA Downlink	NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation	11.2.3		09/05/2006	Noted
R1-061197	TP on Fast Transmission Power Control for L1/L2 Control Channel in E-UTRA Uplink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11.2.3			Not treated
R1-061198	Broadcast Channel Structure for E-UTRA Downlink	NTT DoCoMo, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11.3.1			Not treated
R1-061199	Paging Channel Structure for E-UTRA Downlink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Toshiba Corporation	11.3.2			Not treated
R1-061200	Comparison of Signaling Overhead between Asynchronous and Synchronous Hybrid ARQ for E-UTRA Downlink	NTT DoCoMo	11.3.4			Not treated
R1-061201	Performance Comparison between Turbo Code and LDPC Code for Shared Data Channel in E-UTRA Downlink	NTT DoCoMo, NEC, Sharp, Toshiba Corporation	11			Not treated

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R1-061202	UE Capability in E-UTRA Downlink	NTT DoCoMo, Ericsson, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11			Not treated
R1-061203	Frequency Domain Channel-Dependent Scheduling with Adaptive Transmission Bandwidth of Pilot Channel for CQI Measurement for E-UTRA Uplink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Sharp, Toshiba Corporation	11			Not treated
R1-061204	Investigations on Adaptive Control of Roll-off Factor for DFT-Spread OFDM based SC-FDMA in Uplink	NTT DoCoMo, NEC, Sharp, Toshiba Corporation	11			Not treated
R1-061205	W-CDMA MIMO with FTP Traffic	Motorola	7		08/05/2006	Noted
R1-061206	D-TxAA, PARC, and Single Antenna Systems in Urban Microcells	Motorola	7		08/05/2006	Noted
R1-061207	Interference and Open Loop Transmit Diversity Reception (with TP)	Motorola	11.2.3			Not treated
R1-061208	Peak Rate with Precoded MIMO in E-UTRA	Motorola	11.6.1		10/05/2006	Noted
R1-061209	Evaluation of localized and distributed carrier mappings for EUTRA Downlink MIMO and text proposal	Freescale Semiconductor	11.1.5		09/05/2006	Noted
R1-061210	Evaluation of EUTRA schemes for Downlink Open loop MIMO and text proposal	Freescale Semiconductor	11.1.5			Not treated
R1-061211	Evaluation of Antenna Selection for Downlink Open loop MIMO schemes with four transmit antennas and text proposal	Freescale Semiconductor	11.1.5			Not treated
R1-061212	Evaluation of Synchronous and Asynchronous HARQ for Downlink MIMO	Freescale Semiconductor	11.1.5			Not treated
R1-061213	System Level Evaluation of localized and distributed carrier mapping for Uplink SC-FDMA	Freescale Semiconductor	11.6.2			Not treated

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R1-061214	Text proposal on carrier mapping for Uplink SC-FDMA	Freescale Semiconductor	11.5			Withdrawn
R1-061215	System Level Evaluation of Synchronous and Asynchronous HARQ for Uplink SC-FDMA	Freescale Semiconductor	11.3.4		10/05/2006	Noted
R1-061216	Evaluation of E-UTRA downlink MIMO reference-signal structures and text proposal	Freescale Semiconductor	11.1.5	R1-061583		Not treated, Revised in R1-061583
R1-061217	Evaluation of E-MBMS MIMO reference-signal structures and text proposal	Freescale Semiconductor	11.1.4			Withdrawn
R1-061218	25.225 CR0080 (Rel-6, F)"Clarify the reference point for LCR TDD TA"	CATT	5.4		08/05/2006	Agreed
R1-061219	25.225 CR0081 (Rel-7, A)"Clarify the reference point for LCR TDD TA"	CATT	5.4		08/05/2006	Agreed
R1-061220	Draft TR Physical Layer Aspects for 1.28Mcps TDD HSUPA	CATT	6.1		08/05/2006	Agreed
R1-061221	Text Proposal for basic physical layer structure for 1.28Mcps TDD Enhanced Uplink	CATT	6.1		08/05/2006	Agreed.
R1-061222	Support for Node-B Controlled Uplink Scheduling and Text Proposal for TR 25.XXX	CATT	6.1		08/05/2006	Agreed.
R1-061223	HARQ schemes for 1.28Mcps TDD Enhanced Uplink	CATT	6.1		08/05/2006	Noted
R1-061224	Modulation for 1.28Mcps TDD Enhanced Uplink	CATT	6.1		08/05/2006	Agreed
R1-061225	LCR TDD: E-HICH structure and coding	CATT	6.4			Withdrawn
R1-061226	LCR TDD E-HICH: Simulation Results	CATT	6.4			Withdrawn
R1-061227	On the design of non-synchronized RACH	Nortel	11.1.2		09/05/2006	Noted
R1-061228	On the period of L1 synchronization RACH	Nortel	11.1.2			
R1-061229	DL Adaptive STTD/SM Performance Evaluation for E-UTRA	Nortel	11.1.5			Not treated
R1-061230	Text Proposal for System Performance of DL Adaptive MIMO for E-UTRA	Nortel	11.5			Not treated
R1-061231	SC-FDMA based Multi-user MIMO System Level Performance Evaluation for E-UTRA UL	Nortel	11.1.5		09/05/2006	Noted

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R1-061232	Text Proposal for System level simulation for UL virtual MIMO	Nortel	11.5	R1-061605	10/05/2006	Revised in R1-061605
R1-061233	Performance evaluation of STTD and cyclic shift diversity in the presence of Inter-cell/sector interference in Downlink MIMO systems for LTE	Nortel	11.1.5			Not treated
R1-061234	STBC-HARQ for UMTS LTE Downlink MIMO with TP	Nortel	11.3.4			Not treated
R1-061235	Uplink Adaptive Transmission with TP	Nortel	11.2.1			Not treated
R1-061236	Fulfilment of LTE Complexity Requirements, L1 aspects	Nokia	11.6.5	R1-061620	11/05/2006	Revised in R1-061620
R1-061237	LTE Cell Search	Nokia	11.1.3			Not treated
R1-061238	LTE Evaluation results	Nokia	11.6.2		11/05/2006	Noted
R1-061239	Further evaluation results for SC-FDMA	Nokia	11.5		10/05/2006	Noted
R1-061240	UL reference signal structure and text proposal	Nokia	11.2.1			Not treated
R1-061241	DL control signaling for LTE	Nokia	11.1.1			Withdrawn
R1-061242	Text proposal for synchronisation aspects for TR 25.912, L1 aspects	Nokia	11.7.6	R1-061555		Revised in R1-061555
R1-061243	Impact of DL control signaling overhead on LTE throughput and coverage	Nokia	11.6.2			Not treated
R1-061244	PCH and Paging indicator presence on LTE Layer 1	Nokia	11.3.2			Not treated
R1-061245	On 2 Antenna Open Loop Downlink TX Diversity	Nokia	11.1.5			Not treated
R1-061246	Unified uplink CQI signaling by efficient labeling	Huawei	11.1.1			Not treated
R1-061247	System performances of RACH preamble designs for E-UTRA	Huawei	11.1.2			Not treated
R1-061248	Cell search times of hierarchical and non-hierarchical SCH signals	Huawei	11.1.3		09/05/2006	Noted
R1-061249	Benefits of the generalized CSD scheme in E-UTRA	Huawei	11.1.5			Noted
R1-061250	Evaluation of DL control channel for multiple antenna Node B's	Huawei	11.1.5			Noted
R1-061251	Text proposal on RACH preamble design for E-UTRA	Huawei	11.2.3			Not treated

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R1-061252	Text proposal on comparison of SCH structures	Huawei	11.2.3			Not treated
R1-061253	Text proposal for TR25.814, Section 7.1.3	Huawei	11.2.3			Not treated
R1-061254	SF reduction on compressed mode for 10ms TTI E-DCH	ZTE	5.4		08/05/2006	Agreed that that SF/2 method is not supported for E-DCH
R1-061255	25.212CR0233(Rel-6,F)"Clarification of compressed mode by reducing the spreading factor by 2 for E-DCH"	ZTE	5.4		08/05/2006	Rejected
R1-061256	25.212CR0234(Rel-7,A)"Clarification of compressed mode by reducing the spreading factor by 2 for E-DCH"	ZTE	5.4		08/05/2006	Rejected
R1-061257	Considerations on downlink shared control signalling	ZTE	11.1.1			Not treated
R1-061258	TP: Downlink Control Signalling resource division	ZTE	11.1.1			Not treated
R1-061259	Measurement at the Network Side	ZTE	11.2.3			Not treated
R1-061260	Random access preamble and message	ZTE	11.1.2			Not treated
R1-061261	TP: Random access preamble and message	ZTE	11.1.2			Not treated
R1-061262	Load dependent feedback for MIMO LTE	Siemens	11.1.5			Not treated
R1-061263	Reference-signal arrangement for E-UTRA Downlink MIMO	LG Electronics	11.1.5			Not treated
R1-061264	Further Study on Reference Signal Structure for MBMS	Toshiba Corporation	11.1.4		09/05/2006	Noted
R1-061265	Further considerations on cell search information mapping	ZTE	11.1.3			Not treated
R1-061266	Interference Mitigation Comparisons between FDM and CDM in Uplink Reference Design	ZTE	11.2.1			Not treated
R1-061267	TP: Interference Mitigation for Uplink Reference Design	ZTE	11.2.1			Not treated
R1-061268	SCH Structure and Cell Search Method for E-UTRA TDD system	CATT, RITT	11.1.3			Not treated
R1-061269	Further on the non-synchronization random access procedure for EUTRA TDD	CATT, RITT	11.1.2			Not treated
R1-061270	Further consideration on the reference symbol of Beamforming for EUTRA TDD	CATT	11.1.5			Not treated

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R1-061271	The impact of frequency offset on modulation performance for EUTRA TDD	CATT	11.1.3			Not treated
R1-061272	The numerology of 1.6MHz bandwidth for EUTRA LCR-based TDD frame structure	CATT, RITT, TD-Tech	11.2			Not treated
R1-061273	Further clarifications of the uplink reference signal requirement for downlink pre-coding in TDD mode	CATT, RITT	11.2.1			Not treated
R1-061274	Clarifications of the dynamic beam-forming/pre-coding method in TDD mode and text proposal	CATT, RITT	11.1.5		09/05/2006	Noted
R1-061275	Performance comparison between beam-forming and CDD for control channel	CATT	11.1.1		09/05/2006	Noted
R1-061276	Peak data rates for LCR TDD base Frame Structure	CATT	11.6.1		10/05/2006	Noted
R1-061277	System Performance Evaluation Results for LCR TDD base Frame Structure	CATT	11.6.2		10/05/2006	Noted
R1-061278	Optimum Combination of Channel Coding Rate and Repetition Factor for L1/L2 Control Channel in E-UTRA Downlink	NTT DoCoMo	11.1.1		09/05/2006	Noted
R1-061279	Link-Level Simulations on peak data rate in E-UTRA Downlink	NTT DoCoMo	11.6.1		10/05/2006	Noted
R1-061280	Link-Level Simulations on peak data rate in E-UTRA Uplink	NTT DoCoMo	11.6.1		10/05/2006	Noted
R1-061281	System-Level Simulations on Spectrum Efficiency, User Throughput, and Coverage in E-UTRA Downlink	NTT DoCoMo	11.6.2		11/05/2006	Noted
R1-061282	System-Level Simulations on Spectrum Efficiency, User Throughput, and Coverage in E-UTRA Uplink	NTT DoCoMo	11.6.2		10/05/2006	Noted
R1-061283	Initial cell search and long-CP sub-frame structure	Fujitsu	11.1.3			Not treated
R1-061284	Cubic Metric properties of CAZAC sequences	Fujitsu	11.2.1			Not treated
R1-061285	Introduction of the shortened code concept in Turbo coding	Fujitsu	11.2.3			Not treated
R1-061286	Downlink resource multiplexing	Siemens	11.2.3			Not treated
R1-061287	Signalling for downlink resource allocation	Siemens	11.1.1		09/05/2006	Noted

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R1-061288	TP on downlink resource allocation signalling	Siemens	11.1.1			Not treated
R1-061289	Joint coding vs individual coding for downlink resource allocation	Siemens	11.1.1			Not treated
R1-061290	Signalling in DL for UL resource allocation	Siemens	11.1.1			Not treated
R1-061291	TP on Signalling in DL for UL resource allocation	Siemens	11.1.1			Not treated
R1-061292	MBMS throughput performance	Siemens	11.6.3		10/05/2006	Noted
R1-061293	25.212CR0235 (Rel-6, F)"Clarification of E-TFCI terminology"	Siemens, Panasonic, Samsung	5.4		08/05/2006	Agreed
R1-061294	25.212CR0236 (Rel-7, A)"Clarification of E-TFCI terminology"	Siemens, Panasonic, Samsung	5.4		08/05/2006	Agreed
R1-061295	25.214CR0419 (Rel-6, F)"Clarification of E-TFCI terminology"	Siemens, Panasonic, Samsung	5.4		08/05/2006	Agreed
R1-061296	25.214CR0420 (Rel-7, A)"Clarification of E-TFCI terminology"	Siemens, Panasonic, Samsung	5.4		08/05/2006	Agreed
R1-061297	L1 UE measurement to support intra E-UTRA mobility	NEC Group, NTT DoCoMo	4		08/05/2006	Noted
R1-061298	Proposed response to RAN2 LS in [R1-061109]	NEC Group, NTT DoCoMo	4		08/05/2006	Noted
R1-061299	25.211CR0228(Rel-6, F)"Clarification of the signature sequence index allocation for E-HICH and E-RGCH"	NEC Group	5.4		08/05/2006	Rejected
R1-061300	25.211CR0229(Rel-7, A)"Clarification of the signature sequence index allocation for E-HICH and E-RGCH"	NEC Group	5.4		08/05/2006	Rejected
R1-061301	Consideration on UTRA MIMO scheme	NEC Group	7	R1-061548		Revised in R1-061548
R1-061302	Comments on the proposals to modify HS-SCCH for VoIP	NEC Group	8	R1-061545		Revised in R1-061545
R1-061303	TP on Clarification for "HS-SCCH less operation"	NEC Group	8			Not treated
R1-061304	TP on Clarification for "Restricted HS-SCCH operation"	NEC Group	8			Not treated

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R1-061305	TP on further simplification for "Restricted HS-SCCH operation	NEC Group	8			Not treated
R1-061306	Power balancing mechanism with DPCCH gating	NEC Group	8		09/05/2006	Noted
R1-061307	Physical channel mapping & power control for SCCH	NEC Group, NTT DoCoMo	11.1.1			Not treated
R1-061308	Resource Allocation Signalling for EUTRA	NEC Group	11.1.1			Not treated
R1-061309	Consideration on LTE MIMO scheme	NEC Group	11.1.5			Not treated
R1-061310	Reference signal multiplexing for EUTRA uplink	NEC Group, NTT DoCoMo	11.2.1			Not treated
R1-061311	Considerations on uplink pilot design using CAZAC sequences	NEC Group	11.2.1			Not treated
R1-061312	CQI reporting	NEC Group	11.2.3			Not treated
R1-061313	UE capabilities and spectrum allocation scenarios concerning the LS R1-061109	Samsung	4		08/05/2006	Noted
R1-061314	Uplink ACK/NACK performance: FDM vs TDM	Samsung	11.1.1			Not treated
R1-061315	Downlink Control Signalling Overhead Evaluation	Samsung	11.1.1		09/05/2006	Noted
R1-061316	DL ACK/NACK signalling performance evaluation	Samsung	11.1.1			Not treated
R1-061317	Random access message transmission	Samsung	11.1.2		09/05/2006	Noted
R1-061318	Cell search issues and views	Samsung	11.1.3			Not treated
R1-061319	Performance Comparison between 1.25 MHz and 5 MHz BCH Transmission Bandwidths	Samsung	11.1.3			Not treated
R1-061320	Link Performance of Multi-User MIMO	Samsung	11.1.5			Not treated
R1-061321	Performance Evaluation of PU2RC with Different Codebook Sizes	Samsung	11.1.5		09/05/2006	Noted
R1-061322	TP on Cyclic Delay Diversity for Scheduling Gains	Samsung, ETRI, NTT DoCoMo	11.1.5	R1-061577		Not treated. Revised in R1-061577
R1-061323	Dynamic Switching between Single and Multi-User MIMO	Samsung	11.1.5		09/05/2006	Noted
R1-061324	Performance Evaluation of Multi-User vs. Single User MIMO	Samsung	11.1.5		09/05/2006	Noted
R1-061325	Summary of LTE MIMO email discussion	Samsung	11.1.5		09/05/2006	Noted

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061326	Reference signal structure for EUTRA uplink and TP	Samsung	11.2.1			Not treated
R1-061327	TP on HARQ	Samsung	11.2.3			Not treated
R1-061328	Link Adaptation in Evolved UTRA Downlink and TP	Samsung	11.2.3			Not treated
R1-061329	TP on uplink ACK/NACK signaling	Samsung	11.2.3			Not treated
R1-061330	Bandwidth and Power Efficiency Evaluation for pi/2-BPSK and QPSK, and TP	Samsung	11.2.3			Not treated
R1-061331	TP on BCH Transmission Bandwidth	Samsung	11.2.3			Not treated
R1-061332	TP on Downlink Control Signalling Multiplexing	Samsung	11.2.3			Not treated
R1-061333	Link performance of DL distributed transmission	Samsung	11.2.3			Not treated
R1-061334	System throughput of DL localized transmission with existence of distributed transmission	Samsung	11.2.3			Not treated
R1-061335	TP on downlink data multiplexing	Samsung	11.2.3			Not treated
R1-061336	TP on DL ACK/NACK signalling	Samsung	11.2.3			Not treated
R1-061337	Evaluation of BCH cost vs bit rate	Samsung	11.3.1			Not treated
R1-061338	Low Overhead Asynchronous Adaptive Hybrid ARQ	Samsung	11.3.4			Not treated
R1-061339	Text Proposal on Downlink System Performance Evaluation	Samsung	11.4			Withdrawn
R1-061340	Text Proposal on Uplink System Performance Evaluation	Samsung	11.5		10/05/2006	Noted
R1-061341	LTE downlink system simulation results concerning the LTE target fulfillment	Samsung	11.6.2	R1-061549		Revised in R1-061549
R1-061342	LTE uplink system simulation results concerning the LTE target fulfillment	Samsung	11.6.2		10/05/2006	Noted
R1-061343	Introduction of an E-DCH related Node B measurement for RRM purposes	Siemens	5.5		08/05/2006	Noted
R1-061344	25.215CR0170(Rel-7, C) "Introduction of a Node B measurement for E-DCH RRM"	Siemens	5.5	R1-061616	08/05/2006	Revised in R1-061616
R1-061345	E-UTRA UE Measurements and Capabilities	Ericsson	4		08/05/2006	Noted
R1-061346	Impact of MIMO transmission on the performance of legacy channel reception in a non-MIMO capable UE	Ericsson	7		08/05/2006	Noted

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R1-061347	Complexity and performance trade-offs of MIMO transmission schemes	Ericsson	7		08/05/2006	Noted
R1-061348	Link level evaluation of D-TxAA	Ericsson	7		08/05/2006	Noted
R1-061349	System level results for Rel-7 MIMO schemes	Ericsson	7	R1-061553		Revised in R1-061553
R1-061350	On MIMO for HSDPA	Ericsson	7		08/05/2006	Noted
R1-061351	Replace the Abbreviation 'ConCon' with 'CPC' in TR 25.903	Ericsson	8		09/05/2006	Agreed
R1-061352	New DPCCH Slot Format: Link-Level Performance	Ericsson	8	R1-061571	09/05/2006	TP2 was agreed and TP1 was revised in R1-061571
R1-061353	UL DPCCH Gating: Realistic VoIP Example	Ericsson	8		09/05/2006	Agreed
R1-061354	UL DPCCH Gating: Further Link-Level Performance Results	Ericsson	8		09/05/2006	Noted
R1-061355	UL DPCCH Gating: Further System-Level Performance Results	Ericsson	8		09/05/2006	Noted
R1-061356	UL DPCCH Gating: Impact of Gating Gap Length	Ericsson	8		09/05/2006	Noted
~~R1-061357~~	~~DTX/DRX Control Signalling~~	~~Ericsson~~	~~8~~			Withdrawn
R1-061358	F-DPCCH Gating During Periods of UL DPCCH Gating	Ericsson	8	R1-061575	09/05/2006	Revised in R1-061575
R1-061359	Reduced HS-SCCH: DL VoIP Capacity Gain	Ericsson	8			Not treated
R1-061360	Extended WCDMA Cell Range - RAN1 Impact	Ericsson	9		09/05/2006	Noted
~~R1-061361~~	~~E-UTRA Target Evaluation – TP on Downlink Results for 25.814~~	~~Ericsson~~	~~11.4~~			Withdrawn
~~R1-061362~~	~~E-UTRA Target Evaluation – TP on Uplink Results for 25.814~~	~~Ericsson~~	~~11.5~~			Withdrawn
R1-061363	Uplink Transport Format Selection in E-UTRA	Ericsson	11.1.1			Not treated
R1-061364	E-UTRA Control Signaling - Summary of e-mail discussions	Ericsson	11.1.1		09/05/2006	Noted
R1-061365	E-UTRA Downlink Control Signaling	Ericsson	11.1.1		09/05/2006	Noted
R1-061366	E-UTRA Uplink Control Signaling	Ericsson	11.1.1		09/05/2006	Noted
R1-061367	E-UTRA Scalability of Random Access Preamble	Ericsson	11.1.2		09/05/2006	Noted
R1-061368	E-UTRA Random Access Slot Length	Ericsson	11.1.2		09/05/2006	Noted
R1-061369	LTE random-access capacity and collision probability	Ericsson	11.1.2			Not treated

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R1-061370	On synchronous random access	Ericsson	11.1.2			Not treated
R1-061371	Update of polarization description in link level channel model	Ericsson	11.1.5		09/05/2006	Noted
R1-061372	System level channel models for E-UTRA evaluations	Ericsson	11.1.5		09/05/2006	Revised in R1-061594
~~R1-061373~~	~~E-UTRA Uplink Reference Signal Structure~~	~~Ericsson~~	~~11.2.1~~			Withdrawn
R1-061374	Downlink inter-cell interference co-ordination/avoidance – evaluation of frequency reuse	Ericsson	11.2.2			Not treated
R1-061375	Uplink inter-cell interference co-ordination/avoidance – evaluation of frequency reuse	Ericsson	11.2.2			Not treated
~~R1-061376~~	~~The Effect of Uplink Transmitter Impairments and Power Control Principles on E-UTRA System Performance~~	~~Ericsson~~	~~11.2.3~~			Withdrawn
~~R1-061377~~	~~Text Proposal on Uplink Power Control to mitigate intracell interference~~	~~Ericsson~~	~~11.2.3~~			Withdrawn
R1-061378	E-UTRA Bandwidth Flexibility	Ericsson	11.2.3			Not treated
R1-061379	L1 Multiplexing in E-UTRA Downlink	Ericsson	11.3.3			Not treated
R1-061380	E-UTRA Peak Data Rates	Ericsson	11.6.1		10/05/2006	Noted
R1-061381	E-UTRA Downlink User Throughput and Spectrum Efficiency Evaluation	Ericsson	11.6.2		11/05/2006	Noted
R1-061382	E-UTRA Uplink User Throughput and Spectrum Efficiency Evaluation	Ericsson	11.6.2		10/05/2006	Noted
R1-061383	E-UTRA Broadcast Performance Evaluation	Ericsson	11.6.3		10/05/2006	Noted
~~R1-061384~~	~~E-UTRA Target Evaluation – TP on User Throughput for 25.912~~	~~Ericsson, Motorola~~	~~11.7.2~~			Withdrawn
~~R1-061385~~	~~E-UTRA Target Evaluation – TP on Spectral Efficiency for 25.912~~	~~Ericsson, Motorola~~	~~11.7.3~~			Withdrawn
R1-061386	Combined spatial multiplexing and CDD for 4 transmit antennas	ETRI	11.1.5			Not treated
R1-061387	Text Proposal for the combined spatial multiplexing and CDD	ETRI, Samsung	11.1.5			Not treated
R1-061388	Combined STBC and CDD for unicast traffic in 4 transmit antennas	ETRI	11.1.5			Not treated
R1-061389	UE battery life improvement with SIR target reduction and CQI reduction	Siemens	8		09/05/2006	Noted

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R1-061390	HS-DPCCH performance for beta boosting concept and TPs	Siemens	8		09/05/2006	TP was revised in R1-061573
R1-061391	Downlink Interference Coordination	Siemens	11.2.2			Not treated
R1-061392	Random Access preamble design for E-UTRA	Texas Instruments	11.1.2			Not treated
R1-061393	Random Access procedure for E-UTRA	Texas Instruments	11.1.2		09/05/2006	Noted
R1-061394	~~Handover and inter-cell load balancing analysis: impact on Random Access load~~	~~Texas Instruments~~	~~11.1.2~~			Withdrawn
R1-061395	Signaling for DL resource assignment indication	ETRI	11.1.1			Not treated
R1-061396	Evaluation on Cell-Specific Mapping from D-VRB to PRB and TP	Huawei	11.2.3			Not treated
R1-061397	Mapping Scheme from VRB to PRB and TP	Huawei	11.2.3			Not treated
R1-061398	Uplink Reference Signals Structure with TP	Huawei	11.2.1			Not treated
R1-061399	E-UTRA Uplink Resource Assignment Indication signaling	Huawei	11.1.1			Not treated
R1-061400	Multi-antenna schemes for E-MBMS with Text Proposal	Huawei	11.1.4			Not treated
R1-061401	Link Performance of D-FDMA and L-FDMA with Frequency Hopping in E-UTRA Uplink	Huawei	11.2.3			Not treated
R1-061402	Control channel design in frequency domain	Huawei	11.2.3			Not treated
R1-061403	Further details on Fully DTX'ed concept for ConCon	Huawei	8		09/05/2006	Noted
R1-061404	Further Link simulation results on Fully DTX'ed concept for ConCon	Huawei	8		09/05/2006	Noted
R1-061405	Further System simulation results on Fully DTX'ed concept for ConCon	Huawei	8		09/05/2006	Noted
R1-061406	TP for 25.903 on Fully DTX'ed concept for ConCon	Huawei	8		09/05/2006	Noted
R1-061407	~~CQI Feedback Scheme for MIMO HSDPA~~	~~Huawei~~	~~7~~			Withdrawn
R1-061408	25.212CR0237 (Rel-7, F)"CRC size for Stand-alone Scheduling Information"	Huawei	5.5		08/05/2006	Rejected
R1-061409	~~Dynamic Duplexer Switching for LTE~~	~~Freescall Semiconductor~~	~~11.2.3~~			Withdrawn
R1-061410	PA Backoff Requirements for HSUPA	Freescall Semiconductor	8		09/05/2006	Noted

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061411	Optimization of HS-SCCH for VoIP over HSDPA	Lucent Technologies	8			Not treated
R1-061412	TR25.826 v1.0.1	IPWireless	6.2		08/05/2006	Endorsed as v1.1.0 in R1-061562
R1-061413	Updates to TR25.826	IPWireless	6.2		08/05/2006	TP was agreed.
R1-061414	25.201CR0024(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	R1-061567	08/05/2006	Revised in R1-061567
R1-061415	25.221CR0137(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	R1-061563	08/05/2006	Revised in R1-061563
R1-061416	25.222CR0128(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2			Withdrawn
R1-061417	25.223CR0039(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	R1-061564	08/05/2006	Revised in R1-061564
R1-061418	25.224CR0151(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	R1-061565	08/05/2006	Revised in R1-061565
R1-061419	25.225CR0082(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	R1-061566	08/05/2006	Revised in R1-061566
R1-061420	Draft CR to TS 25.222 - Introduction of E-DCH for 3.84Mcps TDD	IPWireless	6.2		08/05/2006	Noted
R1-061421	Overview of changes for TDD E-DCH operation at 7.68Mcps	IPWireless	6.3		08/05/2006	Noted
R1-061422	Draft CR to TS 25.201 - Introduction of E-DCH for 7.68Mcps TDD	IPWireless	6.3		08/05/2006	Noted
R1-061423	Draft CR to TS 25.221 - Introduction of E-DCH for 7.68Mcps TDD	IPWireless	6.3		08/05/2006	Noted
R1-061424	Draft CR to TS 25.222 - Introduction of E-DCH for 7.68Mcps TDD	IPWireless	6.3		08/05/2006	Noted
R1-061425	Draft CR to TS 25.223 - Introduction of E-DCH for 7.68Mcps TDD	IPWireless	6.3		08/05/2006	Noted
R1-061426	Draft CR to TS 25.224 - Introduction of E-DCH for 7.68Mcps TDD	IPWireless	6.3		08/05/2006	Noted
R1-061427	Draft CR to TS 25.225 - Introduction of E-DCH for 7.68Mcps TDD	IPWireless	6.3		08/05/2006	Noted
R1-061428	System Simulation Results for the MIMO Urban Micro Scenario (TDD)	IPWireless	7		08/05/2006	Noted
R1-061429	25.223CR0040(Rel-7, F)"Correction of The values of weight factors"	IPWireless	5.5		08/05/2006	Agreed

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R1-061430	System Level Comparison of PARC and Dual-stream TxAA For MIMO in Release 7 HSDPA	Texas Instruments	7		08/05/2006	Noted
~~R1-061431~~	~~Implementation Issues of SIC Receiver for MIMO Rel.7 WCDMA~~	~~Texas Instruments~~	~~7~~			Withdrawn
R1-061432	Link Level Performance SIC Receiver for MIMO Rel.7 WCDMA	Texas Instruments	7		08/05/2006	Noted
R1-061433	Shared Control Channel Structure for E-UTRA Downlink	Texas Instruments	11.1.1			Not treated
R1-061434	Proposal for DL SYNC channel (SCH) for E-UTRA	Texas Instruments	11.1.3			Not treated
R1-061435	Comparison between repetitive and non-repetitive SCH structure for E-UTRA	Texas Instruments	11.1.3		09/05/2006	Noted
R1-061436	Transmit diversity schemes for SCH E-UTRA	Texas Instruments	11.1.3			Not treated
R1-061437	Performance of Timing Acquisition and Cell Specific Info Detection in Tightly Synchronized Network for E-UTRA	Texas Instruments	11.1.3			Not treated
R1-061438	E-MBMS Reference Signal Structure and TP	Texas Instruments	11.1.4		09/05/2006	Noted
R1-061439	Evaluation of Codebook-based Pre-coding For LTE MIMO Systems	Texas Instruments	11.1.5		09/05/2006	Noted
R1-061440	System Level Simulation Results for Per Group Rate Control In E-UTRA Downlink	Texas Instruments	11.1.5			Not treated
R1-061441	Feedback reduction for rank 1 pre-coding for E-UTRA downlink	Texas Instruments	11.1.5		09/05/2006	Noted
R1-061442	Downlink CQI Reporting Timing in EUTRA Uplink and TP	Texas Instruments	11.2.3			Not treated
R1-061443	System Level Validation of Throughput Target Achievability by LTE MIMO	Texas Instruments	11.6.2	R1-061581		Revised in R1-061581
R1-061444	Spectral Efficiency Gains of Inter-Cell Interference Management with Soft Re-Use Frequency Planning for EUTRA Downlink	Texas Instruments	11.6.2		11/05/2006	Noted
R1-061445	E-MBMS Performance: Data Rates and Coverage	Texas Instruments	11.6.3		10/05/2006	Noted

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R1-061446	Text proposal for "Restricted HS-SCCH"	Lucent Technologies	8			Not treated
R1-061447	Measurement in support of EDCH scheduling	Lucent Technologies	5.6		08/05/2006	Noted
R1-061448	25.215CR0171(Rel-7, C) "Measurement on "Received Non-E-DCH to total power ratio"	Lucent Technologies	5.5		08/05/2006	Rejected
~~R1-061449~~	~~Performance targets for HSPA evolution~~	~~Lucent Technologies~~	~~40~~			Withdrawn
~~R1-061450~~	~~Some physical layer enhancements for achieving HSPA Evolution requirements~~	~~Lucent Technologies~~	~~40~~			Withdrawn
R1-061451	Using multiple antennas to achieve LTE downlink performance requirements	Lucent Technologies	11.6.1		10/05/2006	Noted
R1-061452	Text Proposal for Precoded FDM Reference Signal for SC-FDMA	Lucent Technologies	11.2.1			Not treated
R1-061453	Update on summary tables for L2 signaling	Lucent Technologies	8	R1-061574	09/05/2006	Revised in R1-061574
R1-061454	Text proposal for reference signals when no data is transmitted in uplink	Lucent Technologies	11.2.1			Not treated
R1-061455	System-Level Simulations for Evaluation using Downlink Interference Coordination	Alcatel	11.6.2		11/05/2006	Noted
~~R1-061456~~	~~Way forward on interference coordination TP~~	~~Alcatel, Nokia~~	~~11.2.2~~			Withdrawn
R1-061457	Further evaluation of slot formats for Continuous Connectivity	Philips	8	R1-061571	09/05/2006	TP3 was agreed and TP1 was revised in R1-061571
~~R1-061458~~	~~W-CDMA MIMO Issues~~	~~Motorola~~	~~7~~			Withdrawn
~~R1-061459~~	~~Simulation Results Update on Alcatel MIMO Scheme for DL-LTE~~	~~Alcatel~~	~~11.1.5~~			Withdrawn
R1-061460	Text Proposal on Enhanced Modulation Scheme for OFDMA	KDDI	11.2.3			Not treated
R1-061461	Twin Turbo Performance with Swapping Constellation Re-Arrangement and Log-Likelihood based Combining	KDDI	11.3.4			Not treated
R1-061462	Scope of Future FDD HSPA Evolution	Motorola	10		09/05/2006	Noted
R1-061463	System simulation results with non-static TTI	Motorola	11.6.2			Not treated
~~R1-061464~~	~~LTE Uplink System Performance Evaluation Results TP~~	~~Motorola~~	~~11.5~~			Withdrawn

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R1-061465	LTE Downlink System Performance Evaluation Results TP	Motorola	11.4			Not treated
R1-061466	DL and UL control signalling considerations	Motorola	11.1.1			Not treated
~~R1-061467~~	~~Simulation Results for Downlink Control Signaling~~	~~Motorola~~	~~11.6.2~~			Withdrawn
R1-061468	Uplink Control Signaling Considerations for E-UTRA	Motorola	11.1.1			Not treated
R1-061469	UE Complexity analysis for study item report	Motorola	11.6.5		11/05/2006	Noted
R1-061470	C/U-plane Latency - Analysis	Motorola	11.6.6		10/05/2006	Noted
R1-061471	C/U-plane Latency - Text proposal	Motorola	11.7.8			Not treated. Replaced by R1-061602
R1-061472	LTE Uplink System Performance of VoIP	Motorola	11.6.2	R1-061551		Revised in R1-601551
R1-061473	Segmentation and ACK/NACK Signaling for LTE	Motorola	11.3.3			Not treated
R1-061474	On DRX possibility	Nokia	8	= R1-061023	09/05/2006	Noted
R1-061475	UE tx and rx parts power consumption improvement with DTX and DRX	Nokia	8	R1-061576	09/05/2006	Revised in R1-061576
R1-061476	TP on uplink 10 ms TTI VoIP capacity with UL DPCCCH gating	Nokia	8		09/05/2006	Agreed
~~R1-061477~~	~~Further HSDPA VoIP results~~	~~Nokia~~	~~8~~			Withdrawn
R1-061478	Signalling for enhanced continuous PS connectivity	Nokia, Qualcomm Europe	8		09/05/2006	Noted
R1-061479	Design Considerations for E-UTRA Uplink Reference Signals and TP	InterDigital	11.2.1			Not treated
R1-061480	Text proposal for E-UTRA Downlink Reference Signals	InterDigital	11.2.3			Not treated
R1-061481	User Throughput and Spectrum Efficiency for E-UTRA	InterDigital	11.6.2		10/05/2006	Noted
R1-061482	Text Proposal on Results of Complexity Analysis for E-UTRA MIMO	InterDigital	11.6.5		11/05/2006	Noted
R1-061483	Optional Noise Floor Indication to the RNC	Ericsson	5.5		08/05/2006	Noted
R1-061484	Distributed transmission in E-UTRA downlink	Philips	11.1.1			Not treated
R1-061485	CQI Signalling Occasions	Philips	11.1.1			Not treated
R1-061486	Uplink Pilot: Link and System Level Considerations & Text Proposal	Texas Instruments	11.2.1	R1-061623		Note treated. Revised in R1-061623
R1-061487	Uplink Interference Mitigation via Power Control	Texas Instruments	11.2.2		12/05/2006	Noted

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R1-061488	Deployment of different E-UTRA bandwidth options	Nokia	4		08/05/2006	Noted
R1-061489	HSDPA Cell Repointing	Qualcomm Europe	5.6		08/05/2006	Noted
R1-061490	System level simulation results for MIMO HSDPA	Qualcomm Europe	7		08/05/2006	Noted
R1-061491	Cell and User Throughput Comparison for 2x2 MIMO: D-TxAA and PARC	Qualcomm Europe	7		08/05/2006	Noted
R1-061492	Complexity of MIMO HSDPA receivers	Qualcomm Europe	7		08/05/2006	Noted
R1-061493	Summary on MIMO for HSDPA evaluation	Qualcomm Europe	7		08/05/2006	Noted
R1-061494	Way forward on MIMO for UTRA-FDD	Qualcomm Europe	7		08/05/2006	Noted
R1-061495	Further details of DRX proposal	Qualcomm Europe	8		09/05/2006	Agreed
R1-061496	DL VoIP capacity analysis for regular HS-SCCH operation, HS-SCCH less operation and new HS-SCCH format	Qualcomm Europe	8			Not treated
R1-061497	UL VoIP capacity with DPCCH gating	Qualcomm Europe	8		09/05/2006	Noted
R1-061498	Signalling in support of DTX/DRX	Qualcomm Europe	8		09/05/2006	Noted
R1-061499	TP for Signalling in support of DTX/DRX	Qualcomm Europe	8		09/05/2006	Noted
R1-061500	Impact of ConCon concepts on DCH search	Qualcomm Europe	8		09/05/2006	Noted
R1-061501	Link Analysis for control channel in support of DL-SCH	Qualcomm Europe	11.6.2		09/05/2006	Noted
R1-061502	Link Analysis for DL control channel for UL scheduling	Qualcomm Europe	11.6.2			Not treated
R1-061503	Link Analysis of Single User MIMO - S-VAP vs. S-PARC	Qualcomm Europe	11.6.2			Not treated
R1-061504	Link Analysis of Single User MIMO - Impact of Precoding on S-VAP	Qualcomm Europe	11.6.2		09/05/2006	Noted
R1-061505	Link Analysis of Single User MIMO - Single Codeword vs. Multi Codeword MIMO with HARQ Resynchronization	Qualcomm Europe	11.6.2		09/05/2006	Noted

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061506	System Analysis of the Impact of CQI Reporting Period in DL SIMO OFDMA	Qualcomm Europe	11.6.2			Not treated
R1-061507	System Analysis of the Impact of Number of Sub-bands in DL SIMO OFDMA	Qualcomm Europe	11.6.2			Not treated
R1-061508	System Analysis comparing synchronous and asynchronous adaptive HARQ.	Qualcomm Europe	11.3.4			Not treated
R1-061509	Link Analysis of DL overhead	Qualcomm Europe	11.6.2			Not treated
R1-061510	TP for TR 25.912 on evaluation of E-UTRA peak rates	Qualcomm Europe	11.7.1	R1-061586	10/05/2006	Revised in R1-061586
R1-061511	TP for TR 25.912 on evaluation of p _{tm} in E-UTRA	Qualcomm Europe	11.7.5	R1-061617	11/05/2006	Revised in R1-061617
R1-061512	Link Analysis of Reference Signals for SFN (Multi-Cell) MBMS	Qualcomm Europe	11.6.3		09/05/2006	Noted
R1-061513	System Analysis of DL Single User MIMO OFDMA	Qualcomm Europe	11.6.2			Not treated
R1-061514	BCH design for E-UTRA	Qualcomm Europe	11.3.1			Not treated
R1-061515	Paging design for E-UTRA	Qualcomm Europe	11.3.2			Not treated
R1-061516	DL TrCH Multiplexing issues for E-UTRA	Qualcomm Europe	11.3.3			Not treated
R1-061517	Link Analysis of ACK channel in UL	Qualcomm Europe	11.6.2			Not treated
R1-061518	Link Analysis of CQI channel in UL	Qualcomm Europe	11.6.2			Not treated
R1-061519	Link Analysis of ASICH in UL	Qualcomm Europe	11.6.2			Not treated
R1-061520	Link Analysis for REQCH in UL	Qualcomm Europe	11.6.2			Not treated
R1-061521	Link Analysis for SDCH in UL	Qualcomm Europe	11.6.2			Not treated
R1-061522	Random Access evaluation	Qualcomm Europe	11.6.2		09/05/2006	Noted
R1-061523	Link Analysis of LFDM and IFDM Waveforms	Qualcomm Europe	11.6.2			Not treated
R1-061524	Link Analysis of UL overhead	Qualcomm Europe	11.6.2		10/05/2006	Noted

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R1-061525	System Analysis for UL SIMO SC-FDMA	Qualcomm Europe	11.6.2		10/05/2006	Noted
R1-061526	TP on Link Analysis for DL control channels	Qualcomm Europe	11.4			Not treated
R1-061527	TP on Link Analysis of DL-SCH for Single User MIMO	Qualcomm Europe	11.4			Not treated
R1-061528	TP on Unicast System Throughput for DL SIMO OFDMA	Qualcomm Europe	11.4			Not treated
R1-061529	TP on Unicast System Throughput of DL Single User MIMO OFDMA	Qualcomm Europe	11.4			Not treated
R1-061530	TP on Link Analysis of UL control channels	Qualcomm Europe	11.5			Not treated
R1-061531	TP on Link Analysis of SDCH in UL	Qualcomm Europe	11.5			Not treated
R1-061532	TP on Random Access evaluation	Qualcomm Europe	11.5			Not treated
R1-061533	Text Proposal on System Analysis for UL SIMO SC-FDMA	Qualcomm Europe	11.6.2	R1-061597		Not treated, Revised in R1-061597
R1-061534	E-UTRA Uplink and Downlink Control Signaling – Text Proposal	Intel Corporation	11.1.1			Not treated
R1-061535	20ms TTI Co-existence with 5ms TTI for E-DCH of LCR TDD	ZTE	6.1		08/05/2006	Noted
R1-061536	Resource Allocation in OFDMA Based EUTRA Downlink and TP	ZTE	11.2.3			Not treated
R1-061537	Paging control and Paging Channels	CATT	11.3.2			Not treated
R1-061538	LTE Target Fulfilment: Complexity - Text proposal	Nokia	11.7.7	R1-061620		Revised in R1-061620
R1-061539	LS on Real Time Gaming Requirements (To: RAN2, Cc: RAN1, RAN3, RAN4, SA4)	WG SA1, Siemens	4	= S1-060589	08/05/2006	Noted
R1-061540	Liaison Statement on the Vocabulary TR, TR 21.905 (To: All 3GPP WGs)	WG SA1, Motorola	4	= S1-060658	08/05/2006	Noted
R1-061541	TPs on way forward on interference coordination	Siemens, Texas Instruments	11.2.2	R1-061578		Not treated, Revised in R1-061578
R1-061542	Implementation Issues of SIC Receiver for MIMO Rel.7 WCDMA	Texas Instruments	7	(R1-061431)	08/05/2006	Noted
R1-061543	Combination of ICI cancellation and coordination: performance and TP	RITT, Huawei	11.2.2	(R1-061178)		Not treated

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R1-061544	L1/L2 Control Channel Structure for E-UTRA Downlink	NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic, Sharp, Toshiba Corporation	11.1.1	(R1-061181)	09/05/2006	Noted
R1-061545	Comments on the proposals to modify HS-SCCH for VoIP	NEC Group	8	(R1-061302)		Not treated
R1-061546	MBMS Discussions Summary	Qualcomm Europe	11.1.4		09/05/2006	Noted
R1-061547	MBMS TP from Email discussions	Qualcomm Europe	11.1.4	R1-061593	09/05/2006	Revised in R1-061593
R1-061548	Consideration on UTRA MIMO scheme	NEC Group	7	(R1-061301)	08/05/2006	Noted
R1-061549	LTE downlink system simulation results concerning the LTE target fulfillment	Samsung	11.6.2	(R1-061341)	11/05/2006	Noted
R1-061550	LTE Uplink System Performance and comparison to HSUPA and TP	Motorola	11.6.2	(R1-061169)	10/05/2006	Noted
R1-061551	LTE Uplink System Performance of VoIP	Motorola	11.6.2	(R1-061472)	10/05/2006	Noted
R1-061552	[DRAFT] LS on UE measurement and reception capabilities for LTE	Motorola	4		10/05/2006	Agreed in R1-061598
R1-061553	System level results for Rel-7 MIMO schemes	Ericsson	7	(R1-061349)	08/05/2006	Noted
R1-061554	System level results for Rel-7 MIMO schemes incl. C/I cap	Ericsson	7		08/05/2006	Noted
R1-061555	Text proposal for synchronisation aspects for TR 25.912, L1 aspects	Nokia	11.7.6	(R1-061242)	11/05/2006	Endorsed in R1-061619
R1-061556	Draft LS on Reconfiguration of EUDCH	Panasonic	5.4		12/05/2006	Approved in R1-061632
R1-061557	Draft LS on the signature sequence index allocation for E-HICH and E-RGCH	NEC Group	5.4	R1-061557		Revised in R1-061557
R1-061558	~~Draft LS to RAN3 regarding E-DCH measurements~~	~~Siemens~~	~~5.5~~			Withdrawn
R1-061559	A proposal for a way forward for the UTRA MIMO WI	Nokia, Intel, NEC, Motorola, Texas Instruments, ZTE			08/05/2006	Noted

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R1-061560	Random access control for 1.28Mcps TDD Enhanced Uplink	WG RAN1	6.1		12/05/2006	Approved as final LS
R1-061561	LS on Uplink Control Signalling for 1.28Mcps TDD Enhanced Uplink	WG RAN1	6.1		12/05/2006	Approved as final LS
R1-061562	TR25.826 v1.1.0	IPWireless	6.2			Endorsed version
R1-061563	25.221CR0137r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	(R1-061415)	12/05/2006	Agreed
R1-061564	25.223CR0039r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	(R1-061417)	12/05/2006	Agreed
R1-061565	25.224CR0151r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	(R1-061418)	12/05/2006	Agreed
R1-061566	25.225CR0082r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	(R1-061419)	12/05/2006	Agreed
R1-061567	25.201CR0024r1(Rel-7, B)"Introduction of E-DCH for 3.84Mcps TDD"	IPWireless	6.2	(R1-061414)	12/05/2006	Agreed
R1-061568	E-UTRA target evaluation: TP on Coverage for TR 25 912	Nortel, Ericsson	11.7.4		12/05/2006	Endorsed in R1-061628
R1-061569	Draft LS on the signature sequence index allocation for E-HICH and E-RGCH	NEC Group	5.4	(R1-061557)	12/05/2006	Approved in R1-061633
R1-061570	Measurement in support of E-DCH scheduling	Lucent Technologies	5.6	(R1-061447)		Withdrawn
R1-061571	Combined text proposals on slot formats for Continuous Connectivity	Philips, Ericsson	8		12/05/2006	Agreed
R1-061572	UL Scheduling Scheme for LTE	Panasonic, NTT DoCoMo	11.1.1	= R2-061220		Not treated
R1-061573	TP on HS-DPCCH performance for beta boosting concept	Siemens	8	(R1-061390)	12/05/2006	Agreed
R1-061574	Update on summary tables for L2 signaling	Lucent Technologies	8	(R1-061453)	12/05/2006	Agreed
R1-061575	TP for F-DPCH Gating During Periods of UL DPCCH Gating	Ericsson	8	(R1-061358)	12/05/2006	Agreed
R1-061576	UE tx and rx parts power consumption improvement with DTX and DRX	Nokia	8	(R1-061475)	12/05/2006	Agreed
R1-061577	TP on Cyclic Delay Diversity for Scheduling Gains	Samsung, ETRI, NTT DoCoMo, Intel	11.1.5	(R1-061322)		Not treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061578	TPs on way forward on interference coordination	Siemens, Texas Instruments, Alcatel, Nokia, Nortel	11.2.2	(R1-061541)		Not treated
R1-061579	Summary of E-UTRA Control Signaling Discussions	Ericsson	11.1.1		11/05/2006	Endorsed
R1-061580	Text Proposal in Antenna Selection on Antenna Selection for DL Open Loop MIMO	Freescale Semiconductor, Samsung, LG Electronics	11.1.5			Not treated
R1-061581	System Level Validation of Throughput Target Achievability by LTE MIMO	Texas Instruments	11.6.2	(R1-061443)	11/05/2006	Noted
R1-061582	TR25.814 v.1.3.0 Physical Layer Aspects for Evolved UTRA	Editor, NTT DoCoMo	11			Endorsed version
R1-061583	Evaluation of E-UTRA downlink MIMO reference-signal structures and text proposal	Freescale Semiconductor	11.1.5	(R1-061216)		Not treated
R1-061584	Draft LS on Random Access burst message size for LTE	Motorola	11.1.2		10/05/2006	Approved in R1-061599
R1-061585	TP on peak rate for TR 25.814	Qualcomm	11.4/11.5		12/05/2006	Agreed
R1-061586	TP for TR 25.912 on evaluation of E-UTRA peak rates	Qualcomm Europe	11.7.1	(R1-061510), R1-061610		Revised in R1-061610
R1-061587	Summary of LTE UL evaluation results.	Motorola	11.5	R1-061601	10/05/2006	Revised in R1-061601
R1-061588	E-UTRA target evaluation, text proposal on DL spectral efficiency for 25.912	Ericsson, Motorola	11.7.3		12/05/2006	Endorsed
R1-061589	E-UTRA target evaluation, text proposal on UL spectrum efficiency for 25.912	Ericsson, Motorola	11.7.3		10/05/2006	Endorsed
R1-061590	E-UTRA target evaluation, text proposal on DL user throughput for 25.912	Ericsson, Motorola	11.7.2		12/05/2006	Endorsed
R1-061591	E-UTRA target evaluation, text proposal on UL user throughput for 25.912	Ericsson, Motorola	11.7.2		10/05/2006	Endorsed
R1-061592	Summary of MBMS session	Qualcomm Europe	11.1.4		11/05/2006	Endorsed
R1-061593	Text proposal from MBMS session	Qualcomm Europe	11.1.4	(R1-061547)	11/05/2006	Agreed
R1-061594	System level channel models for E-UTRA evaluations	Ericsson	11.1.5	(R1-061372)	09/05/2006	Agreed

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-061595	DL Summary of LTE System Performance Evaluation Results	Motorola	11.4	R1-061629		Revised in R1-061629
R1-061596	Summary of Cell search session	NTT DoCoMo	11.1.3		11/05/2006	Endorsed
R1-061597	Text Proposal on System Analysis for UL SIMO SC-FDMA	Qualcomm Europe	11.6.2	(R1-061533)		Not treated
R1-061598	LS on UE measurement and reception capabilities for LTE	WG RAN1	4		12/05/2006	Approved version
R1-061599	LS on Random Access burst message size for LTE	WG RAN1	4		10/05/2006	Approved version
R1-061600	[Draft] LS on SFN operation for E-MBMS	Siemens			10/05/2006	Approved in R1-061603
R1-061601	Summary of LTE UL evaluation results.	Motorola	11.5	(R1-061587), R1-061609	11/05/2006	Revised in R1-061609
R1-061602	TP on C/U-plane Latency - Analysis for TR25.814	Motorola	11.6.6		11/05/2006	Endorsed
R1-061603	LS on SFN operation for E-MBMS	WG RAN1	4		10/05/2006	Approved version
R1-061604	Summary of RACH session	Motorola	11.1.2		11/05/2006	Endorsed
R1-061605	Text Proposal for System level simulation for UL virtual MIMO	Nortel	11.5	(R1-061232), R1-061611	11/05/2006	Revised in R1-061611
R1-061606	Summary of LTE MIMO session	Samsung	11.1.5		11/05/2006	Endorsed
R1-061607	Random Access Channel Text proposal based on ad-hoc discussion	Motorola	11.1.2	R1-061614	11/05/2006	Revised in R1-061614
R1-061608	Text proposal on cell search	NTT DoCoMo, CATT, Ericsson, ETRI, Fujitsu, Huawei, LG Electronics, Mitsubishi Electric, Motorola, NEC, Nokia, Nortel, Panasonic, Qualcomm Europe, RITT, Samsung, Sharp, Siemens, Texas Instruments, TD Tech, Toshiba	11.1.3		12/05/2006	Agreed

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R1-061609	Summary of LTE UL evaluation results.	Motorola	11.5	(R1-061601)	11/05/2006	Agreed
R1-061610	TP for TR 25.912 on evaluation of E-UTRA peak rates	Qualcomm Europe	11.7.1	(R1-061586)	11/05/2006	Endorsed in R1-061612
R1-061611	Text Proposal for System level simulation for UL virtual MIMO	Nortel	11.5	(R1-061605)	11/05/2006	Agreed
R1-061612	TP for TR 25.912 on evaluation of E-UTRA peak rates	Qualcomm Europe	11.7.1	(R1-061610)	11/05/2006	Endorsed version
R1-061613	TP on E-MBMS for TR25.912	Qualcomm Europe	-			Withdrawn
R1-061614	Random Access Channel Text proposal based on ad-hoc discussion	Motorola	11.1.2	(R1-061607)	12/05/2006	Agreed
R1-061615	Draft LS on introduction of an E-DCH Node B measurement for RRM (To RAN2/3/4)	Siemens	5.5		12/05/2006	Approved in R1-061637
R1-061616	25.215CR0170r1(Rel-7, C) "Introduction of a Node B measurement for E-DCH RRM"	Siemens	5.5	(R1-061344)	12/05/2006	Revised and to be sent to RAN#32 as company proposal
R1-061617	TP for TR 25.912 on evaluation of p _{tm} in E-UTRA	Qualcomm Europe	11.7.5	(R1-061511)	12/05/2006	Endorsed in R1-061627
R1-061618	TP on Unicast System Throughput for DL SISO OFDMA	Qualcomm Europe	11.4	(R1-061528)		
R1-061619	Text proposal for synchronisation aspects for TR 25.912, L1 aspects	Nokia	11.7.6	(R1-061555)	11/05/2006	Endorsed version
R1-061620	Fulfilment of LTE Complexity Requirements, L1 aspects	Nokia, Ericsson, Motorola, Panasonic, Qualcomm Europe, Samsung	11.7.7	(R1-061236)	12/05/2006	Endorsed
R1-061621	Draft LS on Rel-7 MIMO Conclusions	Nokia, Broadcom, Ericsson, Intel, Lucent, NEC, NTT DoCoMo, Orange, Panasonic, Samsung, T-Mobile, Texas Instruments, Vodafone	7		12/05/2006	Approved in R1-061636

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R1-061622	Reply LS on quality of service for voice handover	WG SA4 (WGSA2), NEC	4		12/05/2006	Noted
R1-061623	Uplink Pilot: Link and System Level Considerations & Text Proposal	Texas Instruments	11.2.1	(R1-061486)		Not treated
R1-061624	Draft LS on introduction of an optional noise floor indication for E-DCH RRM	Ericsson	5.5		08/05/2006	Approved in R1-061635
R1-061625	Response LS on UE measurement and reception capabilities for LTE (To:RAN2, Co: RAN1)	WG RAN4, Motorola	4		12/05/2006	Noted
R1-061626	LTE Downlink System Performance Evaluation Results	Motorola	11.6.2	(R1-061170)	11/05/2006	Noted
R1-061627	TP for TR 25.912 on evaluation of p _{tm} in E-UTRA	Qualcomm Europe	11.7.5	(R1-061617)	12/05/2006	Endorsed version
R1-061628	E-UTRA target evaluation: TP on Coverage for TR 25 912	Nortel, Ericsson	11.7.4	(R1-061568)	12/05/2006	Endorsed version
R1-061629	DL Summary of LTE System Performance Evaluation Results	Motorola	11.4	(R1-061595)	12/05/2006	Revised in R1-061631
R1-061630	DL Summary of LTE System Performance Evaluation Results	Motorola	11.4	(R1-061629)		Noted
R1-061631	DL Summary of LTE System Performance Evaluation Results	Motorola	11.4	(R1-061630)	12/05/2006	Agreed
R1-061632	LS on Reconfiguration of EUDCH	WG RAN1	4			Approved version
R1-061633	LS on the signature sequence index allocation for E-HICH and E-RGCH	WG RAN1	4			Approved version
R1-061634	Rel-7 MIMO Way forward	Nokia, Ericsson, Motorola, Cingular, 3, Texas Instruments	7		12/05/2006	Noted
R1-061635	LS on introduction of an optional noise floor indication for E-DCH RRM	WG RNA1	4			Approved version
R1-061636	LS on Rel-7 MIMO Conclusions	WG RNA1	4			Approved version
R1-061637	LS on introduction of an E-DCH Node B measurement fro RRM (To RAN2/3/4)	WG RNA1	4			Approved version
R1-061638	TR25.903 v0.4.1	Editor, Siemens	8			Noted
R1-061639	DRAFT LS on feedback regarding the concepts for "Continuous connectivity for packet data users"	Siemens	8			Approved in R1-061644

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R1-061640	TR 25.826 v1.1.1	Editor: IPWireless	6.2			Endorsed as v1.2.0 in R1-061649
R1-061641	Approved Report from RAN1#44bis Meeting	MCC Support	3		08/05/2006	Approved version
R1-061642	Approved Report from RAN1/RAN2 Joint Meeting in Athens	MCC Support	3		08/05/2006	Approved version
R1-061643	TR 25.903 v0.5.0 on "Continuous Connectivity for Packet Data Users"	Editor, Siemens	8			Endorsed version
R1-061644	LS on feedback regarding the concepts for "Continuous connectivity for packet data users" (To: RAN2, RAN3, RAN4)	WG RAN1	8			Approved as final LS on the RAN1 reflector
R1-061645	TR25.814 v1.3.2	Editor. NTT DoCoMo	11			Endorsed as version 1.4.0 in R1-061647
R1-061646	Text proposals on LTE Physical Layer Description for TR 25.912, Chapter 7	NTT DoCoMo	11.8	(R1-061111)		Endorsed on the RAN1 reflector
R1-061647	TR25.814 v1.4.0	Editor. NTT DoCoMo	11			Endorsed version
R1-061648	E-UTRA target evaluation, text proposal on DL user throughput for 25.912	NTT DoCoMo	11.7.2	(R1-061590)		Endorsed on the RAN1 reflector
R1-061649	TR 25.826 v1.2.0 "3.84Mcps TDD Enhanced Uplink – Physical Layer Aspects"	Editor: IPWireless	6.2			Endorsed version
R1-061650	TR25.814 v1.4.1	Editor. NTT DoCoMo	11			Endorsed as version 1.5.0 in R1-061651
R1-061651	TR25.814 v1.5.0	Editor. NTT DoCoMo	11			Endorsed version

Annex F: List of actions

1. R1-061616, 25.215CR0170r1(Rel-7, C): This CR was conditionally agreed, provided there are no technical concerns raised on the reflector until 26 May.
2. R1-061640, TR25.826 v1.1.1 : Provide v1.1.1 for email approval until 19 May.
3. Provide TR25.903 updated version (v.0.4.1) in R1-061638 and send LS to other WGs to ask for feedback on the concepts until August (R1-061639). Both for email approval until 19 May.
4. R1-061111 "Text proposals on LTE Physical Layer Description for TR 25.912, Chapter 7": Continue discussion on the email reflector with the target to arrive at an agreed text proposal by 24 May. Set of comments from each company to be provided by 18 May on the email reflector, thereafter the discussion should focus on resolving the comments.