Mueller Exhibit 34

Agenda item	3
Title:	Approved Report of 3GPP TSG RAN WG1 #38 (Prague, Czech Republic, 16 – 20 August, 2004)
Document for:	Comments and approval
Source:	TSG RAN WG1 Secretary

Notes:

All timestamps in this document are in UTC/GMT+1H unless otherwise noted.

Fact Summary

Meeting:	3GPP TSG RAN WG1 #38
Dates:	16th through 20th August, 2004
Venue:	HILTON PRAGUE, Prague, Czech Republic
Host:	The European Friends of 3GPP[1]
Attendees:	96 delegates
Documents:	246 (including some withdrawn and post-meeting artefacts)

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[1] *Alcatel, Ericsson, Lucent Technologies, Nokia, Nortel Networks, O2, Orange, Siemens, SIMAlliance, Sonera, Telefonica, TIM, T-Mobile, Vodafone, Panasonic.*

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Executive summary

WG RAN1 #38 took place in Hilton Prague, Prague, Czech Republic. The meeting started at 9:00 on Monday 16st August 2004 and finished at 17:00 on Friday 20th.

In the duration of the meeting, the several sessions by only RAN1 delegates were held, and also the joint session with RAN2 delegates regarding "Enhanced Uplink", and the joint session with RAN4 delegates regarding "MBMS" were held.

On MIMO discussion, the ad hoc meeting was held to resolve the differences among delegates regarding the system evaluation methodology. On MBMS discussion, the approach of describing MICH was generally agreed, and also the baseline for the further work to finalise soft combining was decided

On FDD Enhanced Uplink, the working assumption fro "E-DPCCH structure" and "E-DCH Timing" was agreed, and at the Joint session with RAN2, the agreement was obtained in "HARQ Principles" and "Scheduling Principles"

The number of contribution documents for this meeting was 246, and those documents were categorized as followed.

Agenda Item	Input Document	Discussed Document
5. Maintenance of R99, Rel4, Rel5, Rel6	16	16
6. MIMO	35	14
7. MBMS	29	26
8. FDD Enhanced Uplink	76	15
9. Joint session on FDD Enhanced uplink with RAN2	40	6
10. Other issues for joint discussion with RAN2	1	1
11. Uplink Enhancements for UTRA TDD	9	8
12. Analysis of higher chip rates for UTRAN evolution (TDD)	10	10
13. Improvement of inter-frequency and inter-system measuremetns	2	2
14. Optimisation of downlink channelisation code utilisation (FDD)	2	0
15. Optimisation of downlink channelisation code utilisation (TDD)	1	0
16. HSDPA ACK/NACK enhancements	5	5
17. Other	1	0

Note : In above table, the revised and withdrawn contributions are included in the input documents. The contributions of RAN1 were only counted for Joint Session.

1 Opening of the meeting

16/08/2004 09:05

The RAN1 Chairman , Mr. Dirk Gerstenberger started the meeting.
Mr. Enrico Buracchini from Telecom Italia Lab welcomed the delegates on behalf of the host companies of *The European Friends of 3GPP (Alcatel, Ericsson, Lucent Technologies, Nokia, Nortel Networks, O2, Orange, Siemens, SIMAlliance, Sonera, Telefonica, TIM, T-Mobile, Vodafone, Panasonic).*
Short wlwcome introduction, enjoy Prague.

1.1   Call for IPR

16/08/2004 09:10

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 and the minutes of the previous RAN WG1 meetings

R1-040810   Draft Agenda for RAN WG1 #38   (RAN1 Chairman)
16/08/2004 09:10 Presented by Mr. Dirk Gerstenberger.
Mr. Chairman explained the overview of meeting items.
CR input in the first morning and afternoon, and then treat MIMO, Later MBMS in tomorrow morning. We will have a Joint session with RAN4 on Tuesday evening. Regarding E-DCH on Tuesday afternoon, Joint session with RAN2 on Wed. E-DCH, and UL-TDOA.
On Thursday or Friday, treat TDD. We will close meeting at 5:00 pm on Firday.
Discussion (Question / Comment):
Decision: This document was approved.
R1-040811   Draft Report of 3GPP TSG RAN WG1 #37   (RAN1 Secretary)
Decision: This document was not available.
R1-040812   Draft Report of 3GPP TSG RAN WG1 Rel.6 Ad Hoc Meeting in Cannes
**   (RAN1 Secretary)**

16/08/2004 09:15
Discussion (Question / Comment): No
Decision: This document was approved with correction the name of the company.
R1-041020   Approved Report of 3GPP TSG RAN WG1 Rel.6 Ad Hoc Meeting in Cannes
**   (RAN1 Secretary)**

3.   Summary from RAN#24 and RAN1/2 Ad Hoc

R1-040835   **Summary from RAN#24**   **(RAN1 Chairman)**
16/08/2004 09:20 Presented by Mr. Dirk Gerstenberger.
Mr. Chairman, Mr. Dirk Gerstenberger presented about the overview of he discussion and decision on the RAN#24, and also announced the meeting plan in the next year. In order to cope with several WIs speedy, RAN1 would have five or six regular WG meetings in next year.
Decision: This document was noted.

R1-040836   **Summary from RAN1/2 Ad hoc meeting in Cannes**   **(RAN1 Chairman)**
                                                      (Withdrawn)

4.   Liaison statement handling

R1-040813   **(To) Reply LS on Code Sharing during Compressed Mode**   **(To:R1 Cc:R3)**
          (Reply to R1-040386)   **TSG RAN WG2**   **(Nokia)**
16/08/2004 09:29 Presented by Mr. Markku Tarkiainen.
Discussion (Question / Comment): No
Decision: This document was noted.

R1-040814   **(Cc) Reply LS on Multiple MBMS Issues**   **(To: S4, R4 Cc: S2, S1, R1, R3, G1, G2, N1)**   **(Reply to S4-040132)**   **TSG RAN WG2**   **(Samsung)**
Discussion (Question / Comment): This document was already treated in Cannes Meeting
Decision: This document was noted.

R1-040815   **(Cc) Reply to "LS on RRC release aspects of CS video and voice service improvements"**   **(To:S2 Cc: R1, R3)**   **(Reply to S2-041641)**   **TSG RAN WG2**
                                                       (Vodafone)
16/08/2004 09:33 Presented by Mr. Yannick Le Pezennec.
Discussion (Question / Comment): There are some discussions for this LS. It commented that it was necessary to look at RAN3 aspects.
Decision: This document was noted.

R1-040816   **(Cc) LS on RRC release aspects of CS video and voice service improvements (To:S2, Cc: R1,R2,GP)**   **(Reply to S2-041641)**   **TSG RAN WG3**   **(Alcatel)**
16/08/2004 09:40 Presented by Mr. Stefan Russ.

Discussion (Question / Comment): Wait for the any proposal regarding the LS in this week.

Decision: This document was noted.

R1-040817   **(To) Response LS on Multiple MBMS Issues**   **(To: R1, R2, R3, GP, G2)**   **(Reply to R1-040385, R1-040651, etc)**   **TSG SA WG4**   **(Siemens)**
Discussion (Question / Comment): This document was already treated in Cannes Meeting.

Decision: This document was noted.

R1-040818   **(Cc) LS on Proposed Modification to HSDPA Radio Bearer Settings (To: R2 Cc: R1)**   **TSG T WG1**   **(QUALCOMM)**
16/08/2004 09510 Presented by Mr. Serge Willenegger.

Discussion (Question / Comment): I was commented about PDU size 656.

Decision: This document was noted.

R1-041014   **(To) LS on the material to be submitted to ITU-R WP8F#14 for Revision 5 of Recommendation ITU-R M.1457**   **(To:R1, R2, R3, R4)**   **ITU-R Ad Hoc**
                                                    (Telecomm Italia)

16/08/2004 09:56 Presented by Mr. Enrico Buracchini.

Discussion (Question / Comment): Mr. Chairman commented that anyone who have some comments about the LS should provided them until Friday morning.

Decision: This documents was noted.

<u>**R1-041045**</u>   **Response to LS on the material to be submitted to ITU-R WP8F#14 for Revision 5 of Recommendation ITU-R M.1457(To:ITU-R Ad Hoc)**
                                                                ITU-R Ad Hoc   (Telecomm Italia)

20/08/2004 11:31 Presented by Mr. Enrico Buracchini.

Discussion (Question / Comment): No

Decision: This draft was approved in Tdoc <u>R1-041046</u>.

<u>**R1-041039**</u>   **(Cc) Reply LS on Proposed Modification to HSDPA Radio Bearer Settings (To:T1 Cc: R1)   TSG RAN WG2   (NTT DoCoMo)**

20/08/2004 13:52 Presented by Mr. Chairman on behalf of NTT DoCoMo.

Decision: This document was noted.

<u>**R1-041040**</u>   **(Cc) LS on enhancing L1 multiplexing test coverage in 3GPP test specifications (To:T1,   Cc: R1)   TSG RAN WG2   (Nokia)**

20/08/2004 13:55 Presented by Mr. Markku Tarkiainen.

Discussion (Question / Comment):

Decision: It was decided to provide quick feedback to TSG WG-T1 that RAN1 would review the L1 aspects and provide more feedback from RAN#38bis in Tdoc <u>R1-041049</u>.

<u>**R1-041049**</u>   **DRAFT LS on L1 multiplexing test coverage in 3GPP test specifications**
                                                      TSG RAN WG1   (Nokia)

20/08/2004 14:45 Presented by Mr. Markku Tarkiainen.

Discussion (Question / Comment):

Decision: This draft was approved as Tdoc <u>R1-041053</u> and it was decided to continue the discussion also whether R99 or Rel.5 until RAN#38bis.

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5.   Maintenance of R99, Rel4, Rel5, Rel6

5.1   R99 CRs + shadow CRs

There were no contributions to this Agenda Item.

5.2   Rel4 CRs + shadow CRs

R1-040826   25222CR122(Rel-4, F)&CR123(Rel-5, A)&CR124(Rel-6, A): "Correction of symbol Xi defined in sub-frame segmentation step"   (Siemens)
16/08/2004 09:57 Presented by Mr. Huang Xue Gang.

Discussion (Question / Comment): It was commented that there was no isolated impact analysis and how impacts was this CR.

Decision: This document was not approved and would be provided the revision with isolated impact analysis in R1-041017.

R1-041017   25222CR122r1(Rel-4, F)&CR123r1(Rel-5, A)&CR124r1(Rel-6, A): "Correction of symbol Xi defined in sub-frame segmentation step"   (Siemens)
20/08/2004 14:50 Presented by Mr. Huang Xue Gang.

Decision: This CR was approved.

R1-040883   25.224CR132(Rel-4, F)&CR133(Rel-5, A)&CR134(Rel-6, A)   "Transmit diversity usage for beacon channels in LCR TDD"   (IPWireless, Interdigital, Siemens)
16/08/2004 10;01 Presented by Mr. Ma Sha.

Decision: This document was approved.

R1-040913   25224CR135(Rel-4, F)&CR136(Rel-5, A)&CR137(Rel-6, A): "Corrections of radio access procedure for 1.28Mcps TDD"   (Siemens AG, CATT)
16/08/2004 09:15 Presented by Mr. Huang Xue Gang.

Discussion (Question / Comment): It was commented that RAN2 would discussed also same CR in Prague.

Decision: This document was approved with modification in the cover sheet (list RAN2 affected specification) in R1-041018.

R1-041018   25224CR135r1(Rel-4, F)&CR136r1(Rel-5, A)&CR137r1(Rel-6, A): "Corrections of radio access procedure for 1.28Mcps TDD"   (Siemens AG, CATT)

5.3   Rel5 CRs + shadow CRs

R1-040839   25.214CR343r1(Rel-5, F)&CR344r1(Rel-6, A) "Clarification of minimum power limit"   (Panasonic)   (Revised R1-040198)
16/08/2004110:20 Presented by Mr. Hidetoshi Suzuki.

Discussion (Question / Comment):

Decision: This document would be looked at again in Joint session with RAN4 on Tuesday. (See Annex A)

R1-041037   25.214CR343r2(Rel-5, F) CR344r2(Rel-6, A) "Clarification of minimum power limit"   (Panasonic)   (Revised R1-040839)
20/08/2004 14:55 Presented by Mr. Hidetoshi Suzuki.

Discussion (Question / Comment):

Decision: It was not clear if CR is need or not. It was decided to conclude discussion in RAN1#38bis

<u>**R1-040874**</u>   **25.211CR191(Rel-5, F)&CR192(Rel-6, A) "Correction for the slot range of DL DPCCH power control preamble for CPCH"   (LG Electronics)**
16/08/2004 10:14 Presented by Mr. Hak-Seong Kim.

Discussion (Question / Comment): It was commented whether this CR should be for R99 or Rel.4, but it was decided that it was not necessary.

Decision: This document was approved.

5.4   Rel6 CRs + shadow CRs

<u>**R1-040823**</u>   **Introduction of a new Node B measurement 'DL Transmission Branch Load'**
                                                                        (Siemens)
16/08/2004 11:15 Presented by Dr. Joern Krause.

<u>**R1-040824**</u>   **CR147 to 25.215 v6.0.0 Introduction of 'DL Transmission Branch Load' measurement   (Siemens)**
16/08/2004 11:23 Presented by Dr. Joern Krause.

Discussion (Question / Comment): There were some questions about the situation in this Tdoc. It was commented that this Tdoc and CR should be discussed with RAN4 or RAN3 regarding diversity, power definition, Maximum power, in especially, power was the most impact to Node B.

Decision: It was decided that Tdoc <u>R1-040823</u>and <u>R1-040824</u> would be discussed again with RAN4 on Tuesday. See Annex A.

<u>**R1-040875**</u>   **25.214CR349(Rel-6, F) "Clarification of SSDT uplink only signaling"**
                                                                        (LG Electronics)
16/08/2004 10:23 Presented by Mr. Hak-Seong, Kim.

Discussion (Question / Comment): It was commented whether this CR is necessary for Rel.5.

Decision: This document was technically endorsed. The CR was needed to provide the CR for Rel.5 also revised in Tdoc <u>R1-041019</u>.

<u>**R1-041019**</u>   **25.214CR349r1(Rel-6, F)&CR350(Rel-5, A) "Clarification of SSDT uplink only signaling"   (LG Electronics)**
19/08/2004 15:10 Presented by Mr. Hak-Seong, Kim.

Discussion (Question / Comment):

Decision: This CR was approved. MCC will correct cover sheets (RE6 Cat F and appropriate WI code).

<u>**R1-041059**</u>   **25.214CR352r1(Rel-6, F)&CR353(Rel-5, A) "Clarification of SSDT uplink only signaling"   (LG Electronics)**
Decision: The CR numbers of Tdoc R1-041019 was overlapped with other document. In order to cope with this problem, the new CR numbers (352 and 353) and Tdoc numner (R1-041059) were allocated by MCC after the meeting closed. R1-041059 was approved as the final version.

[Editor Note] Coffee Break in the morning.

5.5   Inputs for TS 34.108 + TR 25.993

<u>**R1-040882**</u>   **HS RAB combinations for testing**   **(Ericsson)**
16/08/2004 11:47 Presented by Dr. Stefan Parkvall.

Discussion (Question / Comment):

Decision: This document was noted

<u>**R1-040834**</u>   **Inclusion of combinations of multiple radio bearers with HSDPA into TS**
                34.108   **(Vodafone Group)**

16/08/2004 11:52 Presented by Mr. Yannick Le Pézennec.

Discussion (Question / Comment): It was commented that this topic should be treated in RAN2, but the chairman commented that there were some discussion points regarding this issue in RAN1. It was another commented there were overlaps and differences between this proposal and Ericsson's proposal, so they should be checked.

Decision: Regarding above two paper (<u>R1-040882</u> and <u>R1-040834</u>), it was decided that the offline discussion would be continued during this week and given the feedback to Vodafone and Ericsson again. This topic was treated again on Joint session with RAN2 on Thursday.

Joint Session RAN1/RAN2 regarding "HSDPA RABs" was held on Thursday morning.

R2-041856   HSDPA RAB methodology   (Qualcomm)

19/08/2004 11:30 Presented by Mr. Hector Vayanos.

Discussion (Question / Comment): It was commented that the link between 34.108/25.993 and the responsibility from T1, RAN2 or other groups should be carefully considered. However, it was also commented that for the very short future some very basic RAB combinations were needed to increase the HSDPA test coverage in 34.108, and are also needed in TR 25.993.
Decision: This document was noted, and there were the sentence revisions on this document as followed.

- On DL, all PS RABs will be mapped on the HS-DSCH.
  - o   When with voice /video, all PS-RABs mapped on HS-DSCH
  - o   When no voice/video, test 2 PS RABs on HS-DSCH or sprit DCH/HS-DSCH.
- Use MAC-d flow multiplexing to when of RABs on GHS-DSCH > 1 ~~allow the expansion of the number of RABs supported on HS-DSCH.~~
- On UL, a single transport channel is sufficient for supporting all PS RABs.
- Define RABs with support for MAC-d multiplexing on UL to allow the expansion of the number of RABs supported.
- For the PS RAB, support TTI durations of 10 and 20ms, and RLC PDU sizes of 336bits and 656bits.
- For the DCCH, use 20ms TTI instead of 40ms (no need to add a new DPCH RAB).
- Provide support for NB-AMR and 64kbps CS video on the associated DPCH.

R2-041605   Inclusion of combinations of multiple radio bearers with HSDPA into TS
                34.108   **(Vodafone Group, Qualcomm)**

This document was already seen by the working groups separately (<u>R1-040834</u>).

Discussion: It was commented that there was an earlier discussion in RAN WG1 for the uplink rate (lower rates to be included or not), and also for e.g. video (restricting the TFC or not).

Decision: The conclusion was agreed, expect WB-AMR combination, which is FFS, 128kbps UL is FFS. Agreed to add 64kpbs support at the next meeting. RABs proposed to 25.993 may be given to T-Mobile. The updated CR on 34.108 is in tdoc R2-041810

Additional HSDPA RABs for inclusion into 25.993 have been proposed and presented in RAN2 (R2-041811). RAN1 chairman asked for review and input to RAN1 separately. The corresponding input for 25.993 is in R1-041038 from T-Mobile and was presented during the RAN1#38 meeting (also containing the "pointers" to the agreed RABs included from R2-041810). Due to time contains it was agreed that RAN1 will check the layer1 parameters in the September '04 RAN1#38bis meeting.

[Editor Note]   Lunch Break.

<u>**R1-041038**</u>   **Proposed addition for TR25.993**   **(T-Mobile, Siemens, Nokia)**

20/08/2004 13:58 Presented by Mr. Dirk Kistowski from T-Mobile.

Discussion:

Decision: This document was noted. It was decided to be reviewed by RAN1 until RAN1#38bis.

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5.6   Other

<u>**R1-040904**</u>   **Issues with Radio Link Synchronization**   **(Ericsson)**

16/08/2004 14:13 Presented by Dr. Stefan Parkvall.

Discussion (Question / Comment): There were some questions about A and B synchronization. It was commented that the document had two issue, one is Timing maintain handover and link synchronization.

Decision: This document was noted and more discussion was continued till next meeting.

6.   MIMO

The overview of MIMO discussion was as followed.

It was agreed to use 6 sectors and 2Rx LMMSE as reference case for MIMO for MIMO studies shown in Tdoc R1-040981, and revised version R1-041022.

Regarding the system evaluation methodology, the ad hoc meeting was held to resolve the differences among delegates: Scheduler, UE speed model, traffic model, inclusion of HSDPA traffic models, modelling of overhead channels fixed/variable power, wrap-around. The report of the ad hoc meeting was distributed in Tdoc R1-041036.

6.1   TR 25.876 structure, MIMO requirements

R1-040931   TR25.876 v.1.5.1   "Multiple-Input Multiple Output in UTRA"
                                                                (Editor : Lucent Technologies)

16/08/2004 14:50 Presented by Mr. Teck Hu.

Decision : This document was approved as version 1.6.0 in Tdoc R1-041021.

R1-040870   MIMO generic scheme and text proposal for the MIMO TR 25.876
                                                                (Nortel Networks)

16/08/2004 14:59 Presented by Mr. Hassan El Nahas.

Discussion (Question / Comment): It was commented about the difference form the Nokia proposal in Montreal meeting.

Decision: This document was noted. It was decided to have the offline discussion until Wednesday evening.

R1-040915   Tx Diversity and MIMO   **(Alcatel)**

16/08/2004 15:19 Presented by Mr. Stefan Russ.

Discussion (Question / Comment): It was commented that we need the definition of MIMO and TX Diversity.

Decision: This document was not approved and the text proposal was not included.

[Editor Note]Take break for coffee.

R1-040905   MIMO Evolution Path requirements   **(Siemens)**

16/08/2004 16:20 Presented by Dr. Seyed H Mortazavi

Discussion (Question / Comment): It was commented that for time consuming we should have offline discussion before the conclusion.

Decision: This document was noted. It was decided to have the offline discussion until Wednesday evening.

R1-040981   MIMO Reference Cases   **(Nokia)**

16/08/2004 16:45 Presented by Mr. Jean-Philippe Kermoal.

Discussion (Question / Comment): It was commented that this reference cases were very useful.

Decision: It was agreed to use 6 sectors and 2Rx LMMSE as reference case for MIMO for MIMO studies.

It was decided to provide a TP after the offline discussion in Tdoc R1-041022.

R1-041022   MIMO Reference Cases   **(Nokia)**

19/08/2004 14:45 Presented by Jean-Philippe Kermoal.

Discussion (Question / Comment): no
Decision: This document was approved.

<u>R1-041050</u>   **TR25.876 v.1.6.1   "Multiple-Input Multiple Output in UTRA"**
                                                                (Lucent Technologies)
   Decision: This document was not available. It was decided to approval via email until August 31

6.2   System evaluation methodology

<u>R1-040982</u>   **Comments and TP on MIMO Compatibility Assessment**
                                                                (QUALCOMM Europe)
   16/08/2004 16:55 Presented by Mr. Hans Schotten. .

   Discussion (Question / Comment):
   Decision: It was decided to provide the revision after offline discussion in Tdoc <u>R1-041023</u> by Wednesday
   evening.

<u>R1-041023</u>   **Comments and TP on MIMO Compatibility Assessment**
                                                                (QUALCOMM Europe)
   19/08/2004 14:55 Presented by Mr. Hans Schotten.

   Discussion (Question / Comment): no
   Decision: This document was approved.

<u>R1-040934</u>   **Text Proposal on MIMO System Simulation Evaluation Methodology**
                                                (Mitsubishi Electric Research Labs : MERL)
   16/08/2004 17:14 Presented by Dr. Neelesh B. Mehta.

   Discussion (Question / Comment):

   Decision: This document was noted.

<u>R1-040980</u>   **Text Proposal on System Setup for MIMO   (Nokia, TeliaSonera, T-Mobile)**
   16/08/2004 17:18 Presented by Mr. Jean-Philippe Kermoal.

   Discussion (Question / Comment):

   Decision: This document was noted. Regarding the above two proposal, it should be resolved the differences :
   Scheduler, UE speed model, traffic model, inclusion of HSDPA traffic models, modelling of overhead channels
   fixed/variable power, wrap-around. With regard to MIMO, we have more offline discussion and after Wednesday ,
   we would check the discussion results.

6.3   MIMO Ad Hoc Meeting

   The Ad Hoc meeting for MIMO was held on Tuesday morning (17/08/2004). Participating companies: Alcatel, ETRI, T-
Mobile, Ericsson, Nokia, Siemens, TeliaSonera, Mitsubishi, Nortel, Huawei, Siemens, Lucent, Samsung, Qualcomm. R1-
040982, R1-040870, and R1-040905 were also discussed in the MIMO AdHoc meeting. The outcome of the discussions
was summarized in R1-041036.

<u>R1-041036</u>   **Summary from MIMO ad hoc meeting**   **(MIMO ad hoc)**

   19/08/2004 14:50 Presented by Mr. Hans Schotten of Qualcomm on behalf of the ad hoc meeting

   Discussion (Question / Comment): No
   Decision: This summary was approved.

<u>R1-041034</u>   **Text proposal on System setup to MIMO**   **(MIMO ad hoc)**
   19/08/2004 14: 58Presented by Dr. Neelesh B. Mehta on behalf of the ad hoc meeting.

   Discussion (Question / Comment): It was commented about editorial revision.
   Decision: The document was approved with addition of reference of [6] and correction "the reference cases " in
   A.2.1.10.2. And also it was decided to continue discussion of particular proposals (with indication of gains) at
   RAN1#39.

The following documents were not treated.

R1-040820   Modified per stream rate control for 2-antenna MIMO   (TI)
                                                                    (=R1-040517)
R1-040821   Text proposal for modified per stream rate control for 2-antenna   (TI)
(=R1-040518)
R1-040829   Double-ASTTD with Sub-Group Rate Control   (Huawei Technologies)
R1-040830   Text Proposal for Double-ASTTD with Sub-Group Rate Control
                                                              (Huawei Technologies)
R1-040871   CQI feedback for RC-MPD   (Nortel Networks)
R1-040920   Spatial channel coding (SCC) for high throughput with a single receive antenna
                                                                          (Philips)
R1-040921   Text Proposal for Spatial Channel Coding   (Philips)
R1-040868   Further simulations on RC-MPD and comparison with PARC, DSTTD, and
R'99 TxDiv   (Nortel Networks)
R1-040869   First MIMO Traffic simulations for RC-MPD and PARC with real channnel
estimation   (Nortel Networks)
R1-040916   4Tx open-loop closed-loop (OL-CL) MIMO   (Alcatel)
                                                                    (=R1-040521)

R1-040917   Text Proposal for 4Tx open-loop closed-loop (OL-CL) MIMO   (Alcatel)
                                                                    (=R1-040595)

R1-040930   Performance aspects of advanced spectral processing MIMO receivers for
multi-code reception   (Fujitsu, Dune Srl)
R1-040986   Comparison of D-ASTTD-SGRC and DSTTD-SGRC using full-queue system
simulations   (Huawei Technologies)
R1-040987   Midamble Allocation and Channelistion Code Allocation Signaling to Support
MIMO in UTRA TDD   (IPWireless) (R1-040580)
R1-040988   Text Proposal for MIMO TR 25.876 (Midamble Allocation and Code
Allocation Signaling)   (IPWireless) (R1-040581)
R1-040989   Per Antenna Rate Control for UTRA TDD   (IPWireless) (R1-040582)
R1-041007   Per-Stream Rate Control for LCR TDD_System Proposal and Initial Link
Level Results   (CATT)
R1-041011   Fairness based multiuser MIMO scheduling   (Samsung)
R1-041012   Antenna selection based MIMO   (Samsung & SNU)
R1-041013   PU2RC Simulation   (Samsung & SNU)
R1-040990   Text Proposal for MIMO TR 25.876 (MIMO Proposal for UTRA TDD)
                                                     (IPWireless) (R1-040583)

7. MBMS

The overview of discussion and conclusion about MBMS was as followed.

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1. MICH

- General agreement with the approach of describing MICH in R1-040884. Proceed with drafting of RAN1 CRs.

- NI mapping (q formula): Take proposal in R1-040984 as working assumption, perform further simulations until RAN1#38bis regarding f(.) to confirm the performance.

- Inform other WGs about RAN1's decisions on MICH (draft version in R1-041025, approved version in R1-041048).

- Version 1.4.1 of the TR 25.803 in (in R1-041026). E-mail approval until August 30 (only Siemens TPs will be included. Qualcomm TPs will be proposed in a separate TP for approval)

2. Other MBMS Layer 1 Specification

Regarding MBMS L1 limitations, it was decided where RAN 1 could agree, and LS toRAN2/3/4 was made in Tdoc R1-041047

3. UE Capability

Soft Combining

As the following discussion point, the baseline for the further work to finalise soft combining was decided in Tdoc R1-041030, and also it was decided to continue discussion via reflector before RAN1#38bis.

Time multiplexing on TTI basis & (PhCH) soft combining?
- Allowing for different MTCH or MTCH and MCCH in different RL to be combined.
- Combining decision could be based e.g. on TFCI and/or scheduling information
- TFCI combining cannot be assumed a-priori. (more pessimistic TFCI power setting ? Or use single TF detection on each TrCH, fixed position and no TFCI bits)

Additionally, LS to RAN2 with specific questions related to the compromise proposal was decided in Tdoc R1-041052.

4. MBMS UE performance requirements (Joint session with RAN4)

See Clause 18 and Annex A.

R1-040983   TR 25.803 v1.3.1   **(QUALCOMM Europe)**
16/08/2004 17:41 Presented by Mr. Serge Willenegger.

Decision : This document was approved as v1.4.0 in R1-041024.

R1-041024   TR 25.803 v1.4.0   **(QUALCOMM Europe)**
R1-041026   TR 25.803 v1.4.1   **(QUALCOMM Europe)**
20/08/2004 16:40 Presented by Mr. Serge Willenegger.

Decision : It was decided to approve via E-mail until August 30 (only Siemens TPs will be included. Qualcomm TPs will be proposed in a separate TP for approval)

R1-040827   Simulation results for 1.28Mcps TDD MBMS   **(Siemens)**
            (Revised R1-040441)
16/08/2004 17:44 Presented by Mr. Huang Xue Gang.

Decision: This document was agreed for inclusion in TR.

<u>**R1-040828**</u>   **Coverage Results for MBMS (1.28Mcps TDD): Updated Text Proposal for TR**
            25.803   **(Siemens) (Revised <u>R1-040620</u>)**
        16/08/2004 17:46 Presented by Mr. Huang Xue Gang.

    Decision: This document was agreed for inclusion in TR.

7.1   MBMS indicator channel (MICH)

<u>**R1-040884**</u>   **Draft CR for introduction of MICH in 25.21x**   **(QUALCOMM Europe)**
        16/08/2004 17:52 Presented by Mr. Serge Willenegger.

    Discussion (Question / Comment): It was commented that there were some editorial errors.
    Decision: This document was noted

<u>**R1-040867**</u>   **MBMS notification procedure on MICH**   **(Panasonic)**
        16/08/2004 18:09 Presented by Mr. Frédéric Charpentier.

    Discussion (Question / Comment): There are many comments and questions about the proposal notification
    procedure from especially Qualcomm and NEC.
    Decision: This document was noted

<u>**R1-041015**</u>   **Comments on MICH mapping proposal in <u>R1-040867</u>**   **(NEC)**
        16/08/2004 18:34 Presented by Mr. Thanh Bui.

    Discussion (Question / Comment):
    Decision: This document was noted.

<u>**R1-040984**</u>   **On NI mapping**   **(QUALCOMM)**
        16/08/2004 18:41 Presented by Mr. Hector Vayanos.

    Discussion (Question / Comment): There are many comments and questions from Panasonic. Regarding MICH,
    NEC was objective to Panasonic, Panasonic was objective to Qualcomm.
    Decision: This document was noted.

<u>**R1-040848**</u>   **On MICH mapping**   **(NEC)**
        16/08/2004 19:05 Presented by Mr. Thanh Bui.

    Discussion (Question / Comment): It was commented that in this situation, there are no progress, so take this
    proposal as working assumption and analyse until next meeting whether it has any problem.
    Decision: This document was noted.

From the discussion about above contributions, the following conclusion was completed.

    Conclusion about MICH

    - General agreement with the approach of describing MICH in <u>R1-040884</u>. Proceed with drafting of RAN1 CRs.

    - NI mapping (q formula): Take proposal in <u>R1-040984</u> as working assumption, perform further simulations until
      RAN1#38bis regarding f(.) to confirm the performance.

    - Inform other WGs about RAN1's decisions on MICH (in <u>R1-041025</u>).

    - Version 1.4.1 of the TR 25.803 (in <u>R1-041026</u>).

    [Editor Note] The first day was finished.

<u>**R1-041025**</u>   **[DRAFT] LS on introduction of the MICH in 25.21 (QUALCOMM)**
        20/08/2004 12:25 Presented by Mr. Serge Willenegger.

    Decision: The draft was approved in Tdoc <u>R1-041048</u>.

7.2   Other MBMS L1 specification aspects

<u>R1-040840</u>   **MBMS L1 possible limitations**   **(Panasonic)**
(Revised <u>R1-040710</u>)

17/08/2004 09:09 Presented by Mr. Hidetoshi Suzuki.

Discussion (Question / Comment): There are many questions and comments for the issues describing in this contributions. It was commented that it was good idea to reduce unnecessary functions and BLER measurement of S-CCPCH was necessary. The question was asked what kind of scenario was assumed on BLER measuremsnts.

Decision: This document was noted. I was decided to make a draft LS to RAN2/3/4 with the points where RAN1 can agree on <u>R1-041029</u>.

<u>R1-041029</u>   **DRAFT Question on the impact of L1 limitations on MBMS (Panasonic)**

20/08/2004 11:35 Presented by Mr. Hidetoshi Suzuki.

Discussion (Question / Comment): There were some comments and suggestion of sentence revision.

Decision: The draft was approved with modifications in Tdoc <u>R1-041047</u>.

<u>R1-040918</u>   **Reordering of TTIs in MBMS**   **(Siemens)**
(Revised <u>R1-040775</u>)

17/08/2004 09:51 Presented by Mr. Thomas Hindelang.

Discussion (Question / Comment): It was commented that MTCH level measurement was not really RAN1 matter and also the similar effect might be achievable by time shifting TX from Node B.

Decision: This document was noted. Only applicable for Soft Conbining depending on measurement time in UE. But, this topic is the higher layer issue, RAN1 could not agree at the moment. It was necessary to discuss with other RAN WG.

[Editor Note] Coffee break

7.3   UE capability definition (incl. macro-diversity)

<u>R1-040841</u>   **How MBMS UE capability is defined?**   **(Panasonic)**
17/08/2004 14:39 Presented by Mr. Hidetoshi Suzuki.

Discussion (Question / Comment): It was commented about the capability about reception of MTCH. It was commented that this contribution was not only for UE capability, some description fro network side was necessary.

The question was asked if 6.6 rule was applied. The answer to the question was that it was not necesarrt for S-CCPCH carrying MTCH.

Decision: This document was noted

<u>R1-040886</u>   **UE Capability for MBMS**   **(QUALCOMM Europe)**
17/08/2004 14:52 Presented by Mr. Serge Willenegger.

Discussion (Question / Comment): There were some question and comments and also objections for the UE capability on this contribution. It was commented that soft combining buffer shoud be configured depending on the configured TTI and the other parameters.
Decision: This document was noted

<u>R1-040919</u>   **Further considerations on the UE capability for MBMS (FDD)**   **(Siemens)**
<u>R1-041016</u>   **Further considerations on the UE capability for MBMS (FDD)**   **(Siemens)**
(revised <u>R1-040919</u>)
17/08/2004 15:13 Presented by Mr. Thomas Hindelang.

Discussion (Question / Comment):.It was commented that 256kbps service and around 25% overhead should be claified.
Decision: This document was noted

[Chairman's Note]   Discussion to continue on how to define the MBMS capability requirement

[Editor Note] Coffee break,

Soft Combining

R1-040885   Soft combining aspects of MBMS   (QUALCOMM Europe)
17/08/2004 11:15 Presented by Mr. Serge Willenegger.

Discussion (Question / Comment): There were some comments and questions regarding the conditions and type for SC. The question was asked if S-CCPCH needed indentical.
Decision: This document was noted

R1-040998   MBMS Transport and Physical Layer Soft Combining   (Motorola)
17/08/2004 11:28 Presented by Mr. Mark Harrison.

Discussion (Question / Comment): There are some comments about time relation and difference. It was commented that it should be discussed with RAN2 before decision.

Decision: This document was noted.

Discussion Point for Soft Combining

Time multiplexing on TTI basis & (PhCH) soft combining?

➢ Allowing for different MTCH or MTCH and MCCH in different RL to be combined.

➢ Combining decision could be based e.g. on TFCI and/or scheduling information

➢ TFCI combining cannot be assumed a-priori. (more pessimistic TFCI power setting ? Or use single TF detection on each TrCH, fixed position and no TFCI bits)

Draft a compromise proposal for LLR combining in (R1-041030)

Draft an LS to RAN2 with specific questions related to the compromise proposal in (R1-041031) Nortel

R1-041030   Baseline for finalization of MBMS soft combining
                                        (Qualcomm Europe, Motorola)

20/08/2004 12:45 & 14:30 Presented by Mr. Serge Willenegger.

Discussion (Question / Comment):
Decision: This document was agreed as baseline for the further work to finalise soft combining. It was decided to continue discussion via reflector before RAN1#38bis.

R1-041031   Draft LS on questions on MBMS   (Nortel Networks)

20/08/2004 12:30 Presented by Ms. Evelyne Le Strat.

Discussion (Question / Comment):
Decision: This draft was approved with modifications (removal last two bullets + grammar) in Tdoc R1-041052 (cc: RAN3)

R1-041002   Soft Combining for MBMS   (Ericsson)
17/08/2004 12:16 Presented by Dr. Stefan Parkvall.

The summary of discussion points was presented.

Discussion (Question / Comment):

Decision: This document was noted. It was decided to continue the discussion about timing different.

[Editor Note] Lunch break

R1-040887   S-CCPCH performance with 256 kbps   (QUALCOMM Europe)
                                                    (=R1-040716)

17/08/2004 14:16 Presented by Mr. Serge Willenegger.

Discussion (Question / Comment): It was commnetd that the performance difference between 80 ms TTI and 40 ms TTI would become more large if we have taken into account the measurement gap
Decision: This document was noted. The simulation results on this contribution would be included in the TR.

<u>R1-040849</u>   **UE Capability**   **(NEC)**

7.4   MBMS UE performance requirements (joint with RAN4)

The report of this AI was described in clause 18 and also the draft report of RAN1/RAN4 Joint Session was distributed from WG4 secretary as shown in Annex A.

8   FDD Enhanced Uplink

The overview of conclusion about this AI was as followed.

1. E-DPCCH structure
       Working assumption

             For 2ms TTI
                 CDM
                 Power requirement accounted for by E-TFC selection
             For 10ms TTI
                 Either CDM (E-DPCCH same as for 2ms, e.g. 5 times repeated) or TDM (e.g. E-DPCCH same as for 2ms,
                 time-mux in first 3 slots of E-DCH)
                 Power requirements accounted for by E-TFC selection
                 Additional ways of dealing with power limitation might be necessary
                     ➔ Work on a 2ms coding structure can start already.
                     ➔ Discussion on CDM/TDM for 10ms taken at RAN1#38bis
                     ➔ No more simultaneously code channels will be added for E-UL

       Uplink signalling Information

             Transmission format and HARQ related information up to in the order of 10 bits
                         E-TFRI [5] bites, Boost [1] bit, NDI[2-3]bits, TSN/RSN[0-3]bits, RV[0-2]bits
             Scheduling information up to in the order of 12 bits
                         Rate request [1-5]bits, power info [4-5]bits, Buffer info [3-4]bits, time duration [0-5]bits
                         assumed TFC for SHO [3-5]bits, QoS requirements [4]bis
2. E-DCH Timing

     Working assumption

       E-DCH timing is DPCH frame aligned.

R1-040971   TR25.808 v0.0.3   **(Nokia)**
        17/08/2004 16:23 Presented by Mr. Karri Ranta-aho.

        Discussion (Question / Comment):
        Decision: This document was approved as version 0.1.0 in Tdoc R1-041033

R1-041033   TR25.808 v0.1.0   **(Nokia)**

8.1   Basic E-DCH physical layer structure (Code mapping, E-DPCCH)

E-DPCCH Structure
■   **TDM**

R1-040962   Proposal on RR, SI time multiplexing with HS-DPCCH   (NTT DoCoMo)
        17/08/2004 16:32 Presented by Mr. Anil Umesh
        Discussion (Question / Comment): The question was asked what was the impact to HSDPA on this method. The
        answer to the question was that the proposal was to link with Rel-6.
        Decision: This document was noted.
R1-040972   HSUPA Requirements for uplink signalling   **(Nokia)**
        17/08/2004 16:52 Presented by Mr. Karri Ranta-aho.

        Discussion (Question / Comment):
        Decision: This document was noted.

<u>**R1-040872**</u>   **UL signalling for FDD enhanced UL**   **(Nortel Networks)**
<u>**R1-041004**</u>   **UL signalling for FDD enhanced UL   (Nortel Networks) (Revised <u>R1-040872</u>)**
　　　　17/08/2004 17:03 Presented by Ms. Sarah Boumendil.

Discussion (Question / Comment): There was a question about the simulation assumption. It was commented that TDM might impact to PAR due to different gain factors. The question was asked that tailing was assumed or not. The answer to the question was that it's not a particular isuue.

Decision: This document was noted

<u>**R1-040880**</u>   **Uplink Signalling alternatives for FDD Enhanced Uplink**

(Mitsubishi Electronic)

　　　　17/08/2004 17:15 Presented by Mr. Michiaki Takanoy.

Discussion (Question / Comment):

Decision: This document was noted.

■   **CDM**

<u>**R1-040956**</u>   **Uplink Control Signaling**   **(Ericsson)**
　　　　17/08/2004 17:27 Presented by Dr. Stefan Parkvall.
　　　　Decision: This document was noted.

Mr. Chairman asked companies for their preference between TDM and CDM. NTT DoCoMo , Motorola, Nortel , Mitsubishi supports TDM approach, Other supports CDM approach. And then it was decided that we should have the offline discussion for this topic, and also come back in this week.
Regarding this topic, the discussion started again on Thursday afternoon, and as result of the discussion, the following conclusion could be obtained.

Working assumption

　　For 2ms TTI
　　　　CDM
　　　　Power requirement accounted for by E-TFC selection
　　For 10ms TTI
　　　　Either CDM (E-DPPCH same as for 2ms, e.g. 5 times repeated) or TDM (e.g. E-DPCCH same as for 2ms, time-mux in first 3 slots of E-DCH)
　　　　Power requirements accounted for by E-TFC selection
　　　　Additional ways of dealing with power limitation might be necessary
　　　　　➔Work on a 2ms coding structure can start already.
　　　　　➔Discussion on CDM/TDM for 10ms taken at RAN1#38bis
　　　　　➔No more simultaneously code channels will be added for E-UL

Uplink signalling Information

　　Transmission format and HARQ related information up to in the order of 10 bits
　　　　　　　E-TFRI [5] bites, Boost [1] bit, NDI[2-3]bits, TSN/RSN[0-3]bits, RV[0-2]bits
　　Scheduling information up to in the order of 12 bits
　　　　　　　Rate request [1-5]bits, power info [4-5]bits, Buffer info [3-4]bits, time duration [0-5]bits
　　　　　　　assumed TFC for SHO [3-5]bits, QoS requirements [4]bis

E-DCH Timing

<u>**R1-040833**</u>   **EDCH timing**   **(Huawei Technologies)**
　　　　19/08/2004 17:40 Presented by Ms. Ma Sha.

Discussion (Question / Comment):
Decision: This document was noted.

<u>**R1-040843**</u>   **Channel priority and uplink transmission timing**   **(Panasonic)**
　　　　19/08/2004 17:55 Presented by Mr. Hidetoshi Suzuki.

Discussion (Question / Comment):

Decision: This document was noted.

<u>**R1-040890**</u>   **TP on E-DCH Timing**   **(QUALCOMM Europe)**
      19/08/2004 18:00 Presented by Mr. Serge Willenegger.

      Discussion (Question / Comment): It was commented that DPDCH aligmnet was better for TFC selection.
      Decision: This document was noted.

      Regarding E-DCH timing, many discussion were repeated. Nokia, Ericsson, Samsung, Motorola, and Lucent agreed with Qualcomm. In especially, Panasonic objected that E-DCH timing was DPDCH flame aligned.

      Regarding this topic, the discussion started again on Friday afternoon, and Panasonic supported to the contribution, as result of the discussion, the following working assumption could be obtained.

     Working assumption

       E-DCH timing is DPCH frame aligned.

The following documents were not treated.

<u>R1-040943</u>	**Uplink signaling for E-DCH**	**(LG Electronics)**
<u>R1-040865</u>	**EUL scheduling: signalling support**	**(Samsung)**
<u>R1-040850</u>	**EUL physical channel code mapping**	**(Samsung)**
<u>R1-040888</u>	**OVSF code space for E-DCH**	**(QUALCOMM Europe)**
<u>R1-040889</u>	**TP on PhCH mapping of E-DCH**	**(QUALCOMM Europe)**
<u>R1-040941</u>	**Physical channel code mapping for E-DCH**	**(LG Electronics)**
<u>R1-040949</u>	**Secondary Pilot for E-DCH**	**(NEC)**
<u>R1-040955</u>	**System performance with low capability UE (2ms TTI vs 10ms TTI)**	
		(Panasonic)
<u>R1-040957</u>	**Downlink Control Signaling**	**(Ericsson)**
<u>R1-041008</u>	**Simulations related to** <u>R1-040962</u>	**(NTT DoCoMo)**

8.2   E-DCH TrCH processing (E-DCH channel coding aspects, self-decodable/non-self-decodable transmissions)

<u>R1-040855</u>	**HARQ: physical layer aspects**	**(Samsung)**
		(Revised <u>R1-040797</u>)
<u>R1-040891</u>	**Choice of RV and code rates**	**(QUALCOMM Europe)**
<u>R1-040892</u>	**TP on IR versions**	**(QUALCOMM Europe)**
<u>R1-040893</u>	**Impact of SNR mismatch on turbo decoding**	**(QUALCOMM Europe)**
<u>R1-040894</u>	**Reference short-term link curves for 10ms TTI**	**(QUALCOMM Europe)**
<u>R1-040958</u>	**E-DCH Physical Layer Hybrid ARQ Processing**	**(Ericsson)**

8.3   E-DCH transmit power issues (Power offsets, PAR)

In RAN1 #38, there was no time to treat this topic.

<u>R1-040831</u>	**Power adjustment of ACK/NACK signaling based on ACK/NACK error rate**	
		(Huawei Technologies)
<u>R1-040859</u>	**Power control at the maximum power limit for EUL**	**(Samsung)**
<u>R1-040909</u>	**EUL Power Requirements**	**(Motorola)**
<u>R1-040927</u>	**Retransmission Power Optimisation**	**(Siemens)**
<u>R1-040928</u>	**E-DCH HARQ with Power Offset**	**(Siemens)**
<u>R1-041005</u>	**Traffic to Pilot Ratio Settings and Pilot Powers for EDCH**	
		(Lucent Technologies)

8.4   Signalling support for HARQ

In RAN1 #38, there was no time to treat this topic.

<u>R1-040832</u>	**Downlink Signalling Mapping of ACK and NACK**	**(Huawei Technologies)**
<u>R1-040837</u>	**DL ACK structure**	**(Via Telecom)**
<u>R1-040838</u>	**DL ACK Selection**	**(Via Telecom)**
<u>R1-040842</u>	**Number of simultaneous reception of Acks in SHO**	**(Panasonic)**
<u>R1-040862</u>	**RV Signalling**	**(Samsung)**
<u>R1-040895</u>	**E-TFICH performance with synchronous HARQ**	**(QUALCOMM Europe)**
<u>R1-040896</u>	**E-TFICH performance with asynchronous HARQ**	**(QUALCOMM Europe)**
<u>R1-040897</u>	**HARQ channel mapping in DL**	**(QUALCOMM Europe)**
		(=<u>R1-040723</u>)
<u>R1-040922</u>	**Interaction between Enhanced Uplink and Compressed Mode(Philips)**	
		(Revised <u>R1-040770</u>)
<u>R1-040923</u>	**HARQ in SHO for Enhanced Uplink**	**(Philips)**
		(Revised R2-041286)
<u>R1-040942</u>	**Signaling to support 2 ms and 10 ms TTIs for E-DCH**	**(LG Electronics)**
<u>R1-040944</u>	**Principles of downlink ACK/NACK signaling for E-DCH**	**(LG Electronics)**
<u>R1-040952</u>	**HARQ Downlink Signalling**	**(NEC) (<u>R1-040742</u>)**
<u>R1-040973</u>	**Implicit Redundancy Version for IR HARQ Scheme**	
		(Nokia) (=<u>R1-040752</u>)
<u>R1-040974</u>	**HSUPA HARQ ACK/NACK signalling performance**	**(Nokia)**

8.5   Signalling support for Scheduler

In RAN1 #38, there was no time to treat this topic.

<u>R1-040844</u>	**Uplink power signalling information for the scheduling**	**(Panasonic)**
<u>R1-040854</u>	**Uplink signalling for Node B controlled scheduling**	**(Samsung)**
	(Revised <u>R1-040696</u>)	
<u>R1-040856</u>	**Downlink control channel structure**	**(Samsung) (Withdrawn)**
<u>R1-040857</u>	**System level performance with periodic TPS reporting**	**(Samsung)**
<u>R1-040879</u>	**Signalling for primary Node-B selection in SHO**	**(Mitsubishi Electric)**
<u>R1-040912</u>	**Multi-step rate scheduling and synchronization scheme**	**(Alcatel Shanghai Bell)**
<u>R1-040924</u>	**Node B controlled scheduling in soft handover**	**(Philips)**
		(Revised R2-041286)
<u>R1-040932</u>	**Principles of scheduling for enhanced uplink**	**(Fujitsu)**
<u>R1-040933</u>	**Node B controlled scheduling in soft handover**	**(Fujitsu)**
<u>R1-040945</u>	**Timing of downlink signaling with 10 ms TTI for E-DCH**	**(LG Electronics)**
<u>R1-040953</u>	**Robust Signalling in Rate Scheduling (NEC) (<u>R1-040740</u>) (Not Available)**	
<u>R1-040968</u>	**UL Signalling overhead for node B scheduling in SHO**	**(Siemens)**
		(Revised <u>R1-040788</u>)
<u>R1-040969</u>	**DL Signalling overhead for node B scheduling**	**(Siemens)**
		(Revised <u>R1-040787</u>)
<u>R1-040975</u>	**HSUPA Signalling aspects of the rate scheduling**	**(Nokia) (=<u>R1-040750</u>)**
<u>R1-040999</u>	**Signalling framework for Enhanced Uplink scheduling**	**(Fujitsu)**
<u>R1-041001</u>	**E-DCH scheduling method in SHO**	**(Panasonic) (withdrawn)**
<u>R1-041009</u>	**RoT information broadcast as auxiliary information**	**(Panasonic)**
<u>R1-041010</u>	**Signalling for E-DCH Scheduling - Text proposal**	**(Fujitsu)**
<u>R1-040976</u>	**HSUPA Downlink scheduling signalling performance**	**(Nokia)**

<u>R1-040852</u> **Selection of primary scheduling Node B in SHO** (Samsung)
(Revised <u>R1-040691</u>)

<u>R1-040908</u> **Time and Rate scheduler for Enhanced Uplink** (Motorola)

<u>R1-040910</u> **Signalling Support for EUL** (Motorola)

<u>R1-040914</u> **Target RoT control methods for HSUPA** (Panasonic)
(Revised <u>R1-040780</u>)

<u>R1-040907</u> **Rate Contol Scheduler for Enhanced Uplink** (Motorola)

<u>R1-040911</u> **Outer loop power control for EUL** (Motorola)

9 Joint session on FDD Enhanced uplink with RAN2

RAN1/2 Joint Session on this topic started at 09:00 on Wednesday (18/08/2004). The overview of conclusion was as followed. The draft report of this Joint Session was distributed from WG-RAN2 secretary. (The draft report could be obtained on FTP server of 3GPP home page).

1. HARQ Principles (Synchronous v.s. Asynchronous retransmissions, SHO operation)

- Synchronous repetitions
- How many processes: to be discussed with Lucent paper
  - ➢ 3 / 4 processes in 10 ms TTI
  - ➢ 5 / 6 processes in 2 ms TTI
- Transmission up to n times, Network parameter, or more complex..., per MAC-d flow (diff parameters for diff QoS support)...
- Beta factors up to Nw.
- Fixed or dynamic or diff for transmission and re-transmission, etc.
- IR agreed in RAN1 Redundancy versions taken in a given order, with first transmission always self-decordable. Retransmissions may not be self-decordable. Number of RVs to cycle use is controlled by the NW and may be different for different TFRCs.
- No need to recoginize the Node-B from upper layers when moving in/out SHO) however, Node-B may have SHO status via SHO indicator). UE selects E-TFC. RV for certain E-TFC may be linked to CFN, some explicitly signalled for other E-TFC(How and where TBD)

2. Scheduling principles

It is proposed to agree on the following items as a basis for the scheduling schemes supported by the E-DCH:
- The scheduling grant controls the maximum allowed:
  - o E-DPDCH/DPDCH power ratio.
  - o e-TFC index.
  - o E-DPDCH+DPDCH/DPCCH power ratio.
  - o other
    - ▪ This is used only in e-TFC selection algorism.
  - **(RAN1 to initiate the work. RAN2 to conclude)**
- All grants are deterministic.
- Grants sent on the shared channel are supported. Grants can be valid for one UE, for a groups of UEs sharing a common QoS attribute, or all UEs.
  - o These are absolute scheduling grants.
  - o These grants can have an associated duration.
- Dedicated grants can have an associated validity.
- Scheduling grants can be sent once per TTI or less frequently?
- A shared channel is used to transmit the absolute scheduling grants.
- The absolute scheduling grant contains at least the identity of the UE (except if sent all UEs)(or group of UEs) for which the grant is intended and the maximum resources the UE(s) may use.
- Relative grants (updates) are supported as a complement to absolute grants.
  - o Dedicated resources are used to transmit relative grants to each UE. This is on the same channel as the ACK/NACK.
- The relative grant consists of a TBD bits.
- How UE combines absolute and relative grants is FFS.   **(RAN1 to initiate the work)**
- Soft handover(SHO) is FFS **(RAN1 and RAN2 to initiate the work)**
  - o Some information from all cells from E-DCH active set have to be taken into account. But What?
- Retransmissions handling vs scheduler grants is FFS. **(RAN1 to initiate the work)**

R2-041408   **Agenda of the RAN1-RAN2 joint session**   **(Chairman)**

9.1   HARQ principles: Synchronous vs asynchronous retransmissions, SHO operation (continuation of discussion from joint RAN1/RAN2 session in Cannes)

R1-040898   **Impact of asynchronous HARQ**   **(QUALCOMM Europe)**
  18/08/2004 09:15 Presented by Ms. Jelena Damnjanovic.
  Discussion (Question / Comment):
  Decision: This document was noted.

R2-041620   **E-DCH HARQ delay; synchronous versus asynchonous retransmission**
                                                                          (Ericsson)
  18/08/2004 09:45 Presented by Mr. Sven Ekemark.
  Discussion (Question / Comment):
  Decision: This document was noted.

R2-041589   **E-DCH - Comparison of process modes for HARQ**   **(Siemens)**
  18/08/2004 10:0 Presented by Mr. Thomas Stadler.
  Discussion (Question / Comment):
  Decision: This document was noted.

R1-040864   **HARQ principle**   **(Samsung)**
  18/08/2004 10:15 Presented by Dr. Juho Lee.
  Discussion (Question / Comment):
  Decision: This document was noted.

R1-040940   **HARQ Processes for 2ms and 10ms**   **(Lucent Technologies)**
  18/08/2004 11:25 Presented by Mr. Teck Hu.
  Discussion (Question / Comment):
  Decision: This document was noted.

R1-040906   **Fully sychronous HARQ and reliable signaling in SHO**   **(Motorola)**
  18/08/2004 09:15 Presented by Mr. Robert Love.
  Discussion (Question / Comment):
  Decision: This document was noted.

After discussion for the above 6 contributions, WG1/WG2 Chairman summarised about HARQ as followed.

- Synchronous repetitions
- How many processes: to be discussed with Lucent paper
  - 3 or 4 processes in 10 ms TTI
  - 5 or 6 processes in 2 ms TTI
- Transmission up to N times, Network parameter, or more complex…, per MAC-d flow (diff parameters for diff QoS support)…
- Beta factors up to NW.
- Fixed or dynamic or diffirent for transmission and re-transmission, etc.
- IR agreed in RAN1 Redundancy versions taken in a given order, with first transmission always self-decordable. Retransmissions may not be self-decordable. Number of RVs to cycle use is controlled by the Nw and may be different for different TFRCs.
- No need to recoginize the Node-B from upper layers when moving in/out SHO) however, Node-B may have SHO status via SHO indicator). UE selects E-TFC. RV for certain E-TFC may be linked to CFN, some explicitly signalled for other E-TFC(How and where TBD)

The following documents were not treated.

R1-040876   **Multiple number of SAW ARQ processes**   **(Mitsubishi Electric)**
R1-040899   **TP on synchronous/asynchronous HARQ**   **(QUALCOMM Europe)**
R1-040938   **System Performance with IR/Chase**   **(Lucent Technologies)**
R1-040939   **SHO Operation for EDCH**   **(Lucent Technologies)**

<u>R1-040948</u>   **HARQ signalling in Soft Handover**   **(NEC)**
R2-041628   **Robust HARQ**   **(NEC, Telecom Modus)**

9.2   Scheduling principles (continuation of discussion from joint RAN1/RAN2 session in Cannes)

<u>R1-040959</u>   **E-DCH Scheduling - Way Forward**   **(Ericsson)**
        18/08/2004 15:00 Presented by Dr. Stefan Parkvall.
        Discussion (Question / Comment):
        Decision: This document was noted.
<u>R1-040900</u>   **Scheduling for EUL**   **(QUALCOMM Europe)**   <u>(R1-040728)</u>
        18/08/2004 16:55 Presented by Ms. Jelena Damnjanovic.
        Discussion (Question / Comment):
        Decision: This document was noted.
<u>R1-040978</u>   **HSUPA Dynamic Step Adjustment for Node B Controlled Scheduling**
                                                                (Nokia)

        18/08/2004 17:25 Presented by Mr Sebir.
        Discussion (Question / Comment):
        Decision: This document was noted.

After discussion for the above contributions, WG2/WG1 Chairman summarised about Scheduling as followed based on Tdoc <u>R1-040959</u>.

It is proposed to agree on the following items as a basis for the scheduling schemes supported by the E-DCH:
- The scheduling grant controls the maximum allowed E-DPDCH/DPCCH power ratio.
    o   E-DPDCH/DPDCH power ratio
    o   e-TFC index
    o   E-DPDCH+DPDCH/DPCCH power ratio
    o   other
        ▪   This is used only in e-TFC selection algo
- All grants are deterministic.
- Dedicated grants sent on the shared channel (grants applicable on a per-UE basis) are supported. Grants applicable for groups of UEs can be considered as a complement. Grants can be valid for one UE, for a groups of UEs, or all UE
    o   These are absolute scheduling grants.
    o   These grants can have an associated duration
- Dedicated grants can have an associated validity
- Scheduling grants can be sent once per TTI or less frequently?
- Absolute scheduling grants are supported.
- A shared channel is used to transmit the absolute scheduling grants.
- The absolute scheduling grant contains at least the identity of the UE (or group of UEs) for which the grant is intended and the maximum resources the UE(s) may use.
- Relative grants (updates) are supported as a complement to absolute grants.
    o   Dedicated resources are used to transmit relative grants to each UE. This is on the same channel as the ACK/NACK Dedicated resources are used to transmit relative grants to each UE.
- The relative grant consists of a single (binary or ternary) bit. The relative grant consists of a TBD bits
- Absolute grants have priority higher than (or equal to) relative grants in non-SOHO situations. How UE combines absolute and relative grants I FFS
    o   A single cell (serving cell) is responsible for the absolute grants in soft handover. The cell with the best (long-term) downlink quality is the serving cell (same as for HSDPA).
- SHO is FFS
    o   Some information from all cells from E-DCH active set have to be taken into account. But What ?
- The UE obeys any changes in the E-DPDCH/DPCCH power ratio also for retransmissions handling vs scheduler grants is FFS.
- A scheduling request sent in the uplink consisting of (at least) one bit is supported.

Regarding the continued discussion about the scheduling, RAN1 would be finish at the September meeting and input to RAN2 October meeting, and finally RAN1/RAN2 would complete the discussion at November meeting.

R1-040963	**Configurable Cell Level Rate Controller for EUL**	**(NTT DoCoMo)**
R1-040964	**Autonomous Rate Ramping for Cell Level Rate Control**	**(NTT DoCoMo)**

18/08/2004 18:33 Presented by Mr. Masafumi Usuda. He gave the summary of 0963 and 0964 and claimed that is depicted in figure 4 and 5 of this document.

R2-041617   **E-DCH HARQ protocol**   **(Ericsson)**

18/08/2004 19:35 Presented by Dr. Stefan Parkvall.

Decision: This document was noted.

R2-041650   **Discussion document on PHY/HARQ requirements**   **(Qualcomm)**

18/08/2004 20:10 Presented by Mr. Hector Vayanos.

Decision: This document was noted.

R2-041727   **Mapping of SRB with HSUPA**   **(Nortel Networks)**

18/08/2004 20:20 Presented by Mr. Denis Fauconnier on behalf of Nortel.

Decision: This document was noted.

The following documents were not treated.

R1-040845	**Comparison on the scheduling points on coding chain** **(Revised R1-040711)**	**(Panasonic)**
R1-040851	**Node B controlled scheduling**	**(Samsung)**
R1-040853	**System level performance with various scheduling schemes**	**(Samsung)**
R1-040858	**System level performance with SHO scheduling**	**(Samsung)**
R1-040860	**Overall RoT management strategy**	**(Samsung)**
R1-040877	**Primary Node-B Selection by UE in SHO**	**(Mitsubishi Electric)**
R1-040878	**Primary Node-B Selection in SHO**	**(Mitsubishi Electric)**
R1-040881	**Consideration to Autonomous Transmission on E-DCH**	**(Mitsubishi Electric)** **(=R1-040680)**
R1-040901	**System performance with T&R scheduling and load control**	**(QUALCOMM Europe)**
R1-040929	**Adjustment of Scheduling Timing by UE**	**(Siemens)**
R1-040936	**Scheduling Schemes for EDCH**	**(Lucent Technologies)**
R1-040937	**Scheduling Performance for EDCH**	**(Lucent Technologies)**
R1-040946	**Node B scheduling with transmit power restriction for E-DCH**	**(LG Electronics)**
R1-040950	**Per Priority Queue basis Rate Scheduling**	**(NEC) (R1-040739)**
R1-040960	**On Scheduling Delays**	**(Ericsson)**
R1-040961	**E-DCH Autonomous Transmissions**	**(Ericsson)**
R1-040965	**Considerations on Enhanced Uplink Scheduling Options**	**(Siemens)**
R1-040966	**Uplink signalling for E-DCH scheduling based on predicted TFC**	**(Siemens)** **(=R1-040785)**
R1-040967	**Efficient scheduling in SHO by means of UE feedback**	**(Siemens)** **(Revised R1-040786)**
R1-040977	**1-bit Rate Request/Rate Grant Scheduling Signalling**	**(Nokia)**
R1-040985	**Position on scheduler design parameters**	**(QUALCOMM Europe)**
R2-041629	**Position on scheduler design parameters**	**(NEC, Telecom Modus)**
R2-041641	**Node B controlled scheduling in soft handover**	**(Philips)**

9.3   Outer loop power control aspects

In RAN1 #38, there was no time to treat this topic.

<u>R1-040863</u>	**E-DCH outer loop power control**	**(Samsung)**
<u>R1-040947</u>	**Outer loop power control aspects of E-DCH**	**(LG Electronics)**
<u>R1-040951</u>	**Outer Loop power control in E-DCH**	**(NEC) (R1-040738)**
R2-041618	**E-DCH outer loop power control**	**(Ericsson)**
R2-041630	**Outer Loop Transmission Power Control in Enhanced Uplink**	
		(NEC, Telecom Modus)

9.4   Physical layer model and physical layer error requirements

In RAN1 #38, there was no time to treat this topic.

<u>R1-040866</u>	**Error requirements of scheduling grants**	**(Samsung)**
<u>R1-040902</u>	**HARQ states for EUL**	**(QUALCOMM Europe) (=<u>R1-040730</u>)**
<u>R1-040903</u>	**EUL Requirements**	**(QUALCOMM Europe) (=<u>R1-040731</u>)**
<u>R1-040861</u>	**Autonomous transmission with TDM approach**	**(Samsung)**
<u>R1-040954</u>	**Filtering on E-DCH TFCS**	**(NEC) (R1-040741)**
R2-041461	**TR text proposal on Basic physical layer structure**	**(Nortel)**
R2-041519	**QoS and Scheduling Principles in HSUPA**	**(Nokia)**
R2-041621	**Principles of scheduling for enhanced uplink**	**(Fujitsu)**
R2-041622	**Signalling framework for enhanced uplink scheduling**	**(Fujitsu)**
R2-041729	**Node-B scheduler architecture proposal**	**(Nortel)**

10 Other issues for joint discussion with RAN2

RAN1/2 Joint Session on this topic started at 08:30 on Thursday (19/08/2004). The overview of conclusion was as followed. The draft report of this Joint session was distributed from WG-RAN2 secretary. (The draft report could be obtained on FTP server of 3GPP home page).

UL-TDOA

R2-041726 was a first proposal for a Study Item description sheet. This document was in some parts written as a WI (e.g. including a draft CR). The output of a Study Item should however be primarily a Technical Report, that is, should not be specific to a technology. It was decided that a WI description sheet would be proposed instead (TS 25.331 will be removed in the affected specifications).

In response to questions from the RAN1 chair, it was confirmed by TruePosition that there would be no modification to the physical layer in the UE or NodeB (e.g. no modification to power control behaviour), hence there would be no work to be done in RAN1. This was the reason that no study phase would be required from RAN1 perspective.

This was proposed to be specific to FDD by the RAN2 chairman although there was disagreement on this aspect. IPWireless expressed their concerns with this decision, commenting that there was no technical justification for this restriction. Resolution on this aspect was not found" Proposed completion date: RAN#32. (The new proposed WI description sheet was in R2-041857).

10.1   Review of UL-TDOA Study Item description

R2-041413   **PowerPoint presentation to accompany #2, proposed Inclusion of U-TDOA UE positioning method in the UTRAN specifications SI**   **(TruePosition)**

19/08/2004 08:40 Presented by Mr. Rob Anderson.

Discussion (Question / Comment):
Decision: This document was noted.

R2-041726   **Inclusion of U-TDOA UE positioning method in the UTRAN specifications Study Item Request**   **(TruePosition)**

19/08/2004 09:25 Presented by Mr. Rob Anderson.

Discussion (Question / Comment): There was some discussion on how the process can be handled, especially in about the output from SI (Feasibility Study). Supposing the SI is going to be approved in September TSG, the earliest closing date is December 2004, which TruePosition and the supporters see too late.

The consequence was to modify the objectives and output statements of the draft SJD to fit into the current practice of 3GPP working procedures i.e., instead of including the techniques into the specifications. The sentence of objection was revised as followed "The objective this study item is to study enhanced network based positioning methods for FDD, without the need for modifying UEs and Node B and thus is compatible with existing UEs and Node Bs"

Decision: A WI description sheet will be proposed instead (TS 25.331 will be removed in the affected specifications). In response to questions from the RAN1 chair, it was confirmed by TruePosition that there would be no modification to the physical layer in the UE or NodeB (e.g. no modification to power control behaviour), hence there would be no work to be done in RAN1. This was the reason that no study phase would be required from RAN1 perspective.

It was proposed by the WG2 chairman that this should be specific to FDD. IPWireless expressed their concerns with this decision, commenting that there was no technical justification for this restriction. Resolution on this aspect was not found". Proposed completion date: RAN#32. (the new proposed WI description sheet is in R2-041857).

R2-041412   **Proposed Inclusion of U-TDOA UE positioning method in the UTRAN specifications Study Item**   **(TruePosition)**

Decision: This document was noted without presentation.

10.2   Use of secondary scrambling code for IMS

<u>R1-040935</u>   Secondary Scrambling Code for IMS   (Siemens)

19/08/2004 10:10 Presented by Dr. Przemyslaw CZEREPINSKI.

Discussion (Question / Comment): There were some discussions whether the secondary scrambling code on this contribution was proper. The question was asked what channelization code was used. The answer to question was that one chanelization code was used and different acrambling code was used.

Decision: This document was noted.

R2-041523   Considerations on Single CCTrCH multi-code solution for IMS over radio
(Nortel Networks)

19/08/2004 10:40 Presented by Ms. Sarah Boumendil

Discussion (Question / Comment):

Decision: This document was noted.

After the discussion about above contributions, Mr. RAN1 Chairman commented that the discussion point seems to be more focused on to a RAN1 issue.

R2-041524   Considerations on Multiple-CCTrCH solution for IMS over radio
(Nortel Networks)

[Editor Note]Coffee break

11 Uplink Enhancements for UTRA TDD

<u>**R1-040819**</u>   **TR 25.804 "Uplink Enhancements for UTRA TDD" v0.2.1**   **(InterDigital)**
20/08/2004 08:45 Presented by Ms. Liliana Czapla.

Discussion (Question / Comment): No.
Decision: This document was approved as version 0.3.0 in Tdoc <u>R1-041041</u>.

<u>**R1-040846**</u>   **Geometry Distribution for LCRTDD**   **(Samsung)**
20/08/2004 08:50 Presented by Mr. Sun Chengjun.

Discussion (Question / Comment):
Decision: This document was noted.

<u>**R1-040847**</u>   **Impact of Downlink Signalling for EUCH in LCRTDD**   **(Samsung)**
20/08/2004 08:55 Presented by Mr. Sun Chengjun.

Discussion (Question / Comment): There are some comments.
Decision: This document was noted.

<u>**R1-040991**</u>   **Intra-frame Code Hopping for EU-TDD and Text Proposal for 25.804**
                                                                  (IPWireless)

20/08/2004 08:58 Presented by Mr. Nicholas Anderson.

Discussion (Question / Comment):

Decision: It was decided to include TP with a note that applicability of the scheme for 1.28Mcps TDD is FFS.

<u>**R1-040992**</u>   **HARQ Performance for TDD Enhanced Uplink and Text Proposal for 25.804**
                                                                  (IPWireless)

20/08/2004 09:10 Presented by Mr. Nicholas Anderson.

Discussion (Question / Comment): No.

Decision: This TP was agreed.

<u>**R1-040993**</u>   **Power Control for TDD Enhanced Uplink and Text Proposal for 25.804**
                                                                  (IPWireless)
<u>**R1-041035**</u>   **Power Control for TDD Enhanced Uplink and Text Proposal for 25.804**
                                                (IPWireless) (Revised <u>R1-040993</u>)
20/08/2004 09:15 Presented by Mr. Nicholas Anderson.

Discussion (Question / Comment):

Decision: This TP was agreed.

<u>**R1-041006**</u>   **Modulation for TDD Enhanced Uplink and Text Proposal for 25.804**
                                                (IPWireless) (Withdrawn)

29

12   Analysis of higher chip rates for UTRAN evolution (TDD)

<u>**R1-041000**</u>   **TR25.895 v1.3.4: Analysis of Higher Chip Rates for UTRA TDD Evolution**
                                                                                                      (IPWireless)

20/08/2004 09:25 Presented by Dr. Martin Beale.

Discussion (Question / Comment): No.

Decision: This document was approved as version 1.4.0 in Tdoc <u>R1-041042</u>.

<u>**R1-040994**</u>   **System Simulation Results for Release 99 type channels for TR25.895 (with text proposal)   (IPWireless)**
<u>**R1-041027**</u>   **System Simulation Results for Release 99 type channels for TR25.895 (with text proposal)   (IPWireless) (Revised <u>R1-040994</u>)**
20/08/2004 09:30 Presented by Dr. Martin Beale.

Discussion (Question / Comment):

Decision: This TP was agreed to include in the TR with modification in the last sentence "two 3.84Mcps systems.."

<u>**R1-040995**</u>   **Text Proposal for Application to 3GPP systems and services (IPWireless)**
20/08/2004 09:35 Presented by Dr. Martin Beale.

Discussion (Question / Comment): There were some comments.

Decision : This document was revised wording in Tdoc <u>R1-041043</u>.

<u>**R1-041043**</u>   **Text Proposal for Application to 3GPP systems and services**
                                                                               (IPWireless) (Revised <u>R1-040995</u>)
20/08/2004 14:25 Presented by Dr. Martin Beale.

Discussion (Question / Comment):

Decision : This document was approved.

<u>**R1-040996**</u>   **Text Proposal for Conclusion to TR25.895**   **(IPWireless)**
<u>**R1-041028**</u>   **Text Proposal for Conclusion to TR25.895   (IPWireless) (Revised <u>R1-040996</u>)**
20/08/2004 09:45 Presented by Dr. Martin Beale.

Discussion (Question / Comment): There are many comments and suggestions about the conclusion, most of all, the conclusion should be more summarized and more simplified. The addition of WI proposal in recommendation was not supported from some companies.

Decision: This document was revised regarding conclusions for <u>R1-041044</u>. RAN1 does not agree to recommend the creation of a WI decision is up to RAN.

<u>**R1-041044**</u>   **Text Proposal for Conclusion to TR25.895   (IPWireless) (Revised <u>R1-04028</u>)**
20/08/2004 14:25 Presented by Dr. Martin Beale.

Discussion (Question / Comment):

Decision : This documents was approved. Additionally, it was decided that Update TR v.1.4.1 in Tdoc R1-041051 would be provided on the reflector, and E-mail approval deadline would be August 30.

13   Improvement of inter-frequency and inter-system handover measurements

R1-040822   **Proposal for multiframe compressed mode by puncturing and unequal frame segmentation**   **(Mitsubishi Electric: MMCE)**

20/08/2004 15:10 Presented by Mr. Mickael Bouyaud.

Discussion (Question / Comment): Some companies took objection to the contribution with comment of more detail investigation.
Decision: This document was noted. In current contribution, there is no backward compatibility in SHO. It was decided to continue discussion and proposal.

R1-040979   **On channelisation code sharing during compressed mode**   **(Nokia)**

20/08/2004 15:40 Presented by Mr. Karri Ranta-aho.

Discussion (Question / Comment): Mr. Chairman suggested that it was necessary to discuss more about coding save gain.
Decision: RAN1 could not conclude on a significant code saving gain. Raise question to RAN whether further work on compressed mode enhancements is useful in RAN1.

14 Optimisation of downlink channelisation code utilisation (FDD)

In RAN1 #38, there was no time to treat this topic.

R1-040825   **Concerns on Fractional DPCH Concept**   **(Siemens)**
                (Revised from R1-031227)
R1-040873   **Power control for F-DPCH**   **(Nortel Networks)**

15 Optimisation of downlink channelisation code utilisation (TDD)

In RAN1 #38, there was no time to treat this topic.

R1-040997   **Downlink Code Resource Optimisation for TDD HSDPA**   **(IPWireless)**

16   HSDPA ACK/NACK enhancements (Discussion is limited to coverage improvement and decoder complexity aspects)

<u>R1-040925</u>   **Implementation complexity of ACK/NACK performance improvement (including CR to 25.899)**   **(Philips)**

20/08/2004 16:15 Presented by Dr. Tim Moulsley.

Discussion (Question / Comment):

Decision: This Draft CR was endorsed. It was decided to provide official CR (number #1) on the reflector by August 27 in Tdoc <u>R1-041054</u> and approve on E-mail until August 31.

<u>R1-040926</u>   **Effect of PRE/POST scheme on HSDPA cell coverage (including CR to 25.899)**
                                                                                  (Philips)

<u>R1-041032</u>   **Effect of PRE/POST scheme on HSDPA cell coverage (including CR to 25.899)**
                                                                  (Philips) (Revised <u>R1-040926</u>)

20/08/2004 16:35 Presented by Dr. Tim Moulsley.

Discussion (Question / Comment):

Decision: This Draft CR was endorsed. It was decided to provide official CR (number #2) on the reflector by August 27 in Tdoc <u>R1-041055</u> and approve on E-mail approval until August 31.

17   Other issues

In RAN1 #38, there was no time to treat this topic.

<u>**R1-040970**</u>   **HSDPA Code Allocation/Measurement per Cell Portion**   **(Nokia)**

18   Joint session RAN1 & RAN4

RAN1/4 Joint Session started at 18:30 on Tuesday (17/08/2004).
The draft report of this Joint session was distributed from WG-RAN4 secretary as shown in Annex A.

18.1   Rel5/Rel CRs

R4-040536   **Requirement on UE minimum output power when transmitting HS-DPCCH**

                                             (QUALCOMM Europe)

17/08/2004 18:33 Presented by RAN4 Qualcomm delegate.
Discussion (Question / Comment): It was asked what difference was between option A and B
Decision: This document was noted.

R4-040468   **Response LS on minimum power limit (From R4 to R1 CC: T1RF) (Nokia)**
                                                 (R1-041058)

17/08/2004 18:42 Presented by RAN4 Nokia delegate
Discussion (Question / Comment):
Decision: This document was noted.

<u>**R1-040839**</u>   **25.214CR343R1(Rel-5, F) "Clarification of minimum power limit"**
                              (Panasonic)   **(Revised <u>R1-040198</u>)**
17/08/2004 18:45 Mr. Suzuki wanted to have off-line discussion before discussion at WG meeting. R4-040468
author (Mr. Markus Pettersson) agreed with Suzuki's plan.

<u>**R1-040823**</u>   **Introduction of a new Node B measurement 'DL Transmission Branch Load'**
                                                (Siemens)
17/08/2004 17:55 Presented by Dr. Joern Krause.
Discussion (Question / Comment): WG4 Chairman commented that we have to look at carefully from RAN4
perspective based on TS25.133.
Decision: This document was noted.

<u>**R1-040824**</u>   **CR147 to 25.215 v6.0.0 Introduction of 'DL Transmission Branch Load'**
        measurement   **(Siemens)**
For the contribution <u>R1-040823</u> and <u>R1-040824</u>, it was decided that RAN4 would provide feedback to RAN1 at
their next meeting

18.2   MBMS Requirements

<u>**R1-041003**</u>   **UE performance requirements for MBMS reception**   **(Ericsson)**
17/08/2004 19:04 Presented by Mr. Dirk Gerstenberger on behalf of Ericsson.
Discussion (Question / Comment):
Decision: This document was noted

R4-040528   **New UE Test for MBMS**   **(Panasonic)**
17/08/2004 19:14 Presented by Panasonic RAN4 delegate
Discussion (Question / Comment):
Decision: This document was noted.

R4-040403   MBMS Link Level simulations in the presence of measurement gaps
                                                                          (Mitsubishi)
17/08/2004 19:20 Presented by Mitsubishi RAN4 delegate.
Discussion (Question / Comment): It was asked about the performance degradation on `Norman S-CCPCH and MBMS S-CCPCH.
Decision: This document was noted.

R4-040413   Measurement requirements and MBMS reception in Cell-FACH state
                                                                          (Siemens)
17/08/2004 19:36 Presented by Dr. Joern Krause.
Discussion (Question / Comment):
Decision: This document was noted.

R4-040437   Measurement requirements and MBMS reception.   (Ericsson)
17/08/2004 19:50 Presented by Ericsson RAN4 delegate.
Discussion (Question / Comment): It was asked if another setting is necessary for UE. It was commented that issues was the interaction on measurement, large interaction and small interaction depending on TTI
Decision: This document was noted.

18.3   Rel-6 PAR

Cubic Metric LS from R1 to R4
- RAN4 is pleased to adopt cubic metric

    o   Parameters in equation for Cubic Metric discussed via e-mail before next RAN1 meeting.

- HSDPA output power reduction (rel-6)

    o   Rel6CR was not approved in RAN4 so far (Rel-6 HSDPA–only transmission, i.e., no E-UL considered)

    o   RAN1 can use Cubic Metric or PAR as tools helping to define the PhCH structure.

The WG4 Chairman commented that the problem was how to handle this discussion because R4 is responsible for 24.101 but does not have expertise that R1 has. Wish delegates can communicate within companies.

19   Closing of the meeting : Friday 5.00 PM

20/08/2004 17: 00. The chairman, Mr. Dirk Gerstenberger expressed his appreciation to the delegates and the host companies for their works, and also RAN1 Secretary, Mr. Tsukasa Sasaki finished his work as secretary on this meeting, so Mr. Dirk Gerstenbergar appreciated for his work.

Annex A: Report from Joint Ad Hoc RAN WG1 – WG4

A joint meeting was held on Tuesday 17th from 18:00 to 20:30. The main topic for discussion was the MBMS requirements and measurements.

R1-040823   Introduction of a new Node B measurement 'DL Transmission Branch Load' (Siemens)

The issue of testing TX diversity has always been controversial in WG4, proposals had been presented and reviewed a number of times but finally nothing was accepted. On this particular paper, WG4 chairman suggested that WG4 would analyse and review it and provide feedback in the future.

A.1   Minimum power limit

R4-040468   Response LS on minimum power limit (Nokia)   (R1-041058)

This draft LS, to be sent to WG1, represents the agreed view of WG4 on the issue and its feedback to WG1. The actual behaviour doesn't exactly map to any of the options presented by the first LS from WG1. Rather, it is a combination of options 1 and 2.

R4-040536   Requirement on UE minimum output power when transmitting HS-DPCCH (Qualcomm)

Document illustrates the power variation over time, when TPC commands mandate the UE to lower power to its minimum or further. It is necessary to look at the issue over time, and not only one DPCCH timeslot, in order to get the correct understanding. One way to express this behaviour would be that the UE does not need to go below the limit for the minimum Tx power over any DPCH slot, no matter which channel combinations are transmitted during that slot.

With this contribution, WG4 further clarifies the LS above. Here, the possibility of changing the power level of the DPDCH and DPCCH within the timeslot is introduced. If WG1 believes this is possible, a third alternative behaviour can be adopted.

R1-040839   Clarification of minimum power limit (CR343 to 25.214) (Panasonic)

This CR was produced before the information from WG4 was received. It needs to be checked that the new requirements introduced in the CR align with WG4 understanding in R4-040468. WG1 also will need to consider if it is possible to change the power level of Rel99 channels within the timeslot, and then take it into account for a revision of the CR.

A.2   MBMS

R1-041003   UE performance requirements for MBMS reception (Ericsson)

S-CCPCH can be transmitted by multiple cells, 3 types of combining are being envisaged for the UE: Selective combining, RAKE level combining, Symbol level combining. Performance requirements for the UE for the 3 cases will need to be specified.

Sari Nielsen (Nokia) reminded WG1 that some of the existing performance requirements in WG4 do not have a test associated, it was impossible to define due to the complexity. She warned that this could be the case for MBMS, which presents different complexity issues than the Rel99 channels.

R4-040528   New UE test for MBMS (Panasonic)

Two different aspects of MBMS UE testing are raised, measurement performance and S-CCPCH reception performance. The proposal is to consider both together in the same test suite.

R4-040403   MBMS Link Level simulations in the presence of measurement gaps (Mitsubishi)

It is noted that these simulation only consider one radio link, the advantages of combining are not taken into account.

The case of reception of normal S-CCPCH together with a MBMS S-CCPCH was raised. It may happen that when measurements occasions are scheduled having to receive both, these occasions may end up colliding with most of the TTI of a given MBMS transmission.

R4-040413   Measurement requirements and MBMS reception in Cell-FACH state (Siemens)
It was noted that SA4 is assuming an error rate, at higher layers and after FEC, of 1% with a possible relaxation to 10%.

WG1 chairman clarified that the measurement occasions to be used with the S-CCPCH could blank out FACH TTIs, of 10ms, and not the whole MBMS TTI of 80ms. The resulting data loss can be tempered by the fact that the same MBMS TTI can be received from a different cell if macro diversity is available, and with a different timing due to the RL timing differences. The combining will then decrease the losses.

R4-040437   Interfrequency measurements during MBMS sessions (Ericsson)
It was clarified that the TTIs considered in this paper are those commonly used in R99. It was clarified that a restriction of a 10 ms FACH TTI when operating MBMS is not the best way forward, as Siemens paper shows there is a trade off between UE mobility and MBMS reception. This trade off should be left available for network operation. Additionally, new techniques are being considered: TTI scrambling, or scheduling of measurement occasions, but WG1 chairman warned against adding new features to the specification that may not be implemented, in particular when other, simpler, solution can be found.

WG4 couldn't provide a definite view on the need to set a restriction on the TTI size to 10 ms.

A.3   UE output power back off

WG4 chairman explained that WG4 agreed that the Cubic Metric is a better indication to determine the power back off than the Peak to Average Ratio, as the mapping "CM to back-off" seems to be close to one-to-one. This mapping has only been show so far for a reduced number of PA implementation and seems to be dependant on the ACLR assumption, so results from more companies have been requested in order to determine the coefficients of the mapping formula in a manner that is accurate for all types of PAs.

A separate email reflector will be set for the purpose, WG1 member are invited to join their WG4 colleagues in the discussion.

The CM, or the PAR, are only tools that will finally help to decide the amount of power reduction for a given combination of channels. Agreement on this reduction is very likely going to need long and heated discussions in WG4, and it will involve system simulations and the participation of operators.

The main result of the issue will affect the output power requirement in 25.101, like it has been the case for the Rel-5 HSDPA power back off; but it will also need to be forwarded to WG1 as useful contributions for the EDCH specification.

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Annex C: TSG RAN WG1 meetings through 2004 to 2005

TITLE	TYPE	DATES	LOCATION	CTRY
3GPPRAN1#38bis	WG	20 - 24 Sept 2004	Seoul	KR
3GPPRAN1#39	WG	15 - 19 Nov 2004	Shin-Yokohama	JP
3GPPRAN1#40	WG	14 - 18 Feb 2005	Phoenix	USA
3GPPRAN1#40bis	WG	04 - 08 April 2005	TBD	TBD
3GPPRAN1#41	WG	09 - 13 May 2005	TBD	EU
3GPPRAN1#42	WG	29 Aug -02 Sept 2005	TBD	EU
3GPPRAN1#43	WG	07 - 11 Nov 2005	TBC	Asia

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

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Annex D: List of CRs agreed at RAN1#38

Spec	CR	R	Cat	Rel	R1 Tdoc	Title	Work Item
25.211	191	-	F	Rel-5	R1-040874	Correction for the slot range of DL DPCCH power control preamble for CPCH	
25.211	192	-	A	Rel-6	R1-040874	Correction for the slot range of DL DPCCH power control preamble for CPCH	
25.224	132	-	F	Rel-4	R1-040883	Transmit diversity usage for beacon channels in LCR TDD	TEI 4
25.224	133	-	A	Rel-5	R1-040883	Transmit diversity usage for beacon channels in LCR TDD	TEI 4
25.224	134	-	A	Rel-6	R1-040883	Transmit diversity usage for beacon channels in LCR TDD	TEI 4
25.222	122	1	F	Rel-4	R1-041017	Correction of symbol Xi defined in sub-frame segmentation step	TEI 4
25.222	123	1	A	Rel-5	R1-041017	Correction of symbol Xi defined in sub-frame segmentation step	TEI 4
25.222	124	1	A	Rel-6	R1-041017	Correction of symbol Xi defined in sub-frame segmentation step	TEI 4
25.224	135	1	F	Rel-4	R1-041018	Corrections of radio access procedure for 1.28Mcps TDD	LCRTDD_Phys
25.224	136	1	A	Rel-5	R1-041018	Corrections of radio access procedure for 1.28Mcps TDD	LCRTDD_Phys
25.224	137	1	A	Rel-6	R1-041018	Corrections of radio access procedure for 1.28Mcps TDD	LCRTDD_Phys
25.214	353	-	F	Rel-5	R1-041059	Clarification of SSDT uplink only signalling	TEI 4
25.214	352	1	A	Rel-6	R1-041059	Clarification of SSDT uplink only signalling	TEI 4
25.899	1	1	F	Rel-6	R1-041056	Implementation Complexity of ACK/NACK performance improvement	RInImp-RIperf
25.899	2	-	F	Rel-6	R1-041055	Effect of PRE/POST scheme on HSDPA cell coverage	RInImp-RIperf

Annex E: List of tdocs at RAN1 #38

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040810	Draft Agenda	TSG RAN WG1 Chairman	2		16/08/2004	Approved
R1-040811	DRAFT Report of 3GPP TSG RAN WG1 #37	RAN1 Secretary	2			Not Available
R1-040812	DRAFT1 Report of 3GPP TSG RAN WG1 Rel.6 Ad Hoc meeting in Cannes	RAN1 Secretary	2		16/08/2004	Approved with correction the name of the company
R1-040813	(To) Reply LS on Code Sharing during Compressed Mode (To:R1 Cc:R3) (Reply to R1-040386)	TSG RAN WG2 (Nokia)	4	=R1-040666 =R2-041241	16/08/2004	Noted
R1-040814	(Cc) Reply LS on Multiple MBMS Issues (To: S4, R4 Cc: S2, S1, R1, R3, G1, G2, N1) (Reply to S4-040132)	TSG RAN WG2 (Samsung)	4	=R1-040667 =R2-041244	16/08/2004	Noted (Treated at Cannes Meeting)
R1-040815	(Cc) Reply to "LS on RRC release aspects of CS video and voice service improvements" (To:S2 Cc: R1, R3) (Reply to S2-041641)	TSG RAN WG2 (Vodafone)	4	=R1-040668 =R2-041249	16/08/2004	Noted
R1-040816	(Cc) LS on RRC release aspects of CS video and voice service improvements (To:S2, Cc: R1,R2,GP) (Reply to S2-041641)	TSG RAN WG3 (Alcatel)	4	=R1-040669 =R3-040941	16/08/2004	Noted
R1-040817	(To) Response LS on Multiple MBMS Issues (To: R1, R2, R3, GP, G2) (Reply to R1-040385, R1-040651, etc)	TSG SA WG4 (Siemens)	4	=R1-040670 =S4-040356	16/08/2004	Noted (Treated at Cannes Meeting)
R1-040818	(Cc) LS on Proposed Modification to HSDPA Radio Bearer Settings (To: R2 Cc: R1)	TSG T WG1 (QUALCOMM)	4	=R1-040671 =T1-040957	16/08/2004	Noted
R1-040819	TR 25.804 "Uplink Enhancements for UTRA TDD" v0.2.1	InterDigital	11		20/08/2004	Approved as version 0.3.0 in Tdoc R1-041041.
R1-040820	Modified per stream rate control for 2-antenna MIMO	TI	6.1	=R1-040517		Not Treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040821	Text proposal for modified per stream rate control for 2-antenna	TI	6.1	=R1-040518		Not Treated
R1-040822	Proposal for multiframe compressed mode by puncturing and unequal frame segmentation	Mitsubishi Electric (MMCE)	13		20/08/2004	Noted
R1-040823	Introduction of a new Node B measurement 'DL Transmission Branch Load'	Siemens	5.4		16&17/08/2004	Noted. For the contribution R1-040823 and R1-040824, it was decided that RAN4 would provide feedback to RAN1 at their next meeting
R1-040824	CR147 to 25.215 v6.0.0 Introduction of 'DL Transmission Branch Load' measurement	Siemens	5.4		16&17/08/2004	
R1-040825	Concerns on Fractional DPCH Concept	Siemens	14	(R1-031227)		Not Treated
R1-040826	25.222CR122(Rel-4, F)&CR123(Rel-5, A)&CR124(Rel-6, A): "Correction of symbol Xi defined in sub-frame segmentation step"	Siemens	5.2 5.3 5.4		16/08/2004	Not approved and would be provided the revision with isolated impact analysis in R1-041017.
R1-040827	Simulation results for 1.28Mcps TDD MBMS	Siemens	7	(R1-040441)	16/08/2004	Agreed for inclusion in TR
R1-040828	Coverage Results for MBMS (1.28Mcps TDD): Updated Text Proposal for TR 25.803	Siemens	7	(R1-040620)	16/08/2004	Agreed for inclusion in TR
R1-040829	Double-ASTTD with Sub-Group Rate Control	Huawei Technologies	6	(R1-040430)		Not Treated
R1-040830	Text Proposal for Double-ASTTD with Sub-Group Rate Control	Huawei Technologies	6	(R1-040431)		Not Treated
R1-040831	Power adjustment of ACK/NACK signaling based on ACK/NACK error rate	Huawei Technologies	8.3			Not Treated
R1-040832	Downlink Signalling Mapping of ACK and NACK	Huawei Technologies	8.4			Not treated
R1-040833	EDCH timing	Huawei Technologies	8.1		19/08/2004	Noted
R1-040834	Inclusion of combinations of multiple radio bearers with HSDPA into TS 34.108	Vodafone Group	5.5		16/08/2004	The conclusion was agreed in RAN1/RAN2 joint sesion, expect WB-AMR combination, which is FFS, 128kbps UL is FFS.
R1-040835	Summary from RAN#24	RAN1 Chairman	3		16/08/2004	Noted
R1-040836	~~Summary from RAN1/2 Ad hoc meeting in Cannes~~	~~RAN1 Chairman~~	3			Withdrawn

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040837	DL ACK structure	Via Telecom	8.4			Not treated
R1-040838	DL ACK Selection	Via Telecom	8.4			Not treated
R1-040839	25.214CR343R1(Rel-5, F)&CR344(Rel-6, A) "Clarification of minimum power limit"	Panasonic	5.3	(R1-040198)	16&17/08/2004	Not approved. It was decided to conclude discussion in RAN1#38bis
R1-040840	MBMS L1 possible limitations	Panasonic	7.2	(R1-040710)	17/08/2004	Noted
R1-040841	How MBMS UE capability is defined?	Panasonic	7.3		17/08/2004	Noted
R1-040842	Number of simultaneous reception of Acks in SHO	Panasonic	8.4			Not treated
R1-040843	Channel priority and uplink transmission timing	Panasonic	8.1		19/08/2004	Noted
R1-040844	Uplink power signalling information for the scheduling	Panasonic	8.5			Not treated
R1-040845	Comparison on the scheduling points on coding chain	Panasonic	9.2	(R1-040711)		Not treated
R1-040846	Geometry Distribution for LCRTDD	Samsung	11		20/08/2004	Noted
R1-040847	Impact of Downlink Signalling for EUCH in LCRTDD	Samsung	11		20/08/2004	Noted
R1-040848	On MICH mapping	NEC	7.1		16/08/2004	Noted
R1-040849	UE Capability	NEC	7.3			Not treated
R1-040850	EUL physical channel code mapping	Samsung	8.1			Not treated
R1-040851	Node B controlled scheduling	Samsung	9.2			Not treated
R1-040852	Selection of primary scheduling Node B in SHO	Samsung	8	(R1-040691)		Not treated
R1-040853	System level performance with various scheduling schemes	Samsung	9.2			Not treated
R1-040854	Uplink signalling for Node B controlled scheduling	Samsung	8.5	(R1-040696)		Not treated
R1-040855	HARQ: physical layer aspects	Samsung	8.2	(R1-040797)		Not treated
R1-040856	Downlink control channel structure	Samsung	8.5			Withdrawn
R1-040857	System level performance with periodic TPS reporting	Samsung	8.5			Not treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040858	System level performance with SHO scheduling	Samsung	9.2			Not treated
R1-040859	Power control at the maximum power limit for EUL	Samsung	8.3			Not treated
R1-040860	Overall RoT management strategy	Samsung	9.2			Not treated
R1-040861	Autonomous transmission with TDM approach	Samsung	8			Not treated
R1-040862	RV Signalling	Samsung	8.4			Not treated
R1-040863	E-DCH outer loop power control	Samsung	9.3			Not treated
R1-040864	HARQ principle	Samsung	9.1		18/08/2004	Noted
R1-040865	EUL scheduling: signalling support	Samsung	8.5			Not treated
R1-040866	Error requirements of scheduling grants	Samsung	9.4			Not treated
R1-040867	MBMS notification procedure on MICH	Panasonic	7.1	=R2-041440	17/08/2004	Noted
R1-040868	Further simulations on RC-MPD and comparison with PARC, DSTTD, and R'99 TxDiv	Nortel Networks	6.2			Not treated
R1-040869	First MIMO Traffic simulations for RC-MPD and PARC with real channnel estimation	Nortel Networks	6.2			Not treated
R1-040870	MIMO generic scheme and text proposal for the MIMO TR 25.876	Nortel Networks	6.1		16/08/2004	Noted
R1-040871	CQI feedback for RC-MPD	Nortel Networks	6.1			Not treated
R1-040872	UL signalling for FDD enhanced UL	Nortel Networks	8.4			Revised to R1-041004
R1-040873	Power control for F-DPCH	Nortel Networks	14			Not treated
R1-040874	25.211CR191(Rel-5, F)&CR192(Rel-6, A) "Correction for the slot range of DL DPCCH power control preamble for CPCH"	LG Electronics	5.3		16/08/2004	Approved
R1-040875	25.214CR349(Rel-6, F) "Clarification of SSDT uplink only signaling"	LG Electronics	5.4			Revised to R1-041019
R1-040876	Multiple number of SAW ARQ processes	Mitsubishi Electric	9.1			Not treated
R1-040877	Primary Node-B Selection by UE in SHO	Mitsubishi Electric	9.2			Not treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040878	Primary Node-B Selection in SHO	Mitsubishi Electric	9.2			Not treated
R1-040879	Signalling for primary Node-B selection in SHO	Mitsubishi Electric	8.5			Not treated
R1-040880	Uplink Signalling alternatives for FDD Enhanced Uplink	Mitsubishi Electric	8.5		17/08/2004	Noted
R1-040881	Consideration to Autonomous Transmission on E-DCH	Mitsubishi Electric	9.2	=R1-040680		Not treated
R1-040882	HS RAB combinations for testing	Ericsson	5.5		16/08/2004	Noted
R1-040883	25.224CR132(Rel-4, F)&CR133(Rel-5, A)&CR134(Rel-6, A) "Transmit diversity usage for beacon channels in LCR TDD"	IPWireless, Interdigital, Siemens	5.2		16/08/2004	Approved
R1-040884	Draft CR for introduction of MICH in 25.21x	QUALCOMM Europe	7.1		16/08/2004	Noted
R1-040885	Soft combining aspects of MBMS	QUALCOMM Europe	7.3		17/08/2004	Noted
R1-040886	UE Capability for MBMS	QUALCOMM Europe	7.3		17/08/2004	Noted
R1-040887	S-CCPCH performance with 256 kbps	QUALCOMM Europe	7.3	=R1-040716	17/08/2004	Noted. The simulation results on this contribution would be included in the TR
R1-040888	OVSF code space for E-DCH	QUALCOMM Europe	8.1			Not treated
R1-040889	TP on PhCH mapping of E-DCH	QUALCOMM Europe	8.1			Not treated
R1-040890	TP on E-DCH Timing	QUALCOMM Europe	8.1		19/08/2004	Noted
R1-040891	Choice of RV and code rates	QUALCOMM Europe	8.2			Not treated
R1-040892	TP on IR versions	QUALCOMM Europe	8.2			Not treated
R1-040893	Impact of SNR mismatch on turbo decoding	QUALCOMM Europe	8.2			Not treated

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040894	Reference short-term link curves for 10ms TTI	QUALCOMM Europe	8.2			Not treated
R1-040895	E-TFICH performance with synchronous HARQ	QUALCOMM Europe	8.4			Not treated
R1-040896	E-TFICH performance with asynchronous HARQ	QUALCOMM Europe	8.4			Not treated
R1-040897	HARQ channel mapping in DL	QUALCOMM Europe	8.4	=R1-040723		Not treated
R1-040898	Impact of asynchronous HARQ	QUALCOMM Europe	9.1		18/08/2004	Noted
R1-040899	TP on synchronous/asynchronous HARQ	QUALCOMM Europe	9.1			Not treated
R1-040900	Scheduling for EUL	QUALCOMM Europe	9.2	=R1-040728	18/08/2004	Noted
R1-040901	System performance with T&R scheduling and load control	QUALCOMM Europe	9.2			Not treated
R1-040902	HARQ states for EUL	QUALCOMM Europe	9.4	=R1-040730		Not treated
R1-040903	EUL Requirements	QUALCOMM Europe	9.4	=R1-040731		Not treated
R1-040904	Issues with Radio Link Synchronization	Ericsson	5.6		16/08/2004	Noted and more discussion was continued till next meeting
R1-040905	MIMO Evolution Path requirements	Siemens	6.1		16/08/2004	Noted
R1-040906	Fully sychronous HARQ and reliable signaling in SHO	Motorola	8 9		18/08/2004	Noted
R1-040907	Rate Contol Scheduler for Enhanced Uplink	Motorola	8 9			Not treated
R1-040908	Time and Rate scheduler for Enhanced Uplink	Motorola	8 9			Not treated
R1-040909	EUL Power Requirements	Motorola	8			Not treated
R1-040910	Signalling Support for EUL	Motorola	8 9			Not treated
R1-040911	Outer loop power control for EUL	Motorola	8			Not treated

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040912	Multi-step rate scheduling and synchronization scheme	Alcatel Shanghai Bell	8.5			Not treated
R1-040913	25224CR135(Rel-4, F)&CR136(Rel-5, A)&CR137(Rel-6, A): "Corrections of radio access procedure for 1.28Mcps TDD"	Siemens AG, CATT	5.2 5.3 5.4		16/08/2004	Approved with modification in the cover sheet in R1-011018
R1-040914	Target RoT control methods for HSUPA	Panasonic	8.5	(R1-040780)		Not treated
R1-040915	Tx Diversity and MIMO	Alcatel	6.1		16/08/2004	Noted
R1-040916	4Tx open-loop closed-loop (OL-CL) MIMO	Alcatel	6	=R1-040521		Not treated
R1-040917	Text Proposal for 4Tx open-loop closed-loop (OL-CL) MIMO	Alcatel	6	=R1-040595		Not treated
R1-040918	Reordering of TTIs in MBMS	Siemens	7.2	(R1-040775)	17/08/2004	Noted
R1-040919	Further considerations on the UE capability for MBMS (FDD)	Siemens	7.3	R1-041016		Revised by R1-041016
R1-040920	Spatial channel coding (SCC) for high throughput with a single receive antenna	Philips	6.1			Not treated
R1-040921	Text Proposal for Spatial Channel Coding	Philips	6.1			Not treated
R1-040922	Interaction between Enhanced Uplink and Compressed Mode	Philips	8.4	(R1-040770)		Not treated
R1-040923	HARQ in SHO for Enhanced Uplink	Philips	8.4	(R2-041286)		Not treated
R1-040924	Node B controlled scheduling in soft handover	Philips	8.5	(R1-040769)		Not treated
R1-040925	Implementation complexity of ACK/NACK performance improvement (including CR to 25.899)	Philips	16		20/08/2004	Endorsed. It was decided to provide official CR (number #1) on the reflector by August 27 in Tdoc R1-041054 and approve on E-mail until August 31.
R1-040926	Effect of PRE/POST scheme on HSDPA cell coverage (including CR to 25.899)	Philips	16	R1-041032		Revised by R1-041032
R1-040927	Retransmission Power Optimisation	Siemens	8.3			Not treated
R1-040928	E-DCH HARQ with Power Offset	Siemens	8.3			Not treated
R1-040929	Adjustment of Scheduling Timing by UE	Siemens	9.2			Not treated

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040930	Performance aspects of advanced spectral processing MIMO receivers for multi-code reception	Fujitsu, Dune Srl	6			Not treated
R1-040931	TR25.876 v.1.5.1 "Multiple-Input Multiple Output in UTRA"	Editor(Lucent Technologies)	6		16/08/2004	Approved as version 1.6.0 in Tdoc R1-041021
R1-040932	Principles of scheduling for enhanced uplink	Fujitsu	9.2			Not treated
R1-040933	Node B controlled Scheduling for Enhanced Uplink	Fujitsu	8.5			Not treated
R1-040934	Text Proposal on MIMO System Simulation Evaluation Methodology	Mitsubishi Electric Research Labs (MERL)	6		16/08/2004	Noted
R1-040935	Secondary Scrambling Code for IMS	Siemens	10.2		20/08/2004	Noted
R1-040936	Scheduling Schemes for EDCH	Lucent Technologies	9.2			Not treated
R1-040937	Scheduling Performance for EDCH	Lucent Technologies	9.2			Not treated
R1-040938	System Performance with IR/Chase	Lucent Technologies	9.1			Not treated
R1-040939	SHO Operation for EDCH	Lucent Technologies	9.1			Not treated
R1-040940	HARQ Processes for 2ms and 10ms	Lucent Technologies	9.1		18/08/2004	Noted
R1-040941	Physical channel code mapping for E-DCH	LG Electronics	8.1			Not treated
R1-040942	Signaling to support 2 ms and 10 ms TTIs for E-DCH	LG Electronics	8.4			Not treated
R1-040943	Uplink signaling for E-DCH	LG Electronics	8.4			Not treated
R1-040944	Principles of downlink ACK/NACK signaling for E-DCH	LG Electronics	8.4			Not treated
R1-040945	Timing of downlink signaling with 10 ms TTI for E-DCH	LG Electronics	8.5			Not treated
R1-040946	Node B scheduling with transmit power restriction for E-DCH	LG Electronics	9.2			Not treated

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040947	Outer loop power control aspects of E-DCH	LG Electronics	9.3			Not treated
R1-040948	HARQ signalling in Soft Handover	NEC	9.1			Not treated
R1-040949	Secondary Pilot for E-DCH	NEC	8.1			Not treated
R1-040950	Per Priority Queue basis Rate Scheduling	NEC	9.2	(R1-040739)		Not treated
R1-040951	Outer Loop power control in E-DCH	NEC	9.3	(R1-040738)		Not treated
R1-040952	HARQ Downlink Signalling	NEC	8.4	(R1-040742)		Not treated
R1-040953	Robust Signalling in Rate Scheduling	NEC	8.5	(R1-040740)		Not Available
R1-040954	Filtering on E-DCH TFCS	NEC	9	(R1-040741)		Not treated
R1-040955	System performance with low capability UE (2ms TTI vs 10ms TTI)	Panasonic	8.1			Not treated
R1-040956	Uplink Control Signaling	Ericsson	8.1		17/08/2004	Noted
R1-040957	Downlink Control Signaling	Ericsson	8.1			Not treated
R1-040958	E-DCH Physical Layer Hybrid ARQ Processing	Ericsson	8.2			Not treated
R1-040959	E-DCH Schduling - Way Forward	Ericsson	9.2		18/08/2004	Noted
R1-040960	On Scheduling Delays	Ericsson	9.2			Not treated
R1-040961	E-DCH Autonomous Transmissions	Ericsson	9.2			Not treated
R1-040962	Proposal on RR, SI time multiplexing with HS-DPCCH	NTT DoCoMo	8.1		17/08/2004	Noted
R1-040963	Configurable Cell Level Rate Controller for EUL	NTT DoCoMo	8 9.2		18/08/2004	Noted
R1-040964	Autonomous Rate Ramping for Cell Level Rate Control	NTT DoCoMo	8 9.2		18/08/2004	Noted
R1-040965	Considerations on Enhanced Uplink Scheduling Options	Siemens	9.2			Not treated
R1-040966	Uplink signalling for E-DCH scheduling based on predicted TFC	Siemens	9.2	=R1-040785		Not treated
R1-040967	Efficient scheduling in SHO by means of UE feedback	Siemens	9.2	(R1-040786)		Not treated
R1-040968	UL Signalling overhead for node B scheduling in SHO	Siemens	8.5	(R1-040788)		Not treated

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040969	DL Signalling overhead for node B scheduling	Siemens	8.5	(R1-040787)		Not treated
R1-040970	HSDPA Code Allocation/Measurement per Cell Portion	Nokia	17			Not treated
R1-040971	TR25.808 v0.0.3	Nokia	8	=R1-040805	17/08/2004	Approved as version 0.1.0 in R1-041033
R1-040972	HSUPA Requirements for uplink signalling	Nokia	8.1		17/08/2004	Noted
R1-040973	Implicit Redundancy Version for IR HARQ Scheme	Nokia	8.4	=R1-040752		Not treated
R1-040974	HSUPA HARQ ACK/NACK signalling performance	Nokia	8.4			Not treated
R1-040975	HSUPA Signalling aspects of the rate scheduling	Nokia	8.5	=R1-040750		Not treated
R1-040976	HSUPA Downlink scheduling signalling performance	Nokia	8.5			Not treated
R1-040977	1-bit Rate Request/Rate Grant Scheduling Signalling	Nokia	9.2			Not treated
R1-040978	HSUPA Dynamic Step Adjustment for Node B Controlled Scheduling	Nokia	9.2		18/08/2004	Noted
R1-040979	On channelisation code sharing during compressed mode	Nokia	13		20/08/2004	Noted. RAN1 could not conclude on a significant code saving gain
R1-040980	Text Proposal on System Setup for MIMO	Nokia, TeliaSonera, T-Mobile	6		16/08/2004	Noted
R1-040981	MIMO Reference Cases	Nokia	6		16/08/2004	Noted. Agreed to use 6 sectors and 2Rx LMMSE as reference case for MIMO for MIMO studies
R1-040982	Comments and TP on MIMO Compatibility Assessment	QUALCOMM Europe	6.1		16/08/2004	Noted
R1-040983	TR 25.803 v1.3.1	QUALCOMM Europe	7		16/08/2004	Approved as v1.4.0 in R1-041024
R1-040984	On NI mapping	QUALCOMM Europe	7.1		16/08/2004	Noted

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-040985	Position on scheduler design parameters	QUALCOMM Europe	9.2			Not treated
R1-040986	Comparison of D-ASTTD-SGRC and DSTTD-SGRC using full-queue system simulations	Huawei Technologies	6			Not treated
R1-040987	Midamble Allocation and Channelistion Code Allocation Signaling to Support MIMO in UTRA TDD	IPWireless	6	=R1-040580		Not treated
R1-040988	Text Proposal for MIMO TR 25.876 (Midamble Allocation and Code Allocation Signaling)	IPWireless	6	=R1-040581		Not treated
R1-040989	Per Antenna Rate Control for UTRA TDD	IPWireless	6	=R1-040582		Not treated
R1-040990	Text Proposal for MIMO TR 25.876 (MIMO Proposal for UTRA TDD)	IPWireless	6	=R1-040583		Not treated
R1-040991	Intra-frame Code Hopping for EU-TDD and Text Proposal for 25.804	IPWireless	11		20/08/2004	Decided to include TP with a note that applicability of the scheme for 1.28Mcps TDD is FFS.
R1-040992	HARQ Performance for TDD Enhanced Uplink and Text Proposal for 25.804	IPWireless	11		20/08/2004	Agreed
R1-040993	Power Control for TDD Enhanced Uplink and Text Proposal for 25.804	IPWireless	11	R1-041035	20/08/2004	Revised by R1-041035
R1-040994	System Simulation Results for Release 99 type channels for TR25.895 (with text proposal)	IPWireless	12	R1-041027	20/08/2004	Revised by R1-041027
R1-040995	Text Proposal for Application to 3GPP systems and services	IPWireless	12		20/08/2004	Revised wording in R1-041043
R1-040996	Text Proposal for Conclusion to TR25.895	IPWireless	12	R1-041028	20/08/2004	Revised by R1-041028
R1-040997	Downlink Code Resource Optimisation for TDD HSDPA	IPWireless	15			Not treated
R1-040998	MBMS Transport and Physical Layer Soft Combining	Motorola	7.3		17/08/2004	Noted
R1-040999	Signalling framework for Enhanced Uplink scheduling	Fujitsu	8.5			Not treated

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-041000	TR25.895 v1.3.4: Analysis of Higher Chip Rates for UTRA TDD Evolution	IPWireless	12		20/08/2004	Approved as version 1.4.0 in R1-041042
R1-041001	E-DCH scheduling method in SHO	Panasonic	8.5			Withdrawn
R1-041002	Soft Combining for MBMS	Ericsson	7.3		17/08/2004	Noted
R1-041003	UE performance requirements for MBMS reception	Ericsson	7.4		17/08/2004	Noted
R1-041004	UL signalling for FDD enhanced UL	Nortel Networks	8.4	(R1-040872)	17/08/2004	Noted
R1-041005	Traffic to Pilot Ratio Settings and Pilot Powers for EDCH	Lucent Technologies	8.3			Not treated
R1-041006	Modulation for TDD Enhanced Uplink and Text Proposal for 25.804	IPWireless	11			Withdrawn
R1-041007	Per-Stream Rate Control for LCR TDD_System Proposal and Initial Link Level Results	CATT	6			Not treated
R1-041008	Simulations related to R1-040962	NTT DoCoMo	8.1			Not treated
R1-041009	RoT information broadcast as auxiliary information	Panasonic	8.5			Not treated
R1-041010	Signalling for E-DCH Scheduling - Text proposal	Fujistu	8.5			Not treated
R1-041011	Fairness based multiuser MIMO scheduling	Samsung	6			Not treated
R1-041012	Antenna selection based MIMO	Samsung & SNU	6			Not treated
R1-041013	PU2RC Simulation	Samsung & SNU	6			Not treated
R1-041014	(To) LS on the material to be submitted to ITU-R WP8F#14 for Revision 5 of Recommendation ITU-R M.1457 (To:R1, R2, R3, R4)	ITU-R Ad Hoc (Telecom Italia)	4		16/08/2004	Noted
R1-041015	Comments on MICH mapping proposal in R1-040867	NEC	7.1		16/08/2004	Noted
R1-041016	Further considerations on the UE capability for MBMS (FDD)	Siemens	7.3		17/08/2004	Noted

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-041017	25.222CR122r1(Rel-4, F)&CR123r1(Rel-5, A)&CR124r1(Rel-6, A): "Correction of symbol Xi defined in sub-frame segmentation step"	Siemens	5.2 5.3 5.4	(R1-040826)	20/08/2004	Approved
R1-041018	25224CR135r1(Rel-4, F)&CR136r1(Rel-5, A)&CR137r1(Rel-6, A): "Corrections of radio access procedure for 1.28Mcps TDD"	Siemens AG, CATT	5.2 5.3 5.4	(R1-040913)	20/08/2004	Approved
R1-041019	25.214CR349r1(Rel-6, F)&CR350(Rel-5, A) "Clarification of SSDT uplink only signaling"	LG Electronics	5.4	(R1-040875)	20/08/2004	Approved
R1-041020	Approved Report of 3GPP TSG RAN WG1 Rel.6 Ad Hoc meeting in Cannes	RAN1 Secretary	2	(R1-040812)		Approved Version
R1-041021	TR25.876 v.1.6.0 "Multiple-Input Multiple Output in UTRA"	Editor(Lucent Technologies)	6			Approved Version
R1-041022	Text Proposal " MIMO Reference Case"	Nokia	6	(R1-040981)	20/08/2004	Approved
R1-041023	Comments and TP on MIMO Compatibility Assessment	QUALCOMM Europe	6	(R1-040982)	20/08/2004	Approved
R1-041024	TR 25.803 v1.4.0	QUALCOMM Europe	7.1			Not treated
R1-041025	Draft LS on introduction of the MICH in 25.21x	QUALCOMM Europe	7.1		20/08/2004	Approved in Tdoc R1-041048
R1-041026	TR 25.803 v1.4.1	QUALCOMM Europe	7.1	(R1-041024)		Decided to approve via E-mail until August 30
R1-041027	System Simulation Results for Release 99 type channels for TR25.895 (with text proposal)	IPWireless	12	(R1-040994)	20/08/2004	Agreed to include in the TR with modification
R1-041028	Text Proposal for Conclusion to TR25.895	IPWireless	12	(R1-040996)	20/08/2004	Revised regarding conclusions for R1-041044
R1-041029	DRAFT Question on the impact of L1 limitations on MBMS	Panasonic	7.2		20/08/2004	Approved with modifications in R1-041047
R1-041030	Baseline for finalization of MBMS soft combining	Qualcomm Europe, Motorola	7.3		20/08/2004	Agreed
R1-041031	Draft LS on questions on MBMS	Nortel Networks	7.3		20/08/2004	Approved with modifications in R1-041052.

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NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-041032	Effect of PRE/POST scheme on HSDPA cell coverage (including CR to 25.899)	Philips	16	(R1-040926)	20/08/2004	Endorsed. Decided to provide official CR (number #2) on the reflector by August 27 in R1-041055 and approve on E-mail approval until August 31.
R1-041033	TR25.808 v0.1.0	Nokia	8	=R1-040971		Approved Version
R1-041034	Text proposal on System setup to MIMO	Nokia	6		20/08/2004	Approved with addition and correction
R1-041035	Power Control for TDD Enhanced Uplink and Text Proposal for 25.804	IPWireless	11	(R1-040993)	20/08/2004	Agreed
R1-041036	Summary from MIMO adhoc meeting	MIMO ad hoc	6		20/08/2004	Approved
R1-041037	25.214CR343r2(Rel-5, F)&CR344r2(Rel-6, A) "Clarification of minimum power limit"	Panasonic	5.3	(R1-040839)	20/08/2004	It was not clear if CR is need or not. It was decided to conclude discussion in RAN1#38bis
R1-041038	Proposed addition for TR25.993	T-Mobile, Siemens, Nokia	5.5		20/08/2004	Noted
R1-041039	(Cc) Reply LS on Proposed Modification to HSDPA Radio Bearer Settings (To:T1 Cc: R1) (Reply to)	RAN2	4		20/08/2004	Noted
R1-041040	(Cc) LS on enhancing L1 multiplexing test coverage in 3GPP test specifications (To:T1, Cc: R1)	RAN2	4		20/08/2004	Decided to provide quick feedback to TSG WG-T1 that RAN1 would review the L1 aspects and provide more feedback from RAN#38bis in R1-041049.
R1-041041	TR 25.804 "Uplink Enhancements for UTRA TDD" v0.3.0	InterDigital	11			Approved version
R1-041042	TR25.895 v1.4.0: Analysis of Higher Chip Rates for UTRA TDD Evolution	IPWireless	12			Approved version
R1-041043	Text Proposal for Application to 3GPP systems and services	IPWireless	12	(R1-040995)	20/08/2004	Approved
R1-041044	Text Proposal for Conclusion to TR25.895	IPWireless	12	(R1-041028)	20/08/2004	Approved
R1-041045	Draft Response to LS on the material to be submitted to ITU-R WP8F#14 for Revision 5 of Recommendation ITU-R M.1457 (To:ITU-R Ad Hoc)	RAN1	4		20/08/2004	Approved in R1-041046

NUMBER	TITLE	SOURCE	AGENDA ITEM	REVISED BY (From)	Treated Date	Conclusion/decision
R1-041046	Response to LS on the material to be submitted to ITU-R WP8F#14 for Revision 5 of Recommendation ITU-R M.1457 (To:ITU-R Ad Hoc)	RAN1(Telecom Italia)	4	=R1-041045		Approved version
R1-041047	LS on Question on the impact of L1 limitations on MBMS (To: R2, R3, R4)	RAN1(Panasonic)	7	(R1-041029)		Approved version
R1-041048	LS on introduction of the MICH in 25.21x (To:R2, R3 Cc: R4)	RAN1(Qualcomm)	7			Approved version
R1-041049	DRAFT LS on enhancing L1 multiplexing test coverage in 3GPP test specifications (To:T1, Cc:RAN2)	RAN1 (Nokia)	4		20/08/2004	Approved
R1-041050	TR25.876 v.1.6.1 "Multiple-Input Multiple Output in UTRA"	Lucent Technologies	6			Decided to approve via email until August 31
R1-041051	TR 25.895. version 1.4.1	IPWireless	12			Provided on the reflector, and E-mail approval deadline would be August 30
R1-041052	LS on questions on MBMS (To :R2, Cc :R3)	RAN1(Nortel Networks)	7.3	(R1-041031)		Approved version
R1-041053	LS on enhancing L1 multiplexing test coverage in 3GPP test specifications (To:T1, Cc:R2)	RAN1 (Nokia)	4	(R1-041049)		Approved version
R1-041054	25.899CR1(Rel-6, F)"Implementation complexity of ACK/NACK performance improvement"	Philips	16	=R1-040925		On the reflector by August 27 and approve on E-mail until August 31. There were some comments from Samsung. Revised to R1-041056)
R1-041055	25.899CR2(Rel-6, F)"Effect of PRE/POST scheme on HSDPA cell coverage"	Philips	16	=R1-041032		On the reflector by August 27 and approve on E-mail until August 31. Approved on E-mail.
R1-041056	25.899CR1r1(Rel-6, F)"Implementation complexity of ACK/NACK performance improvement"	Philips	16	(R1-041054)		Approved on E-mail.
R1-041057	MIMO TR25.876 v1.7.0	Editor(Lucent Technologies)	6	=R1-041050		Approved version
R1-041058	Response LS on minimum power limit (To:R1,CC:T1RF)	RAN4	4			Noted
R1-041059	25.214CR352r1(Rel-6, F)&CR353(Rel-5, A) "Clarification of SSDT uplink only signaling"	LG Electronics	5.4	(R1-041019)		Approved.