TSG-RAN Working Group 1 meeting No. 20 *TSGR1-01-0432*
May 21- 25, Pusan, Korea

Agenda Item: **-**

Source: **Secretary**

Title: **Draft minutes of WG1 #19 meeting**

Document for: **Approval**

Draft Minutes for 3GPP TSG-RAN WG1 19th Meeting

Meeting start: February 27th, 2001, in Las Vegas, NV, U.S.A.

Day 1, started at 09.08

1. **Opening of the meeting** (09:08-09:12)
The chairman, Mr. Antti Toskala (Nokia), opened the meeting.
On behalf of the hosting company(Motorola), Mr. Amitava Ghosh welcomed the meeting.

2. Approval of agenda (R1-01-0189) (09:12-09:21)
For agenda point 3 *Report from TSG RAN Ad Hoc on UTRAN Evolution*, Chairman announced that he would present it in the afternoon. It was presented at the end of Day1 very briefly and document was not distributed. (See section 5)
Chairman added agenda point 4 for the election of the officials. Checking of the candidates would take place in the afternoon.

3. Identification of the incoming liaison statements and actions in the answering

No.	Title	Source	To/Cc	Tdoc No.	Source Company	Notes
1	LS to TSG-T WG1 on cell selection timing	GE RAN	CC	R1-01-0191 (GP-010386)	T-Mobil	Noted. (*1) Day1 09:25-09:28
2	LS on UE Simultaneous Physical Channels Combinations for 1.28 Mcps TDD	R2	TO	R1-01-0192 (R2-010244)	CATT	Noted. (*2) Day1 09:29-09:34
3	Response to LS (R1-010180) on Revision of TR 25.840 V1.1.0 on Terminal Power Saving Features	R2	TO	R1-01-0193 (R2-010245)	Samsung	Noted. (*3) Day1 09:34-09:55
4	Response to LS (R1-010172) on DSCH TFCI Split Mode	R2	TO	R1-01-0194 (R2-010246)	Samsung	Noted. (*4) Day1 09:55-09:59
5	Response LS on DSCH TFCI Split Mode	R3	TO	R1-01-0264 (R3-010327)	Samsung	Noted. (*5) Day1 09:59-10:07
6	Response to LS (S4-000700R) on Efficiency of Packet Switched Conversational Multimedia Service	R2	CC	R1-01-0195 (R2-010251)	Siemens	Noted. (*6) Day1 10:07-10:09
7	Clarification request on measurements definition and accuracy	R3	TO	R1-01-0196 (R3-010325)	Nortel	Noted. (*7) Day1 10:10-10:14
8	LS on power balancing accuracy requirement	R4	TO	R1-01-0197 (R4-010161)	Nokia	Postponed to Day2(*8) Day1 10:15-10:27
9	Response to LS (R1-010173) on impact of compressed mode on DPCCH gating benefits	R4	TO	R1-01-0198 (R4-010194)	Nokia	Noted. (*9) Day1 10:27-10:36
10	LS to RAN WG1: Amendments to application of beam forming in release 4	R4	TO	R1-01-0199 (R4-010202)	Nokia	Noted. (*10) Day1 11:11-11:19
11	Response to RAN WG1 LS on compressed mode transmission gap length (TGL) 8 and further limitations on compressed mode usage in 25.133	R4	TO	R1-01-0200 (R4-010223)	Nortel	Noted. (*11) Day1 11:19-11:37
12	LS for UMTS-1800 work required from other working groups	R4	TO	R1-01-0230 (R4-010352)	Motorola	Noted. (*12) Day1 11:41-11:44
13	LS on TSG-SA4 request for information with regard to RAN handling of bit erroneous SDUs within packet switched domain radio bearers	S4	-	R1-01-0298 (S4-000652)	?	Noted. (*13) Day1 11:46-11:53
14	LS on power control preamble	R2	TO	R1-01-0316 (R2-010742)	Ericsson	Noted ✍ CR (*14) Day1 17:42-17:45
15	Response to LS (R4-010193) on Effect of a repeater on OTDOA-based positioning accuracy	R2	CC	R1-01-0323 (R2-010753)	Panasonic	Noted. (*15) Day1 18:12-18:13
16	LS on Release 4 UE Support for CPCH	R2	CC	R1-01-0314 (R2-010740)	GBT	Noted ✍ Day3 (*16) Day1 18:14-18:23
17	Response to LS (R1-010105) on PCH message length	R2	TO	R1-01-0315 (R2-010741)	Nortel	Noted. (*17) Day1 18:23-18:24
18	LS on Power offset $P_{Pilot\text{-}DPDCH}$	R2	TO	R1-01-0318 (R2-010744)	NTT DoCoMo	Noted. (*18) Day1 18:26-18:40
19	LS on Physical Channels Combinations for 1.28 Mcps TDD	R2	TO	R1-01-0321 (R2-010747)	CWTS/ CATT	Treated in AH21 See R1-01-0367
20	Response to LS (R3-010317, R3-010325 and R1-010147) on RTD measurement in UTRAN	R2	TO	R1-01-0319 (R2-010745)	Qualcomm	Noted. (*19) Day2 09:15-09:21
21	LS on DSCH related updates for Rel'4 UE capabilities for the UE Radio Access Capability parameter combinations	R2	TO	R1-01-0320 (R2-010746)	Nokia	Noted. (*20) Day2 09:22-09:28
22	LS on Improved OLPC for FACH	R2	TO	R1-01-0322 (R2-010749)	GBT	Noted ✍ Day3 (*21) Day2 09:28-09:31
23	Response to LS (S4-000652) on RAN handling of bit erroneous SDUs within packet switched domain radio bearers	R2	CC	R1-01-0324 (R2-010756)	Nokia	Noted. (*22) Day2 09:32-09:38
24	LS on Delay times in the control plane	R2	CC	R1-01-0365 (R2-010752)	Samsung	Noted. (*23) Day2 11:53-12:04
25	LS Answer on Introduction of Uplink Power Control at Power Control Limits	R4	TO	R1-01-0364 (R4-010471)	Siemens	Noted. (*24) Day2 12:07-12:23
26	LS on Default configurations	R2	TO	R1-01-0362 (R2-010748)	Ericsson	Noted. (*25) Day2 1629-17:10

27	Reply on Default Configurations for Handover	S4	TO	R1-01-0201 (S4-010122)	Ericsson	Noted. (*25) Day2 16:37-16:50
28	LS for "Reply on Default Configurations for Handover"	N4	TO	R1-01-0208 (N4-010283)	Tellabs Ericsson	Noted. (*25) Day2 16:50-16:53
29	Answer LS on clarification request on measurements definition and accuracy	R4	TO	R1-01-0363 (R4-010364)	Qualcomm	Noted. (*26) Day2 17:12-17:14
30	LS on TDD DPCH Transmit Diversity Indication	R2	TO	R1-01-0317 (R2-010743)	Interdigital	Postponed. (*27) Day2 17:15

(*1) This is the answer liaison from GERAN to TSG T WG1. RAN WG1 received this LS as CC. Since there was no action expected from RAN WG1, chairman concluded this as 'Noted'. There were some issues related to RAN WG4 and RAN WG2.

(*2) In this LS which had been sent out from RAN WG2#18, RAN WG2 was requesting RAN WG1 for its reviewal of the attached CR which covers aspects of UE simultaneous physical channel combinations for 1.28 Mcps TDD. Our answer was expected to be provided before RAN WG2#19. Since RAN WG2#19 had been scheduled to be held one week earlier than RAN WG1#19, this LS had been put on the RAN WG1 e-mail reflector for comments right after the RAN WG2#18. After having some comments, chairman sent RAN WG1 view on this issue to RAN WG2 e-mail reflector. (Copy was also sent on the RAN WG1 e-mail reflector on Feb. 15 as well) Based on this view, RAN WG2 continued their work in RAN WG2 #19 and produced a new liaison in **R1-01-0321**.
As this new liaison was not available in the morning of Day1, Chairman proposed to revisit this issue after everyone got the R1-01-0321. After all, it was reviewed in TDD Ad Hoc and not reviewed in the plenary. (See No. 19)

(*3) This is the answer liaison statement to **R1-01-0180** which we sent out in RAN WG1#18 meeting. We had asked them to study the "Terminal Power Saving Feature" based on RAN WG1 TR attached.
This LS informed us a kind of drastic change in the view of the benefit of the Gating scheme in RAN WG2.
It says

RAN2 would like to inform RAN1 and RAN4 of its status. RAN2 has discussed on the work item and one concern is issued regarding the benefits of the gated DPCCH transmission associated with DSCH over using CELL_FACH process. It was recognized that moving to CELL_FACH is better from terminal saving point of view. Still, gains were claimed from the point of signalling load and delay aspects. Contributions were invited for WG2#19 on comparing delay aspect and signalling between using CELL_FACH and gating and an e-mail discussion would be held to discuss comparison.

At the time of this LS presentation, we had received no continuous LS from RAN WG2#19 and so we were not able to see the latest situation in RAN WG2 on this topic. But it was quite clear that in RAN WG2, the issue was still open (further fundamental discussion is needed). Chairman suggested that in RAN WG1 we should aim to finalize the issue on the TR then discuss in coming RAN about what should be done on the Gating which is release 4 work item. Chairman stated that there would be no point in going to the approval of the CRs on this topic during this week in RAN WG1 in case the issues are still open in RAN WG2 because for release 4 issues, it is a key that all linked CRs of all groups are available. Even if we approved the CRs they will not be treated in RAN if other working groups do not agree on the issue.
There took place a bit long discussion on how we should proceed with this topic.
Conclusion: This LS was noted. We would not approve any CRs on this topic in this meeting. We will review and finalize the TR. RAN will be asked the guidance on how we should proceed with this work item. There may be a joint session with RAN WG2 on this issue in May in Korea because we would have collocated meeting with RAN WG2 and RAN WG3. On day2 we received related new LS from RAN WG2. (See No. 24)

(*4) Mr. Ju Ho Lee (Samsung) presented this LS.
This is the answer liaison statement to **R1-01-0172** which we sent out from RAN WG1#18 meeting in which we asked RAN WG2 and RAN WG3 whether our understanding on DSCH TFCI split mode is correct or not.
RAN WG2 was answering that our understanding is correct and also encouraged RAN WG1 to study the enhancement on hard split to support variable bit length TFCI for DCHs and DSCHs as Release 5 issue.

(*5) Mr. Ju Ho Lee (Samsung) presented this LS.
This is the answer liaison statement from RAN WG3 to **R1-01-0172** (See above). RAN WG3 made almost similar comment as RAN WG2.
Ms. Evelyne Le Strat (Nortel) remarked that we should note in order to avoid misunderstandings that we are speaking here about a set of fixed length TFCI which is just different from 5 + 5. We are definitely not speaking about variable length TFCI and we should not speak about it. She added that on whether we should allow all possible combinations or we should have certain number of possible combinations subset, it is up to RAN WG1 to see what would be feasible from channel coding point of view having opinions from RAN WG2 and RANWG3.
There was another comment saying that we should not have different coding scheme for different split.

(*6) Mr. Marcus Purat (Siemens) presented this LS.
In RAN WG1 #18 meeting we received LS from SA WG4 on the efficiency of packet-switched conversational multimedia service(**R1-01-0029**). We already discussed it and sent our answer to SA WG4(**R1-01-0170**).
RAN WG2 also received same LS from SA WG4 and this is its answer to SA WG4 and SA WG2. They sent this to us as CC.
RAN WG2 was indicating that there is nothing that prevents UTRAN from supporting multiple flows with unequal error protection for IP multimedia services and suggesting that SA WG4 seeks guidance from SA WG2

and RAN WG3 on the architectural issue.
No comments were raised. Chairman concluded that this was noted.

(*7) Ms. Sarah Boumendil (Nortel) presented this LS.
RAN WG3 has identified the need for several measurements for the purpose of UE Positioning function and they were asking in this LS to RAN WG1 to define RTD measurement as describe in TS 25.305. In addition, RAN WG3 was also asking relevant accuracy issues to RAN WG4.
Chairman remarked that we would see some CRs related to this RTD measurement during this meeting.
Mr. Serge Willenegger (Qualcomm) pointed out that R1-01-0319 is the answer from RAN WG2 to this LS.
Mr. Sarah Boumendil indicated that there is relevant LS coming from RAN WG4 (**R4-010364**). As this RAN WG4 LS was not received at this point of time, chairman suggested that we would review those relevant 2 liaisons when we go through the RTD related CRs.
R4-010364 was received on Day2 and numbered as **R1-01-0363**. This was reviewed on Day (See No. 29)

(*8) Mr. Markku Tarkiainen (Nokia) presented this LS.
This is the answer from RAN WG4 to RAN WG3 LS (R3-002576) in which RAN WG3 proposed to move accuracy requirement related to power balancing algorithm from its specification TS 25.423 (RNSAP) and TS 25.433 (NBAP) to RAN WG4 specifications introducing new parameter a. But RAN WG4 felt it is not necessary to define new parameter a. As an alternative RAN WG4 proposed to modify the description in TS 25.214 so that it would indirectly refer to existing requirement set for power control step sizes. They attached to this LS a sample text proposal for TS 25.214.
There was one concern raised that the need for this change is not quite clear.
Chairman suggested offline checking with our RAN WG4 colleagues. He postponed the decision to Day2. (See No.41)

(*9) Mr. Markku Tarkiainen (Nokia) presented this LS.
This is the answer LS from RAN WG4 to **R1-01-0173** which we sent out from RAN WG1#18 meeting in Boston in which we asked RAN WG4 about the foreseen use of compressed mode in terms of percentage of time when the compressed mode is active because it could lead to a degradation of the battery savings benefits brought by DPCCH gating.
Although there was no concrete answer in terms of percentage, RAN WG4 answered in this LS that it believes that continuous use of compressed mode should be avoided and there will be always a notable number of users in operators' network who do not have compressed mode activated. In addition RAN WG4 proposed to use DPCCH gating even during the compressed mode because even if compressed mode patter is active, not every frame is compressed. In general, this LS seemed to support the benefit of DPCCH gating.
Mr. Dirk Gerstenberger (Ericsson) remarked that there seems a mixture of compressed frames and compressed mode in the bullet points in the LS.
Chairman suggested discussing this issue when we review DPCCH gating documents later.
Philips had prepared related paper on this issue (text proposal to TR 25.840) in **R1-01-0280**. This was reviewed and approved on Day 2. (See No. 95)

/**coffee break 10:38-11:10 **/

(*10) Mr. Markku Tarkiainen (Nokia) presented this LS.
RAN WG4 is studying and introducing requirements for UE when beam forming without S-CPICH. In this case UE would need to use dedicated pilots for a phase reference. RAN WG4 aims to have related test included for release 4 and is recommending that RAN WG1 provide needed amendments for release 4 WG1 specifications so that beam forming concept using dedicated pilots can be finalized in all levels of RAN specifications for release 4.
Chairman remarked that there would be a couple of Nokia CRs addressing this issue including CRs for release 99 specifications. He proposed to review all these CRs in the reviewal of release 99 CRs because they are closely related to each other.
Ms. Evelyne Le Strat (Nortel) remarked having a look at those CRs that release 99 CRs may be more than correction for release 99. This comment was noted.
Since there was no action expected from this LS, chairman concluded that this LS was noted.
Relevant CRs were reviewed and approved after some modifications. (See No. 32,33,63,64)

(*11) Ms. Sarah Boumendil (Nortel) presented this LS.
This is the answer LS from RAN WG4 to **R1-01-0167** which we sent out from RAN WG1#18 meeting in Boston.
In RAN WG1#18 there was a CR(**R1-01-0077** CR 25.212-104) which proposed to introduce transmission gap length of 8 slot as used in some of the compressed mode parameter examples in TS 25.133. But since this change was more than a correction, we sent LS (**R1-01-0167**) to RAN WG4 to ask for the reason why they introduced TGL=8 in their specifications.
In the current LS, RAN WG4 was answering that in RAN4#15 meeting in Boston it was agreed that, while TGL=8 does provide some advantage, similar performance could also be achieved using the existing TGL value of 10 and the late introduction of a new value into the specifications could not be sufficiently justified. It was therefore agreed to remove the associated patterns from TS 25.133. With respect to the possible inclusion of TGL values of 8 in Release 4 specifications, RAN WG4 has not reached any conclusion at this point.
So, receiving this answer there is no more point for RAN WG1 to include TGL=8 in our specification for release 99. Therefore CR25.212-104 in R1-01-0077 which had been on-hold was rejected. As Nokia had prepared CR addressing this issue for release 4, this would be reviewed later during this meeting. (See No. 61)
Chairman suggested offline checking with RAN WG4 colleagues regarding the bullets point in this LS whether we should put something in our specifications or not.
Mr. Tim Moulsley (Philips) remarked that we might need to send an answer LS to RAN WG4 to inform RAN

WG1 situation on this issue. Chairman agree with this comment. But after all no answer was made in this meeting.

(*12) The delegate from Motorola presented this LS.
/** Although the source of the LS is being put as "Motorola", this was officially approved in RAN WG4 #16 meeting **/
At RAN#9 a work item on UMTS-1800 was agreed for which RAN4 is the leading working group. Whilst the majority of this work falls within the scope of RAN4 there are a few aspects that should be covered by other RAN working groups. The intention of this LS is to inform other working groups the outline of the work required by other groups.
According to this LS, there is no work envisaged by RAN WG4 for RAN WG1 on this work.
Mr. Tim Moulsley (Philips) remarked that although we do not have to do anything with this particular LS, but we need to bear in mind what will be done on the UE capabilities especially for compressed mode in relation to this work item. This comment was noted.

(*13) This LS was sent from SA WG4 to RAN WG2 originally. But RAN WG2 considered that this needs to be looked at by RAN WG1 as well and so they forwarded this to RAN WG1.
Chairman presented this LS.
SA4 has started working on definition of codecs for packet switched multimedia services, both for the conversational real-time services provided by the IM Subsystem and the transparent packet switched multimedia streaming service. SA4 assumption is that codec data is encapsulated into RTP/UDP/IP packets and header compression is performed by the PDCP layer. During discussion SA4 felt the needs for clarifications from radio protocol technical point of view and they sent questions on following 2 issues.
- Residual bit errors and handling of erroneous SDUs
- CRC options

Chairman remarked that question on CRC options would fall into RAN WG1 scope and some answer should be sent. Chairman asked Ms. Evelyne Le Strat (Nortel) to draft an answer.
The answer was drafted in **R1-01-0339**. This was reviewed on Day4 and approved into **R1-01-0426**. RAN WG2 has also sent an answer to SA4. We received their answer as CC in **R1-01-0324**(R2-010756). This was reviewed on Day2. (See No. 23)

(*14) Mr. Dirk Gerstenberger (Ericsson) presented this LS.
This LS was informing the result of RAN WG2#19 discussion on power control preamble. RAN WG2 concluded a series of discussion on this issue. (See **R1-00-1293**, **R1-00-1413**, **R1-00-1491**). They did not see a need to introduce special behaviour or handling in RAN WG2 specifications handling the TFC or TFCI value used during the power control preamble. This was seen as L1 functionality and is only referenced in RRC. Having our request, RAN WG2 increased the power control preamble length to a maximum of 7 frames. And in the course of this discussion they identified one problem regarding TTI alignment in relation to PCP. Ericsson had prepared new CR for this issue. It was reviewed right after the reviewal of this LS. (In fact, CR had been reviewed before this LS, but the decision was postponed until we review this LS.) (See No. 53, 54, 70)

(*15) This was an answer LS from RAN WG2 to RAN WG4. Because this was sent to us as CC and no action seems to be expected from RAN WG1 (Chairman confirmed this with Mr. Hidetoshi Suzuki (Panasonic)), chairman concluded this as noted without going through the LS.

(*16) Mr. Joe Kwak (GBT) presented this LS.
In RAN WG2#19, it discussed CR 25.306-009 (R2-010664, embedded in this LS) which proposed to add UE support for CPCH as optional in 32 kbps uplink class and mandatory for all other uplink classes in Release 4. This LS was informing us the discussion points in RAN WG2. Since the CR had not been proposed in RAN WG2, no decision was taken and the CR had not been agreed. As the proposal seems to involve RANWG1 aspects, RANWG2 was requesting in the LS that RANWG1 discuss the CR and provide recommendations to next RAN.
Mr. Joe Kwak explained that GBT has 3 more documents on this CPCH topic and he proposed to discuss all these documents on Day3 with other release 4 topics. Chairman agreed with this proposal. (See section 8.7)

(*17) Ms. Sarah Boumendil (Nortel) presented this LS.
This was answer LS to **R1-01-0105** which was sent out from RAN WG1#18 meeting regarding the length of the PCH message.
RAN WG2 confirmed that the paging message length sent on PCH is limited to one 10 ms frame length. Therefore no segmentation is performed in the higher layer (i.e. RLC). RAN WG2 confirmed also that there are no cases where consecutive frames carrying PCH transport blocks have to be received by a particular UE.
R1-01-0105 was the outcome of the discussion related to **R1-01-0056** which proposed to clarify that the S-CCPCH carrying the paging information should be one single frame. Since we received the answer from RANWG2 that there are no cases where consecutive frames carrying PCH transport blocks have to be received by the UE, Panasonic presented the revision of R1-01-0056 (CR 25.211-092r1, **R1-01-0368**) on Day2 and this was approved. (See No. 60)

(*18) Mr. Masafumi Usuda (NTT DoCoMo) presented this LS.
In RAN WG2#19, a CR which specifies that the power-offset value is signalled to the UE for each radio link was approved. However it was pointed out during the RAN WG2 discussion whether the power offset value is necessary for each radio link or one power offset value per UE. In this LS, RAN WG2 was asking RAN WG1 guidance on this issue.
Some discussion took place. Conclusion was as follows.
If we have the same power offset for all the radio links (per UE) it would simplify SIR estimation process. Unless we see the reason why there should be different power offsets for different radio links or benefit for having different offset, weshould consider the same power offset at least for release99 from physical layer point of

view.
Chairman proposed that in order to avoid the mess in RAN (by killing RAN WG2 CR) we should admit RAN WG2 CR as it is and instead put the restriction in RAN WG1 specs that all radio links should have the same power offset. RAN WG2 specs would be revised in the future to reduce unnecessary signalling for this.
RAN WG2 and RAN WG3 needs to be informed that there would be some inconsistency (restriction in R1) on this issue.
Though **R1-01-0360** CR 25.214-162 was allocated for this CR it was not presented during the meeting due to the lack of time. After the meeting was over Mr. Markku Tarkiainen (Nokia) posted R1-01-0360 on the e-mail reflector. Chairman proposed on the reflector to submit this CR to RAN with source name as Nokia in order to avoid e-mail approval of the CR. But in RAN 11 this CR was not presented. (to my understanding.)

(*19) Mr. Serge Willenegger (Qualcomm) presented this LS.
This is an answer LS to **R1-01-0147** which we sent out from RAN WG1#18 meeting.
In RAN WG1#18 meeting, a document(**R1-01-0064**) was discussed in which new UTRAN measurement for the support of OTDOA measurement in UTRAN Rel-4 UE positioning to be in line with the description of RTD measurement in TS 25.305 *Stage 2 Functional Specification of UE Positioning* in UTRAN, v3.4.0.
In this answer LS, RAN WG2 was informing us that the measurement we proposed is in line with their expectation. We also received relevant LS from RAN WG3 and RAN WG4. (See No. 7, 29)
Siemens and Nokia prepared CR for inclusion of RTD measurement for TDD and FDD respectively. Having this LS from RAN WG2, those CRs were reviewed and approved on Day4. (See No. 89 and 91)

(*20) Mr. Markku Tarkiainen (Nokia)
This is an answer LS to **R1-00-1483** which was sent from RAN WG1#18 meeting. RAN WG2 was informing us that it approved a CR which we attached to R1-00-1483 in which the DSCH related capability, support of PDSCH, is modified for the 384kbps class by changing the indication Yes/No to Yes. In addition RAN WG2 was considering similar change to 128 kbps class and was asking RAN WG1 to provided the revision of the attached CR to RAN if RAN WG1 agrees with RAN WG2 on this issue.
Mr. Dirk Gerstenberger (Ericsson) opposed to this idea. Chairman agreed and concluded that we would not touch 128 kbps class.

(*21) Mr. Joe Kwak (GBT) presented this LS.
RAN WG2 was asking RANWG1 to study the Layer 1 DL Probe procedure for Improved OLPC for FACH described in the attached document. (**R2-010341**) There were several questions listed in the LS regarding DL probe procedure mainly on the benefits of this procedure.
Mr. Joe Kwak (GBT) proposed to treat this issue in the similar way of CPCH issue on Day3 with other release4 topics. (See Section 8.7)

(*22) Mr. Markku Tarkiainen (Nokia) presented this LS.
On Day1 we treated LS from SA WG4 (S4-000652) which had not been sent to us directly but had been forwarded by RAN WG2 for discussion. We discussed the LS in **R1-01-0298** (See No.13) and concluded that we should make an answer for the CRC option part of their questions.
The current LS is the RAN WG2 answer to SA WG4(S4-000652). They send a copy to RAN WG1. In this answer LS, RAN WG2 mentioned to SA WG4 that more detailed view on CRC issue might be provided by RAN WG1. This is in line with our intention.

(*23) Mr. Ju Ho Lee (Samsung) presented this LS.
In RAN WG2 there have been discussions on the benefits of Gated DPCCH Transmission (Gating) over using CELL_FACH state. The gains of Gating over using CELL_FACH are being discussed in terms of signalling load and delay aspects. Regarding these signalling load and delay aspects, RAN WG2 sent LS to RAN WG3 to ask for their guidance. RAN WG2 sent this LS to RAN WG1 as CC informing the current situation in RAN WG2 on DPCCH gating. RAN WG2 has not yet reached a conclusion on Gating.

(*24) Siemens presented this LS.
This is the answer LS to **R1-01-0171** which we sent out from RAN WG1#18 meeting in which we asked RAN WG4 2 questions regarding the feasibility of *introduction of uplink power control at power control limits* in terms of backward compatibility and performance requirements.
In this LS RAN WG4 was answering that although they do not see any problem on the backward compatibility issue, there were concerns raised on accuracy issues. RAN WG4 confirms the gain but it could be achieved only by using the algorithm in the ideal conditions which means in order for this scheme to achieve gain, the accuracy requirements may need to be unacceptably tightened. Complexity will be increased considerably.
Siemens remarked that although Siemens does not see any complexity increase, other companies do have complexity increase. Having this LS received Siemens proposed to postpone the proposal of *Improved uplink power control* and continue the discussion for release 5. Siemens stated that the last paragraph of the this LS should be noted because it was pointing out some possible problems from an implementation point of view regarding the power control algorithm specified in the current TS 25.214, section 5.1.2.6., where it is stated that scaling shall not be applied if a UE operating below -50 dBm receives power up commands.
Chairman encouraged the people to consider this problem and make some inputs offline.
R1-01-0387 was allocated for this input.
On Day4 it was announced by Siemens that after having offline discussion with Mr. Tim Moulsley (Philips) Siemens concluded that we do not see the necessity to change RAN WG1 specification since we do not really understand what the problem is. Moreover it can be considered that RAN WG4 can solve this problem within their specifications from the implementation point of view. Therefore this T-doc (R1-01-0387) was withdrawn.
Chairman agreed with this decision and stated the he would have some clarification from RAN WG4 chairman

on this issue in the next RAN. (Day4 09:25)

(*25) Mr. Dirk Gerstenberger (Ericsson) presented all these 3 LSs.
Main LS was **R1-01-0362**(R2-01-0748) and other 2 LSs **R1-01-0201** (S4-010122), **R1-01-0208** (N4-010283) were presented for supplementary information. R1-01-0201 was the answer LS from SA WG4 to RAN WG2 (R2-002463) which we had treated in RAN WG1#17 meeting. SA WG4 was pointing out the differences UMTS_AMR2 codec in terms of the restriction of the switching time. Chairman remarked that if this information from SA WG4 had already been reflected in RAN WG2 CR which was contained in R1-01-0362 then there would be nothing for us to worry about. Mr. Dirk Gerstenberger informed that the RAN WG2 could not see any difference among those restrictions and therefore the results had not been reflected in the RAN WG2 CR.
Ms. Evelyne Le Strat (Nortel) pointed out that RAN WG2 CR does not include the requests from SA WG4. There is nothing on variable bit rate configuration. Chairman stated that this inconsistency will be clarified in the next RAN.
R1-01-0208 was answer LS from CN WG4 to SA WG4(S4-01022, above). This was noted.
In R1-01-0362 RAN WG2 was asking to check their draft CR for the outstanding 6 default configurations which needs RAN WG1 guidance. In case there are needs to modify the values, RAN WG2 was requesting us for modifications and put the revision on the RAN WG2 e-mail reflector in advance to next RAN.
Since Mr. Yannick Le Pezennec (Vodafone) had already done with this homework in **R1-01-0272**, it was reviewed in succession.

R1-01-0272 *Proposed parameter values for 2G-3G handover preconfigurations*
Source : Vodafone Group, France Telecom, Telia

This paper proposed the values for the default preconfigurations requested by RAN WG2 LS (R1-01-0362).
After presentation of this paper, chairman asked Mr. Yannick Le Pezennec to modify the draft RAN WG2 CR contained in R1-01-0362 using the values listed in this paper (R1-01-0272). Chairman encouraged the people to go to Mr. Yannick Le Pezennec if they want to do some modifications. Chairman also asked Mr. Yannick Le Pezennec to draft a LS to RAN WG2 which would contain the revised CR. This LS was drafted in **R1-01-0393**.
It was reviewed on Day4 and approved in **R1-01-0421**. (See No. 160)

(*26) Mr. Serge Willenegger (Qualcomm) presented this LS.
This was an answer LS from RAN WG4 to RAN WG3 informing that RAN WG4 had not yet completed the work on the accuracy definitions for RTD and ATD measurements.
We had already received relevant LS from RAN WG2 (**R1-01-0319**, R2-010745, See No. 20).
RAN WG2 LS was bit more specific on this issue.
Chairman concluded this was noted.

(*27) The reviewal of this LS was postponed. Interdigital was preparing the relevant CR with this LS but during the meeting offline discussion was going on and conclusion was not reached.

4. Change Requests for WG1 Release –99 specifications

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
31	015	1	25.223	R1-01-0020	Code Specific Phase Offsets for TDD	F	Siemens	Approved	No (*1) Comments Day1 12:22
32	095	-	25.211	R1-01-0254	Phase Reference for Secondary CCPCH carrying FACH	F	Nokia	To be revised	(*2) Day1 1446
33	093	-	25.211 Rel-4	R1-01-0217	Application of beamforming and combination of beamforming with TX-diversity on UTRA FDD downlink	F	Nokia	To be revised	(*3) Day1 1446
34	094	-	25.211	R1-01-0218	Clarification on PICH and S-CCPCH timing relation	F	CWTS/ Huawei	Rejected	(*4) Day1 15:11
35	039	-	25.213	R1-01-0261	Clarification of the scrambling code of a power control preamble	F	Panasonic	To be revised	(*5) Day1 15:15
36	038	-	25.213	R1-01-0247	Clarification of channelization codes when SF=512	F	Siemens Panasonic	Approved	No (*6) Comments Day1 15:17
37	156	-	25.214	R1-01-0282	Clarification of initialisation procedure	F	Philips	Approved	No (*7) Comments Day1 15:22
38	148	-	25.214	R1-01-0108	Clarification of UE SIR estimation	F	Ericsson, Philips	To be revised	(*8) Day1 15:34
39	155	-	25.214	R1-01-0279	Correction of Limited Power Raise	F	Ericsson	Approved	No Comments Day1 16:11
40	161	-	25.214	R1-01-0327	Correction of the UE behaviour in SSDT mode	F	Vodafone	To be revised	(*9) Day1 16:25
41	157	-	25.214	R1-01-0284	Power balancing algorithm accuracy description	F	Nokia	To be revised	(*10) Day1 16:35
42	158	-	25.214	R1-01-0285	Definition of power control step size for algorithm 2	F	Nokia	Approved	No (*11) Comments Day1 16:39
43	160	-	25.214	R1-01-0325	DL PC behaviour during UL out-of-sync	F	Nokia	To be revised LS to be sent	(*12) Day1 16:59
44	150	-	25.214	R1-01-0262	Clarification of the order of SSDT signalling in 2 bit FBI	F	Panasonic	To be revised	(*13) Day1 17:03
45	083	-	25.215	R1-01-0294	Correction of GPS Timing measurement	F	Ericsson	Approved	No Comments Day1 17:05
46	046	-	25.221	R1-01-0265	Clarification of TFCI transmission	F	Siemens	Approved	No Comments Day1 17:08
47	045	-	25.221	R1-01-0238	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	F	Siemens	Approved but **revised**	(*14) Day1 17:16
48	054	1	25.222	R1-01-0242	Corrections & Clarifications for TS25.222	F	Siemens	Approved (update)	No (*15) Comments Day1 17:18
49	046	1	25.224	R1-01-0239	Corrections of TDD power control sections	F	Siemens	To be revised	(*16) Day1 17:30
50	053	-	25.224	R1-01-0252	Known TFCI for the TDD Special Burst	F	InterDigital	Approved	No Comments Day1 17:34
51	050	-	25.224	R1-01-0209	Use of a Special Burst in reconfiguration	F	InterDigital	Approved	No Comments Day1 17:36
52	006	-	25.944	R1-01-0256	Corrections for TDD sections	F	Siemens	Approved	No Comments Day1 17:40
53	096	-	25.211	R1-01-0278 R1-01-0359	Uplink power control preamble	F	Ericsson	Approved	(*17) Day1 15:04 and 18:05
54	154		25.214	R1-01-0278	Uplink power control preamble	F	Ericsson	To be revised	(*17) Day1 15:04 and 18:05
55	-	-	-	R1-01-0328	Downlink channelization code phase (for discussion)	-	Panasonic	Offline discussion	(*18) Day2 09:41-09:56
56	039	1	25.213	R1-01-0348	Clarification of the scrambling code of a power control preamble	F	Panasonic	Approved	No (*19) Comments Day2 17:54

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
57	148	1	25.214	R1-01-0352	Clarification of UE SIR estimation	F	Ericsson Philips	Approved	No (*20) Comments Day2 17:56
58	150	1	25.214	R1-01-0357	Clarification of the order of SSDT signalling in 2 bit FBI	F	Panasonic	Approved	No (*21) Comments Day2 17:58
59	082	1	25.215	R1-01-0340	Correction of GSM reference	F	Panasonic	Approved	No (*22) Comments Day 2 17:59
60	092	1	25.211	R1-01-0368	Clarification of the S-CCPCH frame carring paging information	F	Panasonic	Approved	No (*23) Comments Day2 18:03
61	104	1	25.212 Rel-4	R1-01-0390	Addition of compressed mode gap length "8 slots" (Rel4)	C	Nokia	Postponed ✍ rejected	(*24) Day3 09:30
62	161	1	25.214	R1-01-0353	Correction of the UE behaviour in SSDT mode	F	Vodafone Nokia	Approved	No (*25) Comments Day4 08:46
63	095	1	25.211	R1-01-0346	Phase Reference for Secondary CCPCH carrying FACH	F	Nokia	Approved	No (*26) Comments Day4 08:51
64	093	1	25.211 Rel-4	R1-01-0347	Application of beamforming and combination of beamforming with TX-diversity on UTRA FDD downlink	F	Nokia	Approved	No (*27) Comments Day4 08:57
65	033	2	25.221	R1-01-0350	Correction to SCH section	F	InterDigital	Approved	No Comments Day4 09:01
66	048	-	25.221	R1-01-0341	Corrections to Table 5.b "Timeslot formats for the Uplink"	F	InterDigital Siemens	Approved	No Comments Day4 09:03
67	045	1	25.221	R1-01-0379	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	F	Siemens	Approved updates	No (*28) Comments Day4 09:05
68	046	2	25.224	R1-01-0358	Corrections of TDD power control sections	F	Siemens	Approved	No (*29) Comments Day4 09:06
69	037	1	25.224	R1-01-0351	RACH random access procedure	F	InterDigital	Approved updates	No (*30) Comments Day4 09:09
70	154	1	25.214	R1-01-0359	Uplink power control preamble	F	Ericsson	Approved	No (*31) Comments Day4 10:49
71	ZZZ	-	25.213	R1-01-0399	Defining the code phase reference of downlink channelisation codes	F	Siemens	Not Approved	(*32) Day4 10:57
72	163	-	25.214	R1-01-0419	Correction on downlink synchronisation primitives	F	NTT DoCoMo	Approved	(*33) Day4 16:24
73	086	-	25.215	R1-01-0419	Correction on transport channel BLER	F	NTT DoCoMo	Approved	(*33) Day4 16:42

(*1) This CR had been postponed from RAN WG1#18 meeting. No revision had been done from RAN WG#18.
Mr. Marcus Purat (Siemens) presented this CR.
This CR proposed to apply code specific phase offset of pi/2 in order to solve the potential problem of high peak to average power ratios that may occur if the same data is transmitted on all or at least some downlink physical channels within one slot. This issue had been discussed in RAN WG1#17 in Stockholm. In the discussion in RAN WG1#17, 3 main concerns were raised on the usage of code specific phase offsets for the uplink. The paper presented answers for those questions and proposed to use Code Specific Phase Offsets of pi/2 both for the UL and the DL.

/*** Day1 Lunch break 12:24 –14:01 ***/

(*2) Mr. Markku Tarkiainen (Nokia) presented this CR.
Having received a liaison statement from RAN WG4 on *Amendments to application of beam forming in release 4* (**R1-01-0199**, See No. 10) Nokia provided these 2 CRs, one for release 99 specification (R1-01-0254) and one for release 4 specification (R1-01-0217).
In R1-01-0254 (CR 25.211-095), it was proposed to remove the option of having Secondary CPICH or no CPICH at all as a phase reference for S-CCPCH carrying FACH only.
Some concerns were raised that the rationale for removing the option of using S-CCPCH carrying FACH together with S-CPICH as phase reference is not clear.
A bit long discussion took place. The main discussion point was whether we should keep the option that release 99 or release 4 UE should support Secondary CPICH as a phase reference for S-CCPCH carrying FACH only.
Finally it was concluded that we should keep the possibility for the use of S-CPICH as phase reference for the S-CCPCH carrying FACH only for future use and consequently the changes of this CR other than the modification in the very last line were not agreed. This was to be revised. The revision was presented in **R1-01-0346** and approved on Day 4. (See No.63)

(*3) Although this is the CR for release 4 specification, this is directly linked with the above CR (CR 25.211-095) and

therefore was discussed in succession.
Some questions were made.
- Is it clear what is meant by the word "beamforming" ? Is there any explicit definition of this ?
  ✍ It would be defined what kind of beamforming the UE needs to cope with in the form of test cases in RAN WG4 specifications for release 4. (although this needs to be checked). This is somewhat similar to the "out of sync" case in which there is no explicit definition but it is actually defined by the test cases in RAN WG4 specifications. (Chairman answered.)
- Though table 11 has 2 columns they are identical. What are these 2 columns for ?
  ✍ 2 columns are needed if beamforming is allowed for S-CCPCH with FACH only. We need probably to add one row and modify 2 rows with respect to S-CCPCH channel type of table 11. One is for S-CCPCH carrying FACH only and the other is S-CCPCH carrying PCH. The CR had been drafted with anticipation for some possible changes in mind. Similar modification is also needed to table 12. ✍ To be revised.
- Could this be in inforamtive annex ? ✍ It would be a bit funny to have this in informative annex. (Chairman)
  Regarding this, there was one concesern raised that there could be a confusion if we treat beamforming and closed loop transmission techniques at the same time because these are 2 different schemes and issue of beamforming is not yet closed.
  ✍ Chairman suggested offline discussion on this.

According to the comments received this was revised into **R1-01-0347** and the revision was approved with no comments on Day4. (See No. 64)
Chairman remarked that he would present the outcome of these discussions in his report to RAN. We would not send answer LS to RAN WG4 because any particular answer was not requested in the LS from RAN WG4.

(*4) Mr. Guiliang Yang (CWTS) presented this CR
This CR proposed to modify the figure 29 *Radio frame timing and access slot timing of downlink physical channels* because the current figure is not necessary clear.
Mr. Dirk Gerstenberger (Ericsson) remarked that there seems to be misunderstanding of the figure 29 and text. He explained that the intention of the figure 29 is not to show the relation of the contents but to show the timing of downlink physical channels relative to the P-CCPCH. He added that the current figure is completely correct and should not be changed.
Chairman agreed with this remark and concluded that this CR was rejected.

(*5) Mr. Hidetoshi Suzuki(Panasonic) presented this CR.
This CR proposed to removed the description of alignment of power control preamble because now PCP length is defined by the number of frames.
Mr. Dirk Gerstenberger (Ericsson) made a comment that the whole paragraph should be removed saying that it is no use to keep the middle sentence. Mr. Hidetoshi Suzuki answered that there had been a comment on the reflector that the middle sentence should be kept.
Since no one in the meeting opposed to remove the middle sentence, it was agreed to remove whole paragraph.
The revision was made into **R1-01-0348** and approved with no comments on Day 2. (See No.56)

(*6) Mr. Peter Chambers (Siemens) presented this CR.
This was a clarification type CR and approved without any comments.

(*7) Mr. Tim Moulsley (Philips) presented this CR.
This CR proposed to provide clarification to the initialisation procedure by adding one sentence to the description of the criteria for reporting synchronisation status. There had been some discussion on the e-mail reflector which indicated that the current text in TS 25.214 section 4.3.1.2 describing the reporting of "in-sync" during radio link establishment could be misunderstood because it is not clear when the first phase begins although it is stated when it ends. The sentence "The first phase *starts when higher layers initiate physical dedicated channel establishment (as described in [5]) and lasts*" was added. This is consistent with TS 25.331.

(*8) Mr. Dirk Gerstenberger (Ericsson) presented this CR.
In RAN WG1#18 a CR (**R1-01-0071**, CR 25.215-081, Ericsson) which proposed to remove the SIR measurement from the UE measurements in TS 25.215 because SIR measurement by UE is a physical layer internal measurement and is not reported by UE to UTRAN was approved. There was a concern raised by Mr. Matthew Baker (Philips) which said that deleting SIR measurement itself would not be a problem but somewhere in the specifications there should be retained the definition of SIR target or the information regarding SIR measurement, something like (RSCP/ISCP)x(SF/2) because otherwise there would be confusion in downlink power control with UEs having different definition of SIR targets. Chairman agreed with this comment and concluded that the CR 25.215-081 was approved on condition that another CR which includes above SIR measurement information should be submitted to RAN with CR 25.215-081.
The current CR is proposed as this companion CR and proposed to add clarification to informative annex B.2. It was proposed to clarify that UE internal SIR estimation for inner loop power control shall be done excluding the SF.
It was remarked that although this is an addition to the informative annex, the description of " *the spreading factor shall not be considered in the SIR estimation* " gives an impression that it is something mandatory.
Chairman suggested offline discussion for rewording of the very last sentece of this CR.
Finally this was revised into R1-01-0352. It was reviewd on Day 2 and approved. (See No. 57)

/*** Day1 Coffee break 15:35 -16:09 ***/

(*9) Mr. Yannick Le Pezennec (Vodafone) presented this CR.
Regarding the UE behaviour in SSDT mode there is only an example of potential implementation given in the informative annex in the current specification and therefore UE could derive the uplink TPC commands in

different ways. This CR proposed to move that example in annex to the section describing the derivation of the TPC procedure so that the implementation can be done more uniform manner.
Chairman briefly explained the background of the specification (why it has been put in informative annex.).
In the RAN WG1#15 meeting in Berlin, NEC proposed to specify that UE should measure downlink reception quality only on the primary cell signal in SSDT mode in the very last minutes of the meeting (CR 25.214-128, **R1-00-1136**). Though this had been the basic assumption of SSDT and had been considered from the beginning of the proposal of SSDT it had been missing in the specification. There were several concern raised to that late introduction of the assumption. The test cases for SSDT in RAN WG4 are without power controls and there is no test cases on how this should operate. NEC provided the revision of the CR(CR 25.214-128r1, **R1-00-1126**) in RAN WG1#16 meeting in Pusan, taking into account the situation of that point of time and introduced the procedure of how to derive TPC commands into informative annex. But in any case, RAN WG4 specification will not test the SSDT behaviour together with power control activated in release 99 and release 4.
Mr. Tim Moulsley (Philips) pointed out that the current proposal is insufficient and without moving whole informative annex (B.2) to the mandatory part it would not achieve significant change because proposed text does not say anything about what should be done with SIR_{est} and this is subject to the informative annex.
Chairman stated that even if we specify the behaviour in our specifications it is difficult to expect uniformed UE behaviour if we do not have any performance test cases. We need to have test cases.
Chairman suggested that we should keep the annex as it is. He added that he would discuss with RAN WG4 chairman in the next RAN on whether RAN WG4 would do something on SSDT with power control activated during this year.
Mr. Yannick Le Pezennec asked whether we can have general statement in 5.2.1.4.2 saying that the generation of TPC commands are based on the primary cell only. Chairman agreed to this proposal.
This was so revised in **R1-01-0353**. The revision was reviewed on Day 4 and approved. (See No. 62)

(*10) Mr. Markku Tarkiainen (Nokia) presented this CR.
This CR is based on the LS from RAN WG4 (**R1-01-0197**, See No.8)
Although we had agreed to remove the description of the power-balancing alogorithm from TS 25.214 from the informative annex in CR 25.214-144 (**R1-01-0052**) in RAN WG1#18 in Boston, we received the LS from RAN WG4 which is requesting us to introduce an accuracy definition for P_{bal} to TS25.214 and define it with respect to power control step size ? TPC. They provided us with a text proposal. This CR proposed to incorporate this text proposal to TS 25.214. This does not contradict with CR 25.214-144 because RANWG3 had not removed everything but removed the accuracy definition only.
Mr. Dirk Gerstenberger (Ericsson) remarked that before approving this CR we need to check the motivation of this change with RAN WG4, what had been discussed in RANWG4. He added that the formula needs to be revised.
Chaiman agreed with the comment. Modification was needed to the formula. So this was to be revised. Chairman invited people to check the motivation with RAN WG4 before we come back to this issue. On Day4, Mr. Markku Tarkiainen announced that Nokia would like to postpone this issue to the next meeting.

(*11) Mr. Markku Tarkiainen (Nokia) presented this CR.
Currently in the power control step size is signalled for power control algorithm 1 only but not for algorithm 2. The power control step size for algorithm 2 needs to be specified and there are 2 ways of doing this. One is to be signalled by higher layer parameter and other is to fix it as 1 dB. This CR propsed to sepcify in section 5.1.2.2.1 that power control step size for algorithm 2 is always 1dB.
There were small discussion on why currently the power control step size for algorithm2 is not specified in RRC. It seems that that it had been just simply being missed out.
This CR was approved with no comment.

(*12) Mr. Markku Tarkiainen (Nokia) presented this CR.
Currently there is no description about how Node B should set its transmission power in case uplink is in out-of-sync state in Node B, that is, in case no TPC commands are received in the uplink.
This CR proposed adding a description on the layer1 behaviour of Node B in TS 25.214. In order to facilitate the UE TPC command generation during the UL out-of-sync, an IE "UL TPC pattern 01 count" is proposed to be added to the NBAP signalling.
There were several comments.

- Is this talking about the case of uplink out-of-sync or the case where Node B has not yet obtained uplink synchronization (Initial state) ? ✍ This applies out-of-sync case only. ✍ Then this needs to be revised because there is a sentence that says that "*Node Bs that have not yet achieved uplink synchronisation shall follow…*" and this is misleading.
- Title of this added section , "*TPC command generation on uplink during the period of out-of synchronization*" is quite confusing. Is this talking about uplink or downlink ? The behaviour of UE ? or Node B ?
  It should be clarified that this is Node B power settings when uplink is out-of-sync.
- We need to consider whether this is really needed or not ?
- This is something for release 4 rather than for release 99. Is this essential for release 99 ?
- Before having this CR, we should ask to RAN WG3 whether this needs to be specified or not.
- Second last sentence should be removed.

Conclusion : LS is to be sent to RAN WG3 inquiring whether there is a need for RAN WG1 to define a specific Node B transmit power setting for the case of UL out-of-sync state.
R1-01-0356 was allocated for the LS. This LS was reviewed on Day4 and approved into **R1-01-0431**.
(See No. 164)

(*13) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.
This CR proposed to clarify how the ID code bits should be transmitted in 2bit FBI case (Table 4)
The intention was agreed but rewording was suggested. This was revised in **R1-01-0357** and approved in Day 2. (See No. 58)

(*14) Mr. Stephen Dick (InterDigital) requested offline checking. Chairman proposed that we approve the CR at this point of time but if some problem is identified by Day4, the revision shall be done. Eventually after offline discussion this CR was revised in terms of editorial point in **R1-01-0379** and approved on Day 4.(See No. 67)

(*15) Mr. Marcus Purat (Siemens) presented this CR.
This was the revision of already approved CR. (CR 25.222-054, **R1-01-0023**, approved in RAN WG1#18)
In the original CR the order of the physical channel mapping was clarified with the reference to the RRC specification. After it was approved, Siemens received a comment saying that the proposal was not necessary good way to describe it because this order is not only for UE but also the same order is to be applied to Node B. So Siemens revised the original approved CR to define physical channel order. The new change was added only in section 4.2.11.

(*16) This was the revision of already approved CR. (CR 25.224-046, **R1-01-0017**, approved in RAN WG1#18)
There was one comment on new annex A.1 that the word "may" should be replaced by "should" in the following paragraph.

> "The power control may be realized by two cascaded control loops. The outer loop controls the transmission quality, whose reference value is set by higher layers [15], by providing the reference value for the inner loop. This reference value **may** be the SIR at the UE [15]. The inner loop controls the physical quantity for which the outer loop produces the reference value (e. g. the SIR) by generating TPC commands. This may be done by comparing the measured SIR to its reference value."

There was another comment saying that some rewording might be needed.
Chairman suggested offline discussion about the rewording including above "may", "should" issue.
Eventually this was reviesed into **R1-01-0358** in which "may" was replaced by "should". This was approved on Day4. (See No.68)

(*17) Mr. Dirk Gerstenberger (Ericsson) presented this CR.
This is a kind of follow-up CR for the discussion RAN WG2 had week before. (See LS **R1-01-0316**, No. 14)
RAN WG2 made decision to extend the power control preamble length to a maximum 7 frames as requested by RAN WG1. (See **R1-00-1293**, **R1-00-1413**, **R1-00-1491**) Further in order to handle the potential loss of complete messages, RAN WG2 introduced a signalling radio bearer (SRB) delay applied during the first frames after the PCP. During the discussion in RAN WG2, one problem was identified that if the UE is configured to use a TTI > 10ms, TTI boundary must be reached before the first data transmission and this will cause in the worst case an additional period of up to 7 frames.
As a solution of this problem this CR proposed to align the end of the uplink PCP (start of SRB delay) with the start of DPDCH transmission and to clarify that during uplink PCP no DPDCH transmission is done independent of the selected TFCI value.
CR for TS 25.211 was approved with no comments.
Some discussion was made on the CR for TS 25.214 part on following sentence in section 4.3.2.2 whether we need to clarify that this is the case where there is data to be transmitted.

> *The transmission of the uplink DPCCH power control preamble shall start Npcp radio frames prior to the start of the uplink DPDCH transmission,…*

After some discussion, chairman suggested offline discussion on this issue. Eventually this was revised in **R1-01-0359**. The phrase "*if any data is to be transmitted*" was added to the above sentence. The revision was reviewed and approved on Day4. (See No. 70)
/** This was further revised in RP-010224 during the RAN #11 **/

(*18) Mr. Hidetoshi Suzuki presented this discussion paper.
This paper discussed that there are 2 possible ways of understanding of the downlink channelisation code phase with respect to the phase alignment to the channel in case of SF=512, that is, whether the channelisation code is to be aligned to CPICH or to DPCH frame timing. This paper also proposed one possible modification to TS 25.213 which may reduce the hardware complexity irrespective of the understandings.
Chairman remarked that we need some kind of picture for the people to understand what the actual problem is. He added that we need to understand whethere there are rearlly 2 kind of different understandings.
Mr. Peter Chambers (Siemens) proposed offline discussion on this issue until next meeting. Chairman agreed with this proposal.

(*19) This is the revision of **R1-01-0261** which was reviewed on Day1.(See No. 35) The whole last paragrah in section 4.3.2.4 was removed in accordance with the discussion on Day1.

(*20) This is the revision of **R1-01-0108** which was reviewed on Day1.(See No. 38) The last sentence was slightly modified according to the outcome of the offline discussion.

(*21) This is the revision of **R1-01-0262** which was reviewed on Day1. (See No.44) The sentence was reworded for clarification.

(*22) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.
This CR proposed to change the reference document in section 2 [20] from "GSM03.03" to "TS 25.133"
For consistency reason chairman asked people to check whether TDD verision does also need this modification.

(*23) Mr. Hidetoshi Suzuki (Panasonic) presented this CR. This is the revision of R1-01-0056 which was reviewed and rejected in RAN WG1#18 meeting. Now that the confirmation has been received from RAN WG2 in the LS **R1-01-0315** (R2-010741) (See No. 17), Panasonic prepared the slightly revised version of R1-01-0056.

(*24) Mr. Ville Steudle (Nokia) presented this CR.
This CR was proposing the addition of compressed mode gap length of "8 slots" in TS 25.212. Originally this CR had been presented in RAN WG1#18 meeting. For the background, See No.11. Now it was proposed for release 4. In RAN WG4, the benefit of this introduction was agreed but they decided not to introduce this for release 99. It has not yet discussed in RAN WG4 for release 4 because they are still busy for release 99 issues.
Mr. Dirk Gerstenberger (Ericsson) remarked that looking the LS (**R1-01-0200**, R4-010223) from RAN WG4, it is clearly stated that RAN WG4 has not reached any conclusion whether this is useful or not. He added as an information from RAN WG4 colleagues that even if we do not use TGL=8, similar performance can be achieved using existing TGL value of 10.
Ms. Sarah Boumendil (Nortel) supplemented that although RAN WG4 evaluates that similar performance can be achieved by TGL=10, TGL=8 is worth considering for total performance.
Mr. Dirk Gerstenberger proposed to postpone the decision by Day4. He would try to get information from RAN WG4 by that time.
On Day4, Mr. Dirk Gerstenberger stated that according to the information he got there was no convincing argumentation for the benefit of TGL=8 and no conclusion was reached in RAN WG4. He added that we should not be too fast in introducing this.
Mr. Ville Steudle agreed to this comment and state that although even if we see some advantage it seems that some parties has not yet convinced and therefore we need to provide some more simulation results and justification for this. Consequently he proposed to postpone this.
Having this comment, chairman concluded that this CR is rejected in this meeting.

(*25) Mr. Yannick Le Pezennec (Vodafone) presented this CR.
This is a revision of **R1-01-0327** which was reviewed on Day1. (See No. 40) Following the discussion, in this revision only one sentence saying "*based on the downlink signals from the primary cell only*" was added to section 5.2.1.4.2 and annex was kept as it had been.

(*26) Mr. Markku Tarkiainen (Nokia) presented this CR.
This is the revision of **R1-01-0254** which was reviewed on Day1. (See No. 32) Following the discussion, the very last line of the original CR had been kept in this revision.

(*27) Mr. Markku Tarkiainen (Nokia) presented this CR.
This is the revision of **R1-01-0217** which was reviewed on Day1. (See No. 33)

(*28) This is the revision of **R1-01-0238** which was approved on Day1. (See No. 47)

(*29) This is the revision of **R1-01-0239** which was reviewed on Day1. (See No. 49) After offline discussion, the word "may" was replaced by "should" in Annex A.1.

(*30) Ms. Liliana Czapla (InterDigital) presented this CR.
This is the revision of CR (CR 25.224-037, **R1-01-0073**) which was approved in RAN WG1#18.
After the approval in RAN WG1#18, it was pointed out the proposed text for PRACH was a bit misleading. In this revision it was clarified that a PRACH is defined by a timeslot and a channelization code, which is randomly selected from the PRACH Channelisation Code List (TS 25.331) signaled by higher layers.

(*31) Mr. Dirk Gerstenberger (Ericsson) presented this CR.
This is the revision of **R1-01-0278** which was reviewed on Day1. (See No. 54) CR 25.211-096 part was untouched. CR 25.214-154 part was revised to reflect the comment received.

(*32) Mr. Peter Chambers (Siemens) presented this draft CR.
This paper contained 2 possible versions of draft CR to define the code phase for the channelization code in case SF=512. It is open if the code phase reference is the CPICH frame boundary or the DPCH (or other) frame boundary and this CR was trying to fix this. This CR seems to have its base on **R1-01-0328**. (See No. 55)
There were a couple of comments saying that the current specification is not unclear. From section 5.1 we can understand that scrambling is to be done on the symbol basis, that is DPCH frame boundary.
Having these comments chairman concluded that for the timing there is no CR needed on this issue.

(*33) Mr. Yukihiko Okumura (NTT DoCoMo) presented these 2 CRs.
The current description of "Downlink synchronisation primitives" in TS25.214 and "Transport channel BLER" in TS25.215 still have some ambiguities in case of blind transport format detection i.e. no TFCI used. If there is a transport channel, which includes a transport format with zero transport blocks, this transport channel should be excluded from the criterion of the downlink synchronisation primitives and from measurement of transport channel BLER because no CRC is attached on the zero transport blocks.
There was a rather long discussion took place.
CR 25.214-163 :
It was pointed out that the in TS 34.108 we have some cases which are inconsistent with this proposal. e.g. there is stand alone DCCH where there is no TFCI and there is transport format zero block. Since there were no objection raised to this clarification, chairman concluded this approved.
However he remarked that proponent should confirm with their T colleagues that there is no problem with their specification by adding this sentence to our specification.
CR 25.215-086 : There were no objection raised for this CR but there took place long discussion on whether we need this clarification or not. Chairman remarked as his personal opinion that it is a bit funny to put this kind of clarifications into measurement definition place.
Finally it was approved but chairman added that if anybody found problem especially in terms of consistency then put this on-hold in the RAN plenary meeting.
Mr. Dirk Gerstenberger (Ericsson) remarked that it would be useful to have some kind of CR for the next meeting in order to clarify this in terms of BTFD.

5. Report from TSG RAN Ad Hoc on UTRAN Evolution (Day1 18:55 - 18:56)

Chairman presented one slide on the screen.
Work shop took place on Feb. 5 and 6 in Helsinki.
Certain architecture studies were identified during the work shop. They do not have any impact on the radio interface.
Discussion are taking place on the e-mail reflector. In the next RAN it will be discussed how to proceed with these issues.

6. Election of the officials

6.1 Position for Chairmanship

Mr. Antti Toskala (Nokia) was elected as chairman of RAN WG1 for the next term. (Day1 18:57)
(There was no other candidate hence no voting took place.)

6.2 Positions for Vice chairmanship

There were following 3 candidates announced candidacies for the 2 positions of vice chairman.
Mr. Hyeon Woo Lee (Samsung)
Mr. Masafumi Usuda (NTT DoCoMo)
Mr. Alex Lax (3G.com UK)
Votings took place on Day3 and
Mr. Masafumi Usuda (NTT DoCoMo) (elected by 1st voting)
Mr. Hyeon Woo Lee (Samsung) (elected by 2nd voting)
were elected.

7. Ad Hoc 21 session (Day1 night session) (Day1 19:40-21:30)

7.1 Report from Ad Hoc #21: 1.28 Mcps TDD (**R1-01-0367**) (Day2 17:18-17:26)

Mr. Marcus Purat (Siemens, Ad Hoc 21 chairman) presented this report.
As a conclusion of discussion, Ad Hoc 21 was recommending to RAN WG1 the approval of following CR for 1.28Mcps TDD.

- TS25.201 (updated version in **R1-01-0377**)
- TS25.221 (updated version in **R1-01-0371**)
- TS25.222 (updated version in **R1-01-0372**)
- TS25.223 (updated version in **R1-01-0373**)
- TS25.224 (updated version in **R1-01-0374**)
- TS25.225 (updated version in **R1-01-0375**)
- TR25.944 (no update necessary, **R1-01-0255**)

One text proposal to working CR (**R1-01-0369**) for TS 25.224 was updated to reflect the discussion. This was remaining to be approved in the plenary. This CR was reviewed right after the Ad Hoc report. (See 7.2)

Ad Hoc 21 also recommended the approval of TR25.928 on 1.28 Mcps TDD (**R1-01-0376**) as version 2.0.0 for RAN submission.
Chairman proposed to review all the above CRs on Day4 and encouraged people to prepare those CRs by Day3.
All 1.28Mcps related CRs were approved on Day4 (See 8.8)
The Ad Hoc 21 report was approved with no comments.

7.2 Approval of remaining text proposal to working CR

Uplink Synchronisation Procedure (**R1-01-0369**) (17:28-17:31)

This was the revision of R1-01-0223.
There was one comment on terminology. In section 5.2.1.2, the term "normal" time-slot is used. It was discussed in RAN WG1#15 that the term "normal" should rather be used however on the other hand there is a request that terminology should be aligned with 3.84Mcps TDD where the term "traffic" is used.
Chairman suggested to use the same terminology as 3.84Mcps in order to avoid confusion. For section 5.2.1.2, "normal" should be replaced by "traffic" in transplantation process to the TR.

Day 2, started at 09.10

8. Release 4/5 issues

Ad Hoc configuration
AH21 : TDD 1.28 Mchips functionality
AH22 : Terminal power saving features
AH23 : Compressed mode
AH24 : High speed downlink packet access
AH25 : Hybrid ARQ
AH26 : Tx-diversity
AH27 : Radio link performance enhancements
AH28 : Improved Common DL Channel for Cell FACH State
AH29 : Positioning
AH30 : TDD NodeB synchronisation
AH31 : Uplink Synchronous Transmission
AH32 : DSCH Power Control Improvement in soft handover

8.1 TDD Node B sync situation (Ad Hoc 30) Work Item Code : *RANimp-NBsync*

No.	CR	rev.	TS/TR	Tdoc	Title	Cat	Source	Conclusion	Notes
74	001	-	25.836	R1-01-0137	Additions to the node B synchronisation procedure	C	Siemens	offline discussion	(*1) Day2 09:58-10:07
75	042	1	25.221	R1-01-0241	Introduction of the Physical Node B Synchronization Channel	B	Siemens	Approved but **revised**	No (*2) Comments Day2 10:07-10:08
76	044	1	25.224	R1-01-0243	Layer 1 procedure for Node B synchronisation	B	Siemens	Approved but **revised**	No (*2) Comments Day2 10:08-10:11
77	016	-	25.223	R1-01-0202	Cell synchronisation codes for R'4 Node B sync over air interface in UTRA TDD	B	Mitsubishi	Approved	No (*2) Comments Day2 10:12-10:15
78	022	-	25.225	R1-01-0013	Measurements for Node B synchronisation	B	Siemens	Approved	No (*2) Comments Day2 10:15-10:15
79	042	2	25.221	R1-01-0381	Introduction of the Physical Node B Synchronization Channel	B	Siemens	Approved updates	No (*3) Comments Day4 09:12
80	001	1	25.836	R1-01-0382	Additions to the node B synchronisation procedure	C	Siemens	Approved	No (*3) Comments Day4 09:14
81	044	2	25.224	R1-01-0383	Layer 1 procedure for Node B synchronisation	B	Siemens	Approved	No (*4) Comments Day4 09:16

(*1) This is a CR for the TR 25.836 v4.0.0.
Mr. Stefan Oestreich (Siemens) presented this CR. This CR proposed to introduce an additional procedure in order to support frequency acquisition. With current procedure as it is Node B should have quite accurate clock built in but it is wished for manufacturer also for the operator that Node B or Cell can operate with clock with less accuracy. And for this clock with less accuracy it is quite straightforward to introduce this frequency acquisition procedure in addition to Node B synchronization procedure so that this less accurate clock can obtain frequency synchronization.
Mr. Stephen Dick (InterDigital) remarked that all this procedure should be optional. He added that other WG (RAN WG3) CR would be needed to support this CR. Finally he proposed rewording of this CR in the offline discussion.
Mr. Stefan Oestreich answered that in fact RAN WG3 specifications needs to be modified. He stated that the plan is first to introduce this to the TR and then to introduce CRs to the specifications.
Chairman suggested offline discussion.

(*2) All these CRs are in line with the TR and they had been presented in RAWG1 #18 already as well. These were approved with no comments.
CR 25.225-022 (R1-01-0013) was approved without reviewal because it had been already approved in principle in RAN WG1#18 and no comments made so far.
But CR 25.221-042r1(**R1-01-0241**) and CR 25.224-044r1(**R1-01-0243**) were revised on Day4.
(See No. 79 and 81)
Having all these CRs approved (although one CR for TR is still pending), chairman stated that we can close this work item at least form physical layer point of view.

(*3) Mr. Stefan Oestreich (Siemens) presented this CR. This CR is update of already approved CR (CR 25.221-042r1,

R1-01-0241, See No. 75). The first sentence in section 5.3.8 was changed from
"In case of Node B synchronisation via the air interface the PNBSCH shall be used…." to
"In case cell sync bursts are used for Node B synchronisation the PNBSCH shall be used…."
because there was a comment which says that the synchronization via the air interface might not necessary mean the use of cell sync burst.

(*4) Mr. Stefan Oestreich (Siemens) presented this CR. This is the revision of **R1-01-0137** which was reviewed on Day2 (See No. 74) After offline discussion, some more or less editorial modification has been done for clarification.

(*5) Mr. Stefan Oestreich (Siemens) presented this CR. This CR is update of already approved CR (CR 25.224-044r1, **R1-01-0243**, See No. 76) Newly "Frequency Acquisition Phase" was introduced in section 4.9.1 in accordance with the CR 25.836-001r1 (**R1-01-0382**).

8.2 DSCH Power Control Improvement in soft handover (Ad Hoc 32)

Work Item Code : *RInImp-DSCHsho*

No.	CR	rev.	TS/TR	Tdoc	Title	Cat	Source	Conclusion	Notes
82	001	-	25.841	R1-01-0246	TFCI power control for DSCH in split mode (Release 5)	B	LGE	To be revised	(*1) Day2 10:25-10:41
83	149	-	25.214	R1-01-0216	DSCH Power Control Improvement in soft handover	B	Nokia	Approved but **revised**	(*2) Day2 11:24-11:35
84	001	1	25.841	R1-01-0380	TFCI power control for DSCH in split mode	B	LGE	Approved	No (*3) Comments Day4 09:28
85	149	1	25.214	R1-01-0414	DSCH Power Control Improvement in soft handover	B	Nokia	Approved updates	(*2) Day4 16:11-16:15

(*1) The concept of this proposal had been presented in RAN WG1#17 meeting in **R1-00-01429**. Further continuous document was presented in RAN WG1#18 in **R1-01-0125**. In the discussion in RAN WG1#18 it was concluded that this should not be included at least in release 4 because the actual (concrete) benefits of this scheme had not been clarified and no support was obtained from the floor except proponents. Chairman concluded we should treat this as a possible proposal for release 5 in RAN WG1#18.
Having this conclusion LGE provided this CR for the TR 25.841 for release 5.
Ms. Evelyne Le Strat (Nortel) remarked that if we approve this CR at RAN then it would trigger the creation of release 5 version of the TR without having corresponding work item.
Chairman agreed with this comment and stated that probably proponents made mistake because this CR should be CR for release 4 TR. There is no TR for release 5 on this topic. Intention was to have this scheme as a possible proposal for release 5 or beyond release 4 and in order for that the text should be made under the section 6.2 *Other Solutions* in the context of beyond release 4. Therefore no new section as done in this CR should be created.
Chairman added that the current text proposal is too detail and it should be revised so that the level of description should be in line with other solutions in section 6.2. The description should be brief at this stage.
Chairman suggested offline discussion in drafting the revision among interested parties. The revision was made in **R1-01-0380** and approved on Day4. (See No. 84)

/** Day2 coffee break 10:43-11:20 **/

(*2) Mr. Markku Tarkiainen (Nokia) presented this CR.
This is a CR for inclusion of DSCH power control improvement in soft handover to TS 25.214 release 4 and is in line with the TR 25.841.
Ms. Sarah Boumendil (Nortel) questioned on section 5.2.1.4.1 what is meant by "*In case SSDT is used in the uplink direction only,…*". It should be both direction at the same time.
Chairman answered that there is RAN WG2 CR that allows to tell the UE whether the SSDT is assumed in release 99 or it is only sending SSDT signalling on the uplink but the downlink is transmitted as without SSDT(Release 4).
This CR was approved without other comment. Chairman encourage the proponent to check the consistency with RAN WG3 TR/CR since they were having meeting in parallel with us.
This CR was revised on Day4. (See No. 85)

(*3) This is the revision of **R1-01-0246** which was reviewed on Day2. (See No. 82) Following the discussion on Day2, now the description of "TFCI Power control for DSCH in split mode" was put in section 6.2.3 briefly.

(*4) Mr. Markku Tarkiainen (Nokia) presented this CR.
This is a revision of **R1-01-0216** which was approved on Day2. In RAN WG3 it was concluded that in case that the Node B is a primary one, a power offset given for the primary case is rather subtracted from the power value for the PDSCH frame for the given UE. This revision was done to reflect this RAN WG3 conclusion in section 5.2.2.

8.3 Positioning (Ad Hoc 29) Work Item Code : *LCS1-UEpos-enh*

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
86	-	-	-	R1-01-0228	Clarifications about power control and cell search related to idle periods for UTRA TDD	-	Siemens	Agreed LS to be sent	No (*1) Comments Day2 12:26-12:33
87	044	-	25.221	R1-01-0226	Correction of beacon characteristics due to IPDLs	C	Siemens	Approved	No Comments Day2 12:34
88	048	-	25.224	R1-01-0227	Idle periods for IPDL location method	B	Siemens	To be revised	(*2) Day2 12:35-12:38
89	025	-	25.225	R1-01-0229	RTD measurement in UTRAN for UP-TDD	B	Siemens	Approved	No (*3) Comments Day2 14:13-14:18
90	048	1	25.224	R1-01-0389	Idle periods for IPDL location method	B	Siemens	Approved	No (*4) Comments Day4 09:24
91	085	-	25.215	R1-01-0411	RTD measurement in UTRAN for FDD	B	Nokia	Approved	No (*5) Comments Day4 16:11

(*1) Mr. Siegfried Bär (Siemens) presented this document.
This paper provided the answers to the concerns raised in RAN WG1#18 meeting regarding proposed IPDL scheme. Mr. Siegfried Bär proposed to send LS to inform that the solutions were found to the concerns raised in RAN WG1#18. (Those concerns had been informed to RAN WG2 in the LS **R1-01-0174**).
Chairman agreed with this proposal. **R1-01-0388** was allocated for the LS. LS was reviewed on Day4 and approved in **R1-01-0415**. (See No.159)

(*2) Mr. Mirko Aksentijevic (Nokia) remarked that the following sentence in section 5.1 should be reworded.
During idle periods all channels are silent simultaneously, except for the SCH.
Chairman suggested offline discussion for rewording.
This was revised into **R1-01-0389** and approved on Day4. (See No. 90)

/** Lunch break 12:39-14:10 **/

(*3) Mr. Siegfried Bär (Siemens) presented this CR.
This CR proposed to introduce "SFN-SFN observed time difference" to the UTRAN measurement in order to support RTD measurement and to be in line with 25.305 *Stage 2 Functional Specification of UE Positioning* in UTRAN, v3.4.0.
The inclusion of RTD measurement was originally proposed by Nokia in RAN WG1#18 meeting in **R1-01-0064**.
LS **R1-01-0147** had been sent to RAN WG2 to ask their view on this proposal. On Day1 we received answer LS from RAN WG2 (**R1-01-0319**, See No.20) in which RAN WG2 was answering that the proposal of inclusion of RTD measurement is in line with their expectation.
Mr. Siegfried Bär remarked that we should liaise with RAN WG2, RAN WG3 and RAN WG4 to inform them that RAN WG1 agreed to include RTD measurement not only in FDD but also TDD.
Chairman answered that he would report this in his report to RAN and it would be sufficient.
FDD version of this CR was presented by Nokia in **R1-01-0411** on Day4. (See No. 91)

(*4) Mr. Siegfried Bär (Siemens) presented this CR.
This is the revision of **R1-01-0227** which was reviewed on Day 2. (See No.88) After offline discussion the sentence in question was changed from
"During idle periods all channels are silent simultaneously, except for the SCH." to
"During idle periods only the SCH is transmitted."
and another editorial correction had been done.

(*5) Mr. Ville Steudle (Nokia) presented this CR. This is the TDD version of **R1-01-0229**. (See No. 89)

8.4 Terminal power saving features (Ad Hoc 22) Work Item Code : *RInImp-TPS*

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
92	**22**	R1-01-0349	Modification of SSDT Operation to Support Gated DPCCH Transmission in Soft Handover Region with SSDT Activated	Samsung Nokia	Noted	(*1) Day2 14:19-14:56
93	**22**	R1-01-0283	Revision of TR25.840 Terminal Power Saving Features introducing UE capability with DPCCH gating	Nokia	Noted	(*2) Day2 14:56-15:06
94	**22**	R1-01-0336	Further clarifications to outer loop power control during DPCCH gating	Nokia Samsung	Noted	(*3) Day2 15:08-15:28
95	**22**	R1-01-0280	Text proposal for gating during compressed mode	Philips	Agreed in principle	(*4) Day2 15:28-15:49
96	**22**	R1-01-0296	Revision of TR25.840 "Terminal Power Saving Features" v2.2.0	Samsung	Approved	(*5) Day2 17:36-17:50
97	**22**	R1-01-0395	Revision of TR25.840 "Terminal Power Saving Features" to version 2.3.0	Samsung	Offline check	(*6) Day4 09:55-10:11
98	**22**	R1-01-0417	Revision of TR25.840 "Terminal Power Saving Features" to version 2.3.0	Samsung	Approved	(*6) Day4 17:20-17:26

(*1) Mr. Ju Ho Lee (Samsung) presented this paper.
This paper proposed to introduce the procedure (guidance) to the TR on how the RNC should behave in the different situation with gating in order to enable the use of gating during SSDT is activated.
There took place long discussion.
- What is the added benefit (gain) of this proposal ? We need to see the benefit because it would add more complexity to the normal gating operation.
  ✍ This proposal would not increase complexity in terms of UE implementation. In fact, no change is needed to physical layer specifications.
- Then what is the change ?
  ✍ This proposal is just trying to give the guidance on how the RNC should behave. It is summarized in the table 1.
- This is not solving the problem on the fact that Gating and SSDT cannot co-exist but just suggesting the RRC procedures in terms of which message is effectively to be transmitted first over the air and then Iub. This is just suggesting the sequence of activation and de-activation done by the RNC in order to take advantage of both feature. This is really RAN WG2 and RAN WG3 issue.
  And we need also to consider the gating in the uplink.
  ✍ This is not RRC issue. ✍ Yes it is RRC issue…

Finally chairman stopped the discussion and suggested offline discussion. He proposed just to put in the TR that this issue (operation of gating with SSDT feature) needs to be further studied.

(*2) Mr. Markku Tarkiainen (Nokia) presented this paper.
In the last RAN meeting there was a question raised on the DPCCH gating with respect to the UE capability and during RAN WG1#18 meeting we did not address the topic. It was discussed in the previous RAN that RAN WG1 should formulate the view and then provide it to the other WGs. Thus, this papers proposing that UE's capability with gating is optional.
Mr. Dirk Gerstenberger (Ericsson) remarked that the scope of this gating feature had changed dramatically in the RAN WG2#18 meeting and now higher layers are getting more involved. There is a question whether we should keep this work item itself. Therefore we had better wait until all the details on gating are clarified in all relevant working groups before we decided optional/mandatory issue.
Chairman agreed with this comment and stated that we should keep this optionality issue blank for the time being and he will present the situation in his report to RAN as follows.

In the past there has been view in WG1 that gating is fully optional, but it's understood that the situation needs to be revisited once all the details and impacts to capacity etc. are finalise.

(*3) Mr. Markku Tarkiainen (Nokia) presented this paper.
In RAN WG2#19, the outer loop power control modifications during basic gating period were approved. It was proposed that outer loop power control based on CRC attached to zero transport block will be used also during DPCCH gating. This is because DPCCH BER will not offer good enough performance for outer loop. Consequently, this requires changes in multiplexing definitions in the TS 25.212. However, the current implementation of changes in TS 25.212 is not fully optimal. The paper clarified further the effects of outer loop power control to multiplexing chains.
Some discussion took place.
- How many repetition will actually be used ? much more than 1 or 2 ? ✍ for further study
- Too much repetitions of CRC bits seems to be some kind of problem that we do not have in the non gating case. ✍ It is independent of gating. It could occur even in non gating when long period of zero length transport block with CRC.

Chairman concluded further consideration is needed on this issue.

(*4) Mr. Tim Moulsley (Philips) presented this paper.

This paper looks at the problem of gating and compressed mode. The current assumption is that gating should be disabled before initiating compressed mode. Now this does not seem to be an necessary restriction. In this paper a solution to using gating and compressed mode patterns at the same time is provided.

Mr. Dirk Gerstenberger (Ericsson) questioned to Samsung why they in the first place disabled gating during compressed mode in the TR.

Mr. Ju Ho Lee (Samsung) answered that is because of simple operation of gating. But Samsung had studied the further possibility of co-existence with SSDT and with compressed mode.

- Is there any problem with power control ? ✍ No.

Chairman concluded that we agreed on this text proposal in principle though there may be some rewording needed. For the details of text proposal chairman suggested offline discussion.

/** Day2 Coffee break 15:54 –16:28**/

(*5) Mr. Ju Ho Lee (Samsung) presented this revised TR.

This revision includes some clarifications on the discussions before RAN WG1#19 and some editorial corrections. Although the version number v2.1.0 is being put on the cover page, correct version number of this TR is v2.2.0.

Mr. Dirk Gerstenberger (Ericsson) remarked that

- Description (including figure) on the impact of compressed mode on battery life improvement should be included since we have received an answer from RAN WG4.
- Section 8.1.2.3 (Conclusion section) needs to mention that UE battery life improvement depends on UE implementation.

Chairman agreed with this comment. These would be incorporated at the same time with inclusion of **R1-01-0280**.

Mr. Dirk Gerstenberger questioned how we should proceed with this TR.

Chairman explained the reason why this TR had not been raised to v4.0.0. in the previous RAN. It was because the impacts to the other WGs were not clear at that time. Now, RAN WG3 has its own TR and RAN WG4 has discussed and we received input based on that discussion. Current situation is that we now do not see what are the impacts in RAN WG2. Mr. Ju Ho Lee informed that RAN WG2 is going to finalize the relevant works by May meeting as release 4. Chairman stated that he would write in his report to RAN that impact on RAN WG2 section remains empty because the work is now on-going in RAN WG2.

Chairman concluded that this TR was approved and new text proposal in R1-01-0280 as well as the comments from Mr. Dirk Gerstenberger will be incorporated in the next revision. The revision was made in **R1-01-0395** and reviewed on Day 4. (See No. 97)

(*6) Mr. Ju Ho Lee (Samsung) presented this revised TR.

This is the revision of **R1-01-0296**. (See No.96)

Mr. Dirk Gerstenberger (Ericsson) remarked that something is wrong in figure 9 in newly added section 8.1.2.2.3. According to the table 12, 13, improvements cannot never be more than 65% however in the figure 9, it is more than 95%.

Mr. Ju Ho Lee answered that the data in the table 12, 13 were calculated by Nokia whereas figure 9 is based on the calculation from Samsung. He added that the gain of gating depends on the implementation and hence table and figure can be different. Chairman remarked that some explanation is needed and suggested offline discussion for this explanation.

Mr. Dirk Gerstenberger questioned again how we should proceed with this TR.

/** Day4 coffee break 10:13-1045 **/

(*7) Mr. Ju Ho Lee (Samsung) presented this revised TR.

According to the offline discussion, section 8.1.2.2.3 was removed and instead at the end of 8.1.2.2.2, the description of the impact of compressed mode and UE battery life improvement was added.

There was no comments raised and this TR was approved. The new version can be found in **R1-01-0428**.

Dirk Gerstenberger (Ericsson) questioned if we are to submit this TR for the next RAN for approval or not.

Chairman answered as follows.

From RAN WG1 point of view we could perhaps do that. However I see one problem with the TR. That is that RAN WG2 section is empty and RAN WG2 does not have a TR of their own. So I think we just provide this TR to RAN as a part of this work item reporting. In the last RAN, comment was that RAN WG2 section was missing and it was not proposed for approval. I think we can say that from RAN WG1 point of view we have things more or less there. Some minor details needs to be improved but I guess from the RAN WG1 point of view TR is completed and could be approved. But we understand that RAN WG2 part is missing. At least this is my understanding of this TR.

Mr. Dirk Gerstenberger stated that it would be good to express also that there are concerns in RAN WG1 of this solution, for instance, concerns on complexity.

Chairman answered that he would mention in his report to RAN that there are still concerns mentioned in RAN WG1.

8.5 USTS (Ad Hoc 31) (Release 4 study item) Study Item Code : *RInImp-USTS*

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
99	**31**	R1-01-0232	Revision of TR25.854 (Study report on USTS)	SK Telecom Nokia	Approved	No (*1) Comments Day2 18:11-18:17
100	**31**	R1-01-0245	Considerations on Timing Alignment Bits for USTS	LGE SK Telecom	Not Approved	(*2) Day2 18:17-18:39

(*1) Mr. Duk Kyung Kim (SK Telecom) presented this TR.
The revision has been done to reflect the comments received in RAN WG1#18 meeting.
The version number is to be updated to v0.2.0 in **R1-01-0396**.
Eventually the version number was raised after the meeting to **v1.0.0** for RAN submission. (for information)

(*2) This paper discussed several aspects of TABs for USTS regarding the TAB bit pattern and TAB transmission in Node B. This is a kind of revision of **R1-01-0062** which was reviewed in RAN WG1#18 meeting taking into account the comments received and the fact that timing interval had been changed from 20ms to 200ms.
Ms. Evelyne Le Strat (Nortel) questioned whether this scheme is to be applied only in soft handover case or not because Node B can never know whether the UE is in soft handover or not. It was answered that this scheme is to be applied irrespective of soft handover.
After having some discussion, chairman concluded that we should not include this scheme into the TR at this point of time because it seems that it would need further clarification including the necessity of the scheme.

/*** Day 2 closed at 18:39 ***/

Day 3, started at 09.14

8.6 High Speed Downlink Packet Access (Ad Hoc 24) Study Item Code : *RInImp-HSDPA*

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
101	**24**	R1-01-0392	25.950 (v1.1.0) UTRA High Speed Downlink Packet Access	TSG RAN WG2	Noted	No (*1) Comments Day3 09:32-09:35
102	**24**	R1-01-0205	Clarification of simulation results of type-III HARQ bit mapping proposal	Panasonic	Noted	No (*2) Comments Day3 09:41-09:44
103	**24**	R1-01-0206	Text Proposal for HARQ complexity evaluation section of TR25.848	Panasonic	To be revised	(*3) Day 3 09:44-09:56
104	**24**	R1-01-0331	Peak to Average Impact at Node-B due to HSDPA	Motorola	✍ Text proposal	(*4) Day 3 10:00-10:17
105	**24**	R1-01-0332	Physical Layer Structure for HSDPA – Text Proposal for Section 6.1	Motorola	To be revised	(*5) Day 3 10:19-10:25
106	**24**	R1-01-0329	Complexity Analysis on MPIC for HSDPA	NTT DoCoMo	Noted	No (*6) Comments Day3 10:30-10:36
107	**24**	R1-01-0330	Text Proposal for performance of MPIC in TR25.841	NTT DoCoMo	To be revised	(*7) Day 3 10:36-10:45
108	**24**	R1-01-0338	Reduction of DL channel quality feedback rate for HSDPA	Sony	✍ Text proposal	(*8) Day 3 11:45-12:10
109	**24**	R1-01-0207	System Level simulation results of HSDPA estimating downlink channel quality from the transmit power of DPCH	Panasonic	Offline checking	(*9) Day 3 12:10-12:27
110	**24**	R1-01-0309	Semi-static Code Space Division of physical HS-DSCH	Lucent	Offline	(*10) Day 3 12:29-13:13
111	**24**	R1-01-0274	System aspects of power control for Fast Cell Selection in HSDPA	NEC	Text proposal	(*11) Day 3 14:45-14:52
112	**24**	R1-01-0281	Cell Selection in HSDPA	Philips	Noted	(*12) Day 3 14:53-15:28
113	**24**	R1-01-0248	Use Long-Range Prediction to Improve the Performance of AMCS and HARQ with MCS Delay	Wiscom	Noted	(*13) Day 3 15:30-15:37
114	**24**	R1-01-0249	Long-Range Prediction (LRP) of Faded Signals in HSDPA for FDD and TDD	Wiscom	Not included in the TR	(*13) Day 3 15:37-15:56
115	**24**	R1-01-0258	Double data rate for FDD downlink through channel code puncturing in MIMO channels	Nokia	Noted	(*14) Day 3 16:38-16:49
116	**24**	R1-01-0333	Alternatives in MIMO Link Design	Motorola	Noted	(*15) Day 3 16:51-16:56
117	**24**	R1-01-0307	Technical Report text change proposal for Section 7.4.1	Lucent	Approved	No Comments Day3 16:56-16:58
118	**24**	R1-01-0306	MIMO physical layer description	Lucent	Approved	No Comments Day3 16:58-17:02
119	**24**	R1-01-0313	Further Discussion on UE Complexity for MIMO architectures	Lucent	✍ Text Proposal	(*16) Day 3 17:05-17:22
120	**24**	R1-01-0308	Link level results for HSDPA using multiple antennas in correlated and measured channels	Lucent	✍ Text proposal	(*17) Day 3 17:22-17:42
121	**24**	R1-01-0286	Link Level Simulation Results for HSDPA: Comparison between MIMO and Tx Diversity	Fujitsu	Noted	(*18) Day 3 17:42-17:56
122	**24**	R1-01-0290	Stand-alone DSCH principles and benefits	Nortel Wavecomm France Telecom	Noted	(*19) Day 3 18:02-18:20
123	**24**	R1-01-0292	WCDMA based Stand-alone DSCH physical layer related aspects	Nortel Wavecom	Noted	(*19) Day 3 18:23-19:36
124	**24**	R1-01-0391	OFDM as a candidate for stand-alone DSCH	Wavecomm France Telecom Nortel	Noted	(*19) Day 3 19:36-20:29
125	**24**	R1-01-0295	HSDPA System Level Simulations	Nokia	Noted	(*20) Day 4 11:12-11:34

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
126	**24**	R1-01-0240	AMCS Performance Evaluation for TDD	Siemens	Noted	(*21) Day 4 11:35-11:43
127	**24**	R1-01-0408	Text proposal for section 8 of TR 25.848	Siemens	To be revised	(*22) Day 4 11:43-12:00
128	**24**	R1-01-0251	Link Level Simulation Results of HSDPA in TDD Mode	Wiscom	Noted	(*23) Day 4 12:00-12:11
129	**24**	R1-01-0250	Proposal of a HSDPA Frame Structure in TDD Mode	Wiscom	Noted	(*24) Day 4 12:11-12:22
130	**24**	R1-01-0259	METRA project results: Link-level simulation results for standard-friendly MIMO techniques in the TDD mode of UTRA	Nokia	Noted	No Comments Day4 12:22-12:25
131	**24**	R1-01-0409	Text Proposal for HARQ section of TR25.848	Panasonic	Approved	No (*25) Comments Day4 12:28-12:30
132	**24**	R1-01-0244	Impact of block length on turbo-code performance for HSDPA	Ericsson	Discussed	(*26) Day 4 13:57-14:05
133	**24**	R1-01-0310	Further results on the impact of code block size on HSDPA performance	Lucent		(*27) Day 4 14:05-14:40
134	**24**	R1-01-0237	Enhanced HARQ Method with Signal Constellation Rearrangement	Panasonic	Noted	(*28) Day 4 14:44-15:00
135	**24**	R1-01-0311	Methodology for HARQ System Simulations	Lucent	Noted	(*29) Day 4 15:01-15:10
136	**24**	R1-01-0312	Downlink Model for HSDPA	Lucent	Noted	(*30) Day 4 15:11-15:23
137	**24**	R1-01-0401	Revised Text Proposal for performance of MPIC in TR25.841	NTT DoCoMo	Approved	No (*31) Comments Day4 15:26-15:28
138	**24**	R1-01-0400	Physical Layer Structure for HSDPA – Text Proposal for Section 6.1	Motorola	Approved	No (*32) Comments Day4 15:28-15:29
139	**24**	R1-01-0406	Text contribution on MIMO UE complexity	Lucent	Approved Ref. removed	(*33) Day 4 15:29-15:34
140	**24**	R1-01-0407	Text contribution on MIMO performance	Lucent	Approved Ref. removed	(*34) Day 4 15:35-15:38
141	**24**	R1-01-0405	Text contribution on MIMO physical layer description	Lucent Nokia	Approved	No (*35) Comments Day4 15:38-15:41
142	**24**	R1-01-0410	Text Proposal for MIMO and Tx Diversity Comparison Section	Fujitsu	Not approved ✍ Offline	(*36) Day 4 15:41-15:46
143	**24**	R1-01-0397	Text proposal for associated downlink signaling on TR25.848	Sony	Approved	No (*37) Comments Day4 15:47-15:49
144	**24**	R1-01-0423	Text proposal for section 8 of TR 25.848	Siemens	Approved	No (*38) Comments Day4 16:04-16:05
145	**24**	R1-01-0413	Text proposal in TR for Semi-static Code Space Division of physical HS-DSCH	Lucent	Approved	No (*39) Comments Day4 16:49-16:50
146	**24**	R1-01-0420	Stand-alone DSCH, proposed text for inclusion in TR 25.848 v 0.4.0	Nortel	Approved	No (*40) Comments Day4 16:50-16:55
147	**24**	R1-01-0422	Text Proposal for Section 7.1.2.1.2 – Complexity Impacts to RNS	Motorola	Approved	No (*41) Comments Day4 16:55-16:57
148	**24**	R1-01-0425	Recommendations on HSDPA	Drafting Group	To be revised into LS	(*42) Day 4 16:57-17:12

(*1) This is the RAN WG2 TR on HSDPA. Some sections were left blank for inclusion of appropriate texts from the RAN WG1 TR.

In section 14.1, RAN WG2 listed their recommendation as follows.

1. RAN WG2 has determined the MAC-HSDSCH at the Node B with HARQ and scheduling functionality to be feasible and recommends that this be adopted for inclusion in Rel-5 to enable the techniques being addressed for HSDPA.
2. Adaptive Modulation and Coding - RAN WG1 to make recommendation.
3. RAN WG1 to provide recommendations on intra-Node B Fast Cell Selection. RAN WG2 proposes not to include inter-Node B fast cell selection in Rel-5.
4. RAN WG1 to provide recommendation on MIMO. RAN2 has determined impacts on WG2 to be minimal

based on current understanding.

5. RAN WG1 to provide recommendation on Stand-alone DSCH. RAN WG2 recommends that UTRAN evolution should enable the introduction of this technique if found necessary in future releases.

(*2) Panasonic presented this paper. This is a follow up paper of **R1-01-0031** which was reviewed in RAN WG1#18. In RAN WG1#18 it was pointed out that that there is no difference between so-called symbol combining and conventional combining in QPSK case. Panasonic conducted simulation and the results put in this paper shows that there is actually no difference in QPSK case. Having this result, Panasonic proposed the proposed mapping method to be used for 16QAM or higher level modulation because proposed method can reduce the receiver's buffer size achieving the same performance as the conventional method for those modulations.
Text proposal of this scheme is in **R1-01-0206**.

(*3) This is the text proposal of **R1-01-0205** (Above).
Mr. Erik Dahlman (Ericsson) remarked that although this is an interesting proposal he was a bit reluctant to introduce this kind of detailed description into the feasibility study report.
Mr. Amitabha Ghosh (Motorola) supported this comment and added we should just point out general techniques.
Chairman suggested that we would not include this long text proposal as it is but just put simple statement in connection with the existing type III HARQ complexity values (table1).
Panasonic agreed with this suggestion and provided brief text proposal in **R1-01-0409**. This was reviewed on Day4 and approved. (See No.131)

(*4) Mr. Amitabha Ghosh (Motorola) presented this paper.
This paper shows peak-to-average power ratio impact at Node B in case of multi-level modulation, higher order modulation. In conclusion it says that it can be concluded that the PAP (Peak to Average Power ratio) is not affected for a W-CDMA system using HS-DSCH with higher order modulation.
Ms. Evelyne Le Strat (Nortel) remarked that we need to be a bit cautious when analysing the result of this analysis because the assumption of 20 users utilizing Walsh of size 32 and equiprobable mix of QPSK, 16 QAM and 64 QAM does not necessary reflect the real system (peak bit rate/user). In the case of small number of the users using high order modulation, result may be different from what is presented here. We need to have RAN WG4 to consider this issue in terms of RF characteristics of the Node B. Chairman remarked that in case of small number of the user PAP is getting much more easier.
Regarding this Mr. Amitabha Ghosh stated that there is a typo in this paper on the assumption. 20 user should be replaced by 20 codes.
Then one user for HSDPA and others users with QPSK ?
Mr. Amitabha Ghosh stated there should be some more simulation done where other users assigned QPSK, 16 QAM and 64 QAM.
What should we put in the TR ? The relevant section is still blank. We should not put an optimistic indication in the TR.
After some discussion, chairman concluded that a small text proposal without curves on this issue be made by Mr. Amitabha Ghosh. We will check it on the screen before it is implemented in the TR. Eventually very short text proposal was made in **R1-01-0422**. This was reviewed on Day 4 and approved with no comment. (See No. 147)

(*5) Mr. Amitabha Ghosh (Motorola) presented this paper.
This paper is the text proposal of Stop and Wait protocol to be added to Section 5.2.
One comment was raised by Lucent which stated that there is a contradiction in the description. In the description of Stop-and-Wait it says that UE has to have only one block memory and it says N channel operation offers solution to the particular problem of Stop-and-Wait. But if we have parallel channel operation like N channel operation, then Stop-and-Wait would not have any memory advantage over the selective repeat.
Mr. Amitabha Ghosh agreed to this comment. Chairman suggested offline work for revision between Motorola and Lucent. **R1-01-0400** was allocated for the revision. It was reviewed on Day4 and approved. (See No. 138)

(*6) Mr. Masafumi Usuda (NTT DoCoMo) presented this paper.
This paper showed the results of complexity analysis on multipath interference canceller(MPIC) which had been newly introduced in RAN WG1#18 meeting in **R1-01-0102**. In RAN WG1#18 there had been a request for complexity analysis for this method. As promised in RAN WG1#18, NTT DoCoMo provided this paper.
The analysis is based on the number of computation operations, such as multiplication and addition, and the complexity of MPIC is compared with a conventional matched filter (MF) based Rake receiver without MPIC.
It was shown that MPIC with 2/3/4-stage requires approximately 3/5/7 times larger number of multiplications and additions compared with a conventional MF based Rake receiver without MPIC.

(*7) Mr. Masafumi Usuda (NTT DoCoMo) presented this paper.
This is a text proposal of the performance of MPIC for the TR.
Mr. Serge Willenegger (Qualcomm) questioned on Figure 1 about the reason why the throughput of 2path with MPIC is better than 1path in some points in case of MCS1. It was answered that is because of diversity effect.
Mr. Amitabha Ghosh (Motorola, editor of the TR) asked if it is possible to condense the text. Mr. Masafumi Usuda agreed with this comment.
Mr. Tim Moulsley (Philips) remarked that there should be a description in the TR on how we actually exploit this kind of technique, e.g. choice of modulation at Node B in the knowledge of some receiver property.
Chairman suggested offline discussion for revision. The revision was provided in **R1-01-0401**. It was reviewed on Day4 and approved for TR. (See No. 137)

/*** Day3 coffee break 10:45 – 11:15 ***/
/*** First voting for vice-chairman position started after the coffee break. ***/

(*8) Mr. Katsutoshi Itoh (Sony) presented this paper.
This paper was the revision of **R1-01-0231** which had been distributed on the e-mail reflector.

A proposal was made in RAN WG1#18 in **R1-01-0074** which exploits TPC commands to reduce the feedback rate for downlink channel quality estimation. The current paper presented system simulation results to show that the proposed scheme can actually be used to reduce the feedback rate without impacting the system throughput. It was also suggested that this scheme enables network to do trade-off between uplink capacity and channel quality estimation accuracy by giving UTRAN the control of the channel feedback rate.
Mr. Erik Dahlman (Ericsson) remarked that though he agrees with the proposed method, he does not think that OTA(over the air throughput) is an appropriate performance measure. Performance measure here should be both of service throughput (the number of correct bits from transmitter to receiver) and quality measure (average packet call throughput). OTA is not relevant because it does not take into account re-transmissions and OTA does not take into account the load, either.
Mr. Katsutoshi Itoh answered that to be sure we need to have quality measure but for the service throughput, the OTA is relevant. The results shown in this document does include the re-transmissions and it corresponds to the true throughput seen from Node B and not from UE. He added that service throughput including the load can be calculated approximately through the values in the table.
Motorola clarified that the definition of OTA does take into account the re-transmission.
There was another comment that for the TR, it is too much detail.
Chairman concluded that proponent prepare a brief text proposal. **R1-01-0402** was allocated for the text proposal. Eventually text proposal was further revised into **R1-01-0397**. This was reviewed on Day4 and approved. (See No.143)

(*9) Panasonic presented this document.
This paper is the continuous work of paper presented in RAN WG1#18 (**R1-01-0004**). This paper presented more elaborate simulation results
The following assumptions are added in order to respond to the comments made in the previous meeting.
-UE velocity of 40km/h and 120km/h are considered.
-TPC error ratio is set to 4%.
-CIR measurement error in UE is introduced as a statistical variable with 1dB sigma.
-CIR reporting erasure is set to 1%.
After having some discussion, chairman suggested to make a small text proposal on this. We do not need these simulations result from the feasibility point of view.
Mr. Amitabha Ghosh (Motorola, editor of the TR) pointed out that this is already included in the TR in section 6.2.
Chairman proposed to have offline discussion for the exact text including the discussion on whether the current text in the TR should be modified or not.

(*10) Lucent presented this paper.
This paper proposed code space division of the physical HS-DSCH into several equal multi-coded parallel physical HS-DSCHs as an alternative physical channel structure in conjunction with minimum TTI of one slot. Some kind of broadcast channel is needed to support this that carries information on the code space availability.
Long discussion took place.
After the discussion chairman concluded as follows
Even if this would need only one additional issue that we need to have some kind of broadcast channel (physical layer), we cannot do it as physical layer independent issue. We need to have coordination with higher layers. If higher layer (RAN WG2 in this case) gives us permission to do it then maybe we can do it. Therefore the best way forward is to bring this issue to the upcoming Joint Ad Hoc with RAN WG1 and RAN WG2 in May. Because this would contain physical layer issue and higher layer issue at the same time it would be very difficult to determine how to proceed within only one group.
Chairman added comment on the text proposal attached to this paper that it is very short and if this kind of information cannot be derived from the current TR, it should be included in the TR. But we need to check whether and how the text should be accommodated in the TR from feasibility study point of view. This checking should be done offline. This text proposal was finally modified in **R1-01-0413**. It was reviewed and approved on Day3. (See No. 145)

/*** Day3 lunch break 13:14-14:42 ***/

(*11) Mr. Kojiro Hamabe (NEC) presented this paper.
This paper proposed an additional alternative of power control techniques for Fast Cell Selection(FCS). This paper also contained a text proposal for this additional alternative for the TR in section 6.4.3.
Mr. Erik Dahlman (Ericsson) agreed with this proposal and stated that indeed the alternative (2) should be replaced by this alternative (4). He added that the original intention of alternative (2) was actually that of alternative (4).
He added that although this is currently written as a part of FCS, this is primarily related to the situation when the UE is in soft handover.
Chairman suggested that proponent provide the small text with revision marks to the editor for inclusion.

(*12) Mr. Tim Moulsley (Philips) presented this paper.
This paper presented some simulation results on the potential benefits of FCS in HSDPA.
It was shown that the SIR gain derived from FCS appear to become worthwhile for SIR values below about 5 dB and paper suggested that this gain could be obtained in
1. Fair schedular
2. Maximum coverage required
3. Poor propagation conditions

There took place some question and answer session but in general this paper was supported.

Regarding this FCS issue, we are asked by RAN WG2 to provide recommendation on intra-Node B FCS.
RAN WG2 proposed not to include inter-Node B FCS in release 5 and we had to recommend how we consider about the inclusion of Intra-Node B FCS in terms of release. (See No.101)
Chairman questioned people how we should recommend RAN WG2 on this Intra-Node B inclusion.
Long discussion was made. There were no definitive comments. Concerning the postponement of this feature to further release (later than release 5), for and against seemed even.

Ms. Evelyne Le Strat (Nortel) remarked.

We are not sure that there is no cost for the Intra-Node B FCS compared to no FCS.
We are not sure either that the signalling is the same in the cases where we have Intra-Node B and Inter-Node B FCS because we identified in the TR that the inter-Node B FCS may require additions of some signalling in order to ensure consistency of the scheduling because MAC is in Node B.
Based on this, unless there are significant gains for Intra-Node B FCS, unless we can really show that it is extremely simple to consider Intra-Node B and that there is gain which justifies the introduction of Intra-Node B in one release ahead of Inter-Node B, we may try to treat Intra-Node B and Inter-Node B FCS together in the same release so that we can have fully consistent scheme.

Chairman fully agreed with this comment and concluded that we recommend RANWG2 that study of Intra-Node B and Inter-Node B FCS should be considered together and not separately. Both Intra and Inter Node B FCS should be studied further during release 5 HSDFPA.

(*13) Wiscom presented these 2 documents.
R1-01-0248 showed the simulation results of using Long-Range Prediction(LRP) to improve the system performance of AMCS and HARQ with MCS feedback and selection delay. LRP method itself had been presented already in RAN WG1#18 meeting in **R1-01-0025**.
The simulation results showed that the performance improvement by using prediction is as much as 1.0 to 1.5 dB with Ec/Ioc between –5 to 5dB at intermediate vehicle speed.
Since **R1-01-0249** contains the text proposal of long-range prediction method, chairman suggested to review R1-01-0249 in succession.
Mr. Robert C. Qiu (Wiscom) presented this paper. This was the revision of **R1-01-0025**. It was proposed to include LRP based channel prediction in HSDPA for both FDD and TDD mode into the TR. Text proposal was attached to this paper.
After short discussion chairman proposed not to included this into TR for the time being with following reasons.
- There had not been discussed signalling issue on this.
- This does not seem essential from the feasibility study point of view.

He proposed to continue the discussion after the feasibility phase.

/** Day3 coffee break 16:03-16:33 **/

(*14) This paper presented a comparison of 2 different type of techniques to double the data rate in FDD downlink when 2 Tx and 2 Rx antennas are available. One is the punctured scheme in which the rate 1/3 code is punctured to rate 2/3 in order to double the data rate and the loss of coding gain is compensated by applying dual-antenna RAKE. The other one is layered scheme which is similar to the MIMO technique that has been discussed so far. As a conclusion it says that the punctured scheme achieves a better performance with a significantly lower receiver complexity than the layered scheme.
Lucent made a comment which said that the layered techinique discussed in this paper is different from the MIMO techinique which had been proposed. Lucent explained the differences.They also pointed out that they basically agree with the conclusion. Because the situation this paper did comparison is relatively low data rate (order of ksps) and in the low data rate situation, combination of Tx and Rx diversity is actually superior to MIMO. Lucent had pointed out this fact already in RAN WG1#18 meeting. Lucent's MIMO proposal is for high data rate of 10.8Mbps and above.
Mr. Said Tatesh (Lucent) remarked in answering chairman's comment that there is no need to feedback this paper into TR because what we are looking in the TR is whether the concept is feasible or not. And it is feasible now. And later when we go thorough the standardization process we should look at all the alternatives.
Chairman remarked that for the baseline complexity part, the comparison of different techinique might be needed.
Chairman suggested offline discussion on the inclusion of the paper into TR between Nokia and Lucent.
R1-01-0405 was allocated for this text proposal. It was presented on Day4 sourced by Lucent and Nokia and approved. (See No.141)

(*15) Mr. Amitabha Ghosh (Motorola) presented this paper.
In this paper, various alternatives to V-BLAST proposed by Lucent are outlined. It was stated that those alternatives should be evaluated in detail in RAN WG1.
Lucent remarked that they basically agree with the approach of this paper.

(*16) Lucent stated that they would provide the text proposal which summarizes the conclusion of this paper.
Chairman remarked
- Is it possible to replace "homodyne" to more familiar term ?
- Absolute values put in this contribution should be got rid of unless detailed explanations are given because it is impossible for anybody to calculate if just absolute values are given.

Mr. Erik Dahlman (Ericsson) requested to postpone the decision whether we include this into TR or not.
There were some doubts raised about the complexity estimates in this paper.
Chairman stated that text proposal should be produced regardless we approve it or not.
R1-01-0406 was allocated for this text proposal. It was reviewed on Day4 and approved. (See No. 139)

(*17) Lucent presented this slide on the screen.

Lucent had already showed in the past meetings the gains of MIMO in spatially correlated channels compared to conventional single antenna schemes. In this presentation, link performance results on the following channel environments were shown.

1. A micro cell environment suggested by Siemens
2. Actual channels measured in a dense urban environment (midtown Manhattan)

The performance results similar to those in the previous paper (**R1-01-0131**) were shown. The (2,2) systems are minimally affected by channel correlations. The (4,4) systems are less robust, however significant performance improvements can be achieved by transmitting with two of the four antennas and using larger constellations.
Lucent proposed that some text proposal should be included in the TR. After having short discussion on this proposal, chairman agreed to it. **R1-01-0407** was allocated for the text proposal. It was reviewed on Day4 and approved. (See No. 140)

(*18) Mr. Hiroyuki Seki (Fujitsu) presented this paper.
This paper presented link level simulation results using the multiple reception antennas diversity with STTD and closed-loop transmit diversity schemes to compare to the MIMO performance. The FER performance for the same total data rate of 10.8 Mbps was compared in a flat fading channel.
Although according to the simulation results significant performance gains could not be observed for MIMO compared to multiple antenna diversity, this paper concluded that it is due to the flat Rayleigh fading channel assumption and MIMO architecture will have possibly significant performance gains in the practical propagation environments with high data rate higher than 10.8Mbps.
Lucent appreciated this contribution. Although they agreed with the results presented in this paper, they added following 2 points.

- In fact STTD can achieve comparable performance to the MIMO system but its data rate is limited basically 10.8Mbps whereas the MIMO technique can achieve higher peak data rate. (2,2) system can achieve 14.4 Mbps.
- In closed loop transmitter diversity case, the amount of feedback is actually going to be more than that of the MIMO system.

There was another comment that code re-use feature of the MIMO system should also be emphasized against the transmit diversity.
Chairman remarked that we needed not to include this to the TR. But eventually related text proposal was presented in **R1-01-0410** by the proponent on Day4. (See No. 142)

Chairman asked people how we should make recommendation on MIMO to RANWG2 because we were requested a recommendation.
Mr. Amitabha Ghosh (Motorola) remarked that we should use **R1-01-0333** as a baseline that says that MIMO is feasible but we need to study all these alternative techniques.
Chairman agreed to this comment.

(*19) Ms. Evelyne Le Strat (Nortel) presented **R1-01-0290**. Principles of Stand-alone DSCH were introduced in detail. **R1-01-0292** was also presented by Ms. Evelyne Le Strat and this paper discussed WCDMA based Stand-alone DSCH physical layer related aspects. Ms. Nathalie Goudard (Wavecom) presented **R1-01-0391** which introduced OFDM technology as a candidate for Stand-alone DSCH. Text proposal for Stand-alone DSCH had been prepared in **R1-01-0293** but it was not presented.
All these 3 papers discussed Stand-alone DSCH which is defined as a DSCH on a downlink carrier that is different from the WCDMA carrier. The benefits and defects were explained in detail.
There took place very long discussion. Quite a lot of comments were raised. Major opinion was rather negative to this proposal both for WCDMA based and OFDM based Stand-alone DSCH.
Finally chairman concluded as follows.
Text proposal should not include OFDM because it is too early to say something on this from the feasibility point of view. We have only received one piece of paper for OFDM. It would require lots of more work to be done before we can say something on this OFDM scheme from feasibility point of view. Moreover RAN WG2 TR does not mention anything about OFDM so it would not be inconsistent even if do not mention it in our TR. In fact it would need TSG level discussion before it should be discussed in WG level because it is completely new air interface. Chairman would report this in his report to RAN.
For WCDMA based Stand-alone DSCH, text could be included in the TR however the current proposal (R1-01-0293) is too detail. Chairman asked Ms. Evelyne Le Strat to prepare very brief text proposal by Day4.

(*20) Mr. Markku Tarkiainen (Nokia) presented this paper.
This paper discussed first system level simulation results for HSDPA. It was shown that the use of AMC is beneficial to increase the network throughput as well as user throughput.
Chairman remarked that this results confirms what has been stated in the TR on the benefit of AMC.

(*21) Siemens presented this paper.
This paper presented TDD link level simulation assumptions and performance results for different Adaptive Modulation and Coding Schemes (AMCS). It was designated to the TR. The results were compared with the performance results for FDD presented in R1-00-0727. This paper does not investigate the optimum number of AMC schemes.
It is shown that higher order modulation is applicable for the TDD mode. The presented link level performance results are comparable with that of FDD. Due to the performance similarities between TDD and FDD, the alignment with respect to AMC schemes for both mode seems to be possible.
There were a couple of questions for clarification on the simulation assumptions. Those were answered.

Since Siemens had prepared a text proposal for this, it was reviewed in succession.

(*22) This is the text proposal for **R1-01-0240**.
Proponent asked people to change "Real" to "Real/Ideal" for the channel estimation value in Table 1.
There was a comment that simulation assumptions/parameters/algorithms(channel estimation) should be clarified so that other parties can repeat the simulation.
There was another comments regarding the unit of x-axis saying that in FDD results, Ior/Ioc is used whereas in this simulation results Eb/No is used and it is difficult to compare both results.
Chairman suggested that we should not modify the unit in the curves in the TR at this stage instead we should put some small statement that says both units need to be same unit for comparison.
As a conclusion this text proposal was agreed in principle but needs to be revised to modify the value of channel estimation in Table 1. The revision was made in **R1-01-0423** and this was approved in the afternoon.
(See No. 144)

(*23) This paper proposed to fix the frame structure for the easiness of comparison of simulation results. The link level simulation results were shown on different MCS schemes for HSDPA in TDD mode which used the proposed frame structure.
There were several concerns raised against fixing the frame structure. Major opinion was that we are to optimise the frame structure and not to fix it. Until now no company has not yet got convincing result that shows which is the best frame structure. We should not lock the frame structure.
Chairman remarked that we should now concentrate on AMC or HARQ techniques and frame structure itself is not that important when we do comparison of the simulation results and therefore frame structure should not be fixed.

(*24) This paper proposed the frame structure that was introduced and used in R1-01-0251. Wiscom remarked in response to the comments received in the discussion of R1-01-0251 that their intention was not to fix the frame structure but to define a frame structure just for the reference so that simulation results provided by several companies can easily be compared.
This paper also proposed a table for information bit per frame and the information date rate for different MCS schemes.
Siemens pointed out that similar table is already in TR.

(*25) This is the revision of **R1-01-0206** which was reviewed on Day3. (See No.103) Following the discussion on Day3 the text proposal was revised into very brief and small one in section 6.3

(*26) Mr. Erik Dahlman (Ericsson) presented this paper.
The benefits of variable TTI were claimed in RAN WG1#18 in **R1-01-0079** based on the argument that fixed TTI would reduce turbo code performance due to very small code block size. This paper compared the performance of larger code block size and smaller code block size based on the simulation results and pointed out that although there is a gain with larger code block size for higher SIR (lower BLER) (but gain is much smaller than what was shown in **R1-01-0079**), there is no such gain for lower SIR (higher BLER). It is also pointed out that Hybrid ARQ will typically operate with a relatively high initial BLER (high as 50% or beyond).
Based on this results, this paper concluded that there are no significant gains for larger code block size and hence from this point of view, there are no reason to introduce a variable TTI for HSDPA.
Since there was another related paper (**R1-01-0310**), chairman proposed to review it in succession.

(*27) Lucent presented this paper. This paper presented modified results of **R1-01-0079** comparing the performance of Turbo code block sizes. New results did agree with that of **R1-01-0244** (Ericsson). This paper still pointed out that when very small code block sizes are used, there is noticeable throughput degradation as compared to large code block sizes. In addition it says that the percentage of overhead with smaller code block sizes is large as compared to large code block sizes. It is also mentioned that the variable TTI approach provides other benefits such as adapting MCS for retransmissions, low signalling overhead and selecting the code block size (for a given MCS level) based on backlog to reduce frame fill inefficiency. They added that if we do simulation with fading channel assumption, results would be different.
There took place a bit long discussion. Finally Lucent remarked that if we exclude all the overhead due to CRC or signalling overhead the difference in the throughput would be very small. (In this sense, discussion agreed with the paper from Ericsson because the conclusion of Ericsson paper was derived in terms of the analysis of turbo code performance.)
Chairman stated that we have to look carefully at the signalling aspect to in the future. But in order for us to be able to make discussion on this aspect we need to have some kind of example proposed to see how the signalling looks like and is impacted in both cases of Fixed TTI and Variable TTI.

(*28) This paper presented a new HARQ method using signal constellation rearrangement. It was shown that by changing the symbol mapping onto the constellation in the re-transmission, which corresponds to the averaging out the bit reliabilities, a significant performance gain can be achieved for 16QAM and 64QAM with compared to normal Chase Combining at the expense of slightly increased complexity. In the simulation, MCS level was kept.
It was pointed out by Katsutoshi Itoh (Sony) that the gain was achieved only in the region where S/N is low and hence if AMCS operates properly then this kind of gain would not be achieved because lower MCS level would then be selected. He added that this scheme would need somewhat synchronization mechanism between Tx and Rx and this would increase the complexity compared to easy Chase combining.
It was answered by Panasonic that the intention was to show if you have to retransmit packets and if you chose wrong MCS then you can gain from this method compared to normal Chase combining. This would increase the robustness of Chase combining. For the complexity issue, it is very close to that of Chase combining.
Chairman stated that we need probably pretty soon to decide whether we will have Chase combining or

incremental redundancy and then after that if Chase combing is selected this kind of detail optimisations can be considered.

(*29) This paper discussed about methodology to integrate link-level model with system-level simulations for HARQ performance evaluation. Aggregate E_s/N_t metric was introduced.
Chairman stated that we noted this paper. Due to lack of time, he suggested offline discussion if there were questions or comments.

(*30) This paper provided clarifications to comments and questions on Lucent's Downlink model proposal for HSDPA in RAN WG1#17, RAN WG1#18 and RAN WG2#18. This paper was already presented in RAN WG2#19.
Lucent had been suggested by RAN WG2 that this paper should be reviewed in RAN WG1 as well.
There was a comment that if Lucent proposes variable TTI, then it is very strange that the values are restricted to {1,2,4,8,16}, there should be 3, 5,.. included.

(*31) Mr. Masafumi Usuda (NTT DoCoMo) presented this paper.
This is the revision of **R1-01-0330** which was reviewed on Day3. (See No. 107)
The revision was not condensed but was expanded.

(*32) Mr. Amitabha Ghosh (Motorola) presented this paper.
This is the revision of **R1-01-0332** which was reviewed on Day3. (See No. 105)
Comment was reflected.

(*33) This is the text proposal based on **R1-01-0313** which was discussed on Day3. (See No.119)
Chairman raised concern about the existence of reference. He stated that TR should be self-contained. (This had been already pointed out in RAN WG1#18.)
Proponent remarked that they would provide the revision without reference to the editor of the TR.

(*34) This is the text proposal based on **R1-01-0308** which was reviewed on Day3. (See No. 120)
Proponent remarked that they would provide the revision without reference to the editor of the TR.

(*35) This is the text proposal based on **R1-01-0258** which was reviewed on Day3. (See No. 115)

(*36) Mr. Hiroyuki Seki (Fujitsu) presented this contribution.
This is the text proposal based on the **R1-01-0286** which was reviewed on Day 3. (See No. 121)
Mr. Said Tatesh (Lucent) remarked that the conclusion of R1-01-0286 had been that there was no need to reflect the results to the TR. Mr. Hiroyuki Seki replied that MIMO is quite new technology for 3GPP and therefore the comparison with other technique should be mentioned in the TR.
Finally chairman suggested as one possibility that this text might be included in the relevant part of **R1-01-0405** and suggested offline discussion with Lucent on this issue. He added that the results of different schemes would not be needed at this point of time in terms of feasibility study.

(*37) Mr. Katsutoshi Itoh (Sony) presented this paper.
This text proposal is based on the **R1-01-0338** which was reviewed on Day3.(See No. 108) Originally **R1-01-0402** was allocated for this text proposal, it seems that it was further revised into R1-01-0338.
Regarding the text proposal itself, the proponent explained that after having offline discussion only one line was added to section 6.6.2 because current TR already contains most of key items related to the use of TPC.

/*** Day4 coffee break coffee break 15:52-16:04 ***/

(*38) This is the revision of **R1-01-0408** which was discussed in the morning (See No. 127)
There was one missing error that needed to be corrected pointed out by the proponent. "Burstform No." in the table should be replaced by "Burst type". This had been already indicated to the editor.

(*39) Mr. Amitabha Ghosh (Motorola) presented this paper.
This is the text proposal which was the outcome of offline discussion concerning **R1-01-0309** which was discussed on Day3. (See No. 110) Following one sentence was to be added in the TR in section 6.6.2 "Associate Downlink Signalling"

The amount of signalling overhead depends on and increases with the flexibility in the code allocation to different UEs as set up by higher layers.

(*40) Ms. Evelyne Le Strat (Nortel) this paper.
This is the text proposal on stand alone DSCH. (See No. 122, 123, 124)

(*41) Mr. Amitabha Ghosh (Motorola) presented this paper.
This is the text proposal based on the **R1-01-0331** which was discussed on Day3. (See No. 104)

(*42) Mr. Amitabha Ghosh (Motorola) presented this paper.
This is the answer for RAN WG2. For the recommendations which have been requested by RAN WG2, the answers were prepared reflecting the RAN WG1 discussion on HSDPA.
Mr. Erik Dahlman (Ericsson) remarked on AMC issue that we should put in the recommendation that RAN WG1 considers that AMC should be part of release 5.
Mr. Amitabha Ghosh (Motorola) opposed to state that MIMO should be part of release 5.
After some discussion Chairman suggested as one alternative to put it like "RAN WG1 recommends that MIMO should be part of further HSDPA work" and not to mention about any RELEASE here.
Finally chairman proposed to make this paper into LS form and send it to RAN WG2 and cc RAN.

R1-01-0430 was allocated for the revised TR. Mr. Amitabha Ghosh (Motorola) will distribute this revised TR on the e-mail reflector. This TR would be provided to next RAN.

8.7 Improved Common DL Channel for Cell FACH State (Ad Hoc 28)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
149	**28**	R2-010664	TS25.306CR009, Modified UE Capability for CPCH	GBT + 25 companies	Noted	(*1) Day3 20:30-21:24
150	**28**	R1-01-0288	RAN1 Views on UE Support for CPCH in Release 4	GBT	Noted	

(*1) Mr. Joe Kwak (GBT) presented this CR(RAN WG2 CR in R2-010664).
This is embedded in RAN WG2 LS (**R1-01-0314**, R2-010740, See No.16). In the LS, RAN WG2 was requesting that RAN WG1 discuss the embedded CR and provide recommendations to RAN #11.
R1-01-0288 was reviewed in succession. This paper listed some points for consideration during the RAN WG1 discussion.
There were some concerns raised especially on the complexity aspects of CPCH. Major opinion was that the additional complexity does not justify the potential benefits at this point of time and we are not ready to consider the CPCH mandatory or as a reference configuration for release 4. There was another comment that stated that SF=512 is still open in RAN WG1 and therefore we cannot say it as mandatory.
Having these comments, chairman concluded that from RAN WG1 point of view we cannot say this as mandatory for the classes listed in RAN WG2 CR. He also pointed out that it is not quite obvious in RAN WG 1 why there should be separate parameters for CPCH in R2-010664 depending on the UE classes.
Chairman remarked that he would mention about this to RAN 11 in his report.
There was also one question asking the meaning of the reference tables in TS 25.306.

/*** Day3 closed at 09:26 ***/

On Day4, Mr. Joe Kwak (GBT) tried to explain **R2-010341** which is embedded inside of the incoming LS (**R1-01-0322**). Due to the lack of time, chairman encourage people to have a look at that document offline.
Mr. Joe Kwak questioned whether it is possible to start the e-mail discussion on the RAN WG1 e-mail reflector.
Chairman answered yes and supported e-mail discussion on this issue. Mr. Joe Kwak stated that GBT will kick off the e-mail discussion. Chairman remarked that he will report this in his report to RAN. (17:16-17:20)

Day 4, started at 08.42

8.8 TDD 1.28 Mchips functionality (Ad Hoc 21) Work Item Code : *LCRTDD-Phys*

All following documents/CRs had been basically reviewed in Ad Hoc 21 session on Day1. (See section 7)

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
151	-	-	-	R1-01-0376	TR 25.928 v1.1.2 1.28Mcps functionality for UTRA TDD Physical Layer	-	Siemens	Approved	No Comments Day4 09:39
152	006	1	25.201	R1-01-0377	Inclusion of 1.28Mcps TDD in TS 25.201	B	CWTS/CATT Siemens	Approved	No Comments Day4 09:41
153	043	1	25.211	R1-01-0371	Inclusion of 1.28Mcps TDD in TS 25.221	B	Siemens CWTS/CATT	Approved	No Comments Day4 09:43
154	055	1	25.222	R1-01-0372	Inclusion of 1.28Mcps TDD in TS 25.222	B	Siemens CWTS/CATT	Approved	No Comments Day4 09:45
155	017	1	25.223	R1-01-0373	Inclusion of 1.28Mcps TDD in TS 25.223	B	Siemens CWTS/CATT	Approved	No Comments Day4 09:47
156	047	1	25.224	R1-01-0374	Inclusion of 1.28Mcps TDD in TS 25.224	B	Siemens CWTS/CATT	Approved	No Comments Day4 09:49
157	024	1	25.225	R1-01-0375	Inclusion of 1.28Mcps TDD in TS 25.225	B	Siemens CWTS/CATT	Approved	No Comments Day4 09:51
158	005	1	25.944	R1-01-0255	1.28 Mcps TDD related changes to 25.944	B	Siemens CATT	Approved	No Comments Day4 09:53

8.9 Tx-diversity (Ad Hoc 26)

8.9.1 Ad Hoc 26 meeting

The actual Ad Hoc meeting took place on Day 3 night. (Day3 21:45 - 22:30)

8.9.2 Report from Adhoc 26: Transmit diversity with more than 2 antennas (R1-01-0418)

Source : Ad Hoc 26 chairman (Day4 12:30-12:33)

Two documents(**R1-01-0287**, **R1-01-0335**) had been presented at this AH26. They had been noted.
The remaining documents including text proposal to the TR could not be treated and were left for presentation in the plenary.
Remaining papers are as follows.

Text proposals:

- **R1-01-0203** Description of the eigenbeamformer concept (update) and performance evaluation,, Siemens
- **R1-01-0204** Text proposal for WG 1 report on Tx diversity for multiple antennas, Siemens
- **R1-01-0370** Proposed TR of Tx diversity for multiple antennas, Samsung
- **R1-01-0404** Text proposal for WG 1 report on Tx diversity for multiple antennas on general issues, Nokia, Siemens

Discussion papers:

- **R1-01-0394** Further comments on transmit diversity schemes, Lucent
- **R1-01-0276** Closed Loop Mode Transmit Diversity for DSCH in Soft Handover, NEC

Ad Hoc report was approved with no comments.
Chairman remarked that from TSG RAN point of view it would not be a issue whether we have these remaining paper covered in this meeting or not. The main thing is to schedule Ad Hoc meeting in May on this topic.
He stated that in case we would not have time in the afternoon to discuss these issues, e-mail discussion would be highly encouraged.

9. Approval of the liaison statements as output from WG1

No.	Discussed Tdoc	Source	To/Cc	Title	Approved Tdoc	Notes
159	R1-01-0388	Siemens	R2 C:R3	LS about IPDLs in UTRA-TDD	R1-01-0415	No (*1) Comments Day4 09:23
160	R1-01-0393	Vodafone	R2	Response to LS on Default configurations	R1-01-0421	(*2) Day4 11:10
161	R1-01-0339	Nortel	S4 Cc:R2	Response LS to "LS on TSG-SA4 request for information with regard to RAN handling of bit erroneous SDUs within packet switched domain radio bearers" (S4-000652)	R1-01-0426	No (*3) Comments Day4 16:48
162	R1-01-0425	Drafting Group	R2 Cc:RAN	Recommendations on HSDPA	R1-01-0427	(*4) Day4 17:12
163	R1-01-0412	Samsung	R2,R3,R4	LS on revision of TR 25.840 "Terminal Power Saving Features" to v2.3.0	R1-01-0429	(*5) Day4 17:29
164	R1-01-0356	Nokia	R3	LS on DL transmit power setting during UL out-of-synch	R1-01-0431	(*6) Day4 17:37

(*1) Mr. Siegfried Bär (Siemens) presented this LS. (See No. 86)

(*2) Mr. Yannick Le Pezennec (Vodafone) presented this LS. (See No. 26)

Mr. Dirk Gerstenberger (Ericsson) suggested that somewhere in the LS it should be mentioned that in general RAN WG1 feels that the parameters should be aligned to TS 34.108.

Chairman agreed to this comment and asked proponent to add this statement.

Chairman also asked the proponent to post this LS on the RAN WG2 e-mail reflector as soon as possible.

(*3) Ms. Evelyne Le Strat (Nortel) presented this CR. (See No. 13)

(*4) See No. 148

(*5) Mr. Ju Ho Lee (Samsung) presented this LS.

Chairman suggested to remove the CRs attached.

Mr. Dirk Gerstenberger (Ericsson) remarked that the following first phrase in the 2nd paragraph should be removed. He stated that it is clear that we have not concluded on SSDT solution.

Although gating is now going to be stable through revision to version 2.2.0,

(*6) Mr. Markku Tarkiainen (Nokia) presented this LS. (See No. 43)

Mr. Dirk Gerstenberger (Ericsson) remarked that the first bullet point (see below) should be removed.

a radio link is initially setup on a frequency i.e. the radio link set it belong to is in initial state

10. Closing

Chairman introduced Joint Ad Hoc meeting in May and stated as follows.

I think inputs on those topics that really span between the working groups are encouraged. Especially we should confirm the view of RAN WG2 on the signalling aspects for example. I think signalling is something which is pretty much between RAN WG1 and RAN WG2. Those signalling aspects are recommended to be raised in this Ad Hoc in May so that after this Ad Hoc we could have clear vision what RAN WG1 should do on this issue and what to expect to RAN WG2 to do. I believe anyway from what I have seen on their report that RAN WG2 has pretty much acknowledged that there is a need of very fast signalling for the various features like AMC or HARQ. They do understand the need for physical layer signalling that is different from release 99. I guess this is something probably that needs to go into some more details. Probably on individual topics like MIMO for instance it is a topic that does not have great interaction with RAN WG2 directly. So at least on this MIMO issues probably we do not need to discuss in RAN WG2. Probably we need to have RAN WG2 issue sorted out on that first. So I think it will be on this HSDPA with AMC and HARQ that we that we should address. Those issues are spanning between RAN WG1 and RAN WG2.

Finally Chairman thanked hosting company (Motorola) for providing good environment and its hospitality.
Meeting closed at 17:38 on March 2, 2001.

9. WG1 meeting schedule in year 2000 -2002(Tentative)

Meeting	Year	Month	Date	Location	Hosts
RAN WG1 #10	2000	January	18-21	China	Nokia
RAN WG1 #11	2000	February	29 – March 3	USA	T1P1
RAN #7	2000	March	13-15	Madrid, Spain	
RAN WG1 #12	2000	April	10-13	Korea	TTA
RAN WG1 #13	2000	May	22-25	Tokyo, Japan	NTT DoCoMo
RAN #8	2000	June	21-23	Dusseldorf, Germany	
RAN WG1 #14	2000	July	4-7	Finland	Nokia
RAN WG1 #15	2000	August	22-25	Germany	Siemens
RAN #9	2000	September	20-22	Hawaii	
RAN WG1 #16	2000	October	10-13	Pusan, Korea	Samsung, LGIC
RAN WG1 #17	2000	November	21-24	Stockholm, Sweden	Ericsson
RAN #10	2000	December	6-8	Bangkok, Thailand	Unisys
RAN WG1 #18	2001	January	15-18	U.S.A. Boston	North American Friends of 3GPP
RAN WG1 #19	2001	February	27 – March 2	U.S.A. Lasvegas	Motorola
RAN #11	2001	March	13-16	Palm Springs, CA U.S.A.	North American Friends of 3GPP
HSDPA Ad Hoc	2001	April	5-6	Sophia Antipolis with R2	
RAN WG1 #20	2001	May	21-25 (**5days**)	Pusan, Korea withR2,3	Samsung
RAN #12	2001	June	12-15	Stockholm, Sweden	Ericsson
RAN WG #21	2001	June	26-29	Paris, France	Nortel(tentative)
RAN WG #22	2001	August	27-31	T.B.D.	Host needed
RAN #13	2001	September	18-21	Beijing, China	Lucent, CWTS
RAN WG #23	2001	October	8-12	T.B.D.	Host needed
RAN WG #24	2001	November	19-23	T.B.D.	Host needed
RAN #14	2001	December	11-14	Kyoto, Japan	ARIB, TTC
RAN #15	2002	March	5-8	(Korea)	TTA
RAN #16	2002	June	4-7	(Europe)	Motorola
RAN #17	2002	September	3-6	(France)	Alcatel
RAN #18	2002	December	3-6	(U.S.A.)	North American Friends of 3GPP

Annex A : List of approved CRs (Approved in RAN WG1 #18 and #19 meetings)

1. CRs to Release 99 specifications / Technical Reports.

1. 1. TS 25.211

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.211	091	-	R1-01-0034	DSCH reading indication	F	Ericsson	18-11	RP-010058	3.5.0	3.6.0
2	25.211	092	1	R1-01-0368	Clarification of the S-CCPCH frame carring paging information	F	Panasonic	19-60	RP-010058	3.5.0	3.6.0
3	25.211	095	1	R1-01-0346	Phase Reference for Secondary CCPCH carrying FACH	F	Nokia	19-63	RP-010058	3.5.0	3.6.0
4	25.211	096	-	R1-01-0359	Uplink power control preamble	F	Ericsson	19-53	RP-010058	3.5.0	3.6.0

1. 2. TS 25.213

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.213	038	-	R1-01-0247	Clarification of channelization codes when SF=512	F	Siemens, Panasonic	19-36	RP-010059	3.4.0	3.5.0
2	25.213	039	1	R1-01-0348	Clarification of the scrambling code of a power control preamble	F	Panasonic	19-56	RP-010059	3.4.0	3.5.0

1. 3. TS 25.214

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.214	142	1	R1-01-0112	Uplink power control in compressed mode	F	Philips	18-27	RP-010060	3.5.0	3.6.0
2	25.214	144	-	R1-01-0052	Removal of the power balancing algorithm from TS 25.214	F	NEC	18-13	RP-010060	3.5.0	3.6.0
3	25.214	145	-	R1-01-0053	Clarification of Nid parameter – when SSDT and uplink compressed mode are in operation	F	NEC, Telecom Modus	18-14	RP-010060	3.5.0	3.6.0
4	25.214	146	-	R1-01-0085	Clarification of closed loop transmit diversity mode 1 and mode 2 operation during compressed mode	F	Motorola	18-15	RP-010060	3.5.0	3.6.0
5	25.214	148	1	R1-01-0352	Clarification of UE SIR estimation	F	Ericsson, Philips	19-57	RP-010060	3.5.0	3.6.0
6	25.214	150	1	R1-01-0357	Clarification of the order of SSDT signalling in 2 bit FBI	F	Panasonic	19-58	RP-010060	3.5.0	3.6.0
7	25.214	154	1	R1-01-0359	Uplink power control preamble	F	Ericsson	19-70	RP-010600	3.5.0	3.6.0
8	25.214	155	-	R1-01-0279	Correction of limited power raise	F	Ericsson	19-39	RP-010060	3.5.0	3.6.0
9	25.214	156	-	R1-01-0282	Clarification of initialisation procedure	F	Philips	19-37	RP-010060	3.5.0	3.6.0
10	25.214	158	-	R1-01-0285	Definition of power control step size for algorithm 2	F	Nokia	19-42	RP-010060	3.5.0	3.6.0
11	25.214	161	1	R1-01-0353	Correction of the UE behaviour in SSDT mode	F	Vodafone, Nokia	19-62	RP-010060	3.5.0	3.6.0
12	25.214	163	-	R1-01-0419	Correction on downlink synchronisation primitives	F	NTT DoCoMo	19-72	RP-010060	3.5.0	3.6.0

1. 4. TS 25.215

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_ne
1	25.215	079	2	R1-01-0107	Correction of the observed time difference to GSM measurement	F	Nokia	18-28	RP-010061	3.5.0	3.6.0
2	25.215	081	-	R1-01-0071	Removal of UE SIR measurement	F	Ericsson	18-17	RP-010061	3.5.0	3.6.0
3	25.215	082	1	R1-01-0340	Correction of GSM reference	F	Panasonic	19-59	RP-010061	3.5.0	3.6.0
4	25.215	083	-	R1-01-0294	Correction of GPS Timing measurement	F	Ericsson	19-45	RP-010061	3.5.0	3.6.0
5	25.215	086	-	R1-01-0419	Correction on transport channel BLER	F	NTT DoCoMo	19-73	RP-010061	3.5.0	3.6.0

1. 5. TS 25.221

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-	V_old	V_ne
1	25.221	033	2	R1-01-0350	Correction to SCH section	F	InterDigital	19-65	RP-010062	3.5.0	3.6.0
2	25.221	037	1	R1-01-0019	Bit Scrambling for TDD	F	Siemens	18-20	RP-010062	3.5.0	3.6.0
3	25.221	039	1	R1-01-0111	Corrections of PUSCH and PDSCH	F	Siemens	18-30	RP-010062	3.5.0	3.6.0
4	25.221	040	-	R1-01-0021	Alteration of SCH offsets to avoid overlapping Midamble	F	Siemens	18-31	RP-010062	3.5.0	3.6.0
5	25.221	041	-	R1-01-0022	Clarifications & Corrections for TS25.221	F	Siemens	18-32	RP-010062	3.5.0	3.6.0
6	25.221	045	1	R1-01-0379	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	F	Siemens	19-67	RP-010062	3.5.0	3.6.0
7	25.221	046	-	R1-01-0265	Clarification of TFCI transmission	F	Siemens	19-46	RP-010062	3.5.0	3.6.0
8	25.221	048	-	R1-01-0341	Corrections to Table 5.b “Timeslot formats for the Uplink”	F	InterDigital,	19-66	RP-010062	3.5.0	3.6.0

1. 6. TS 25.222

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.222	051	1	R1-01-0019	Bit Scrambling for TDD	F	Siemens	18-21	RP-010063	3.5.0	3.6.0
2	25.222	054	1	R1-01-0242	Corrections & Clarifications for TS25.222	F	Siemens	19-48	RP-010063	3.5.0	3.6.0

1. 7. TS 25.223

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.223	015	1	R1-01-0020	Code specific phase offsets for TDD	F	Siemens	19-31	RP-010064	3.5.0	3.6.0

1. 8. TS 25.224

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.224	036	-	R1-01-0153	DTX and Special Burst Scheduling	F	InterDigital	18-35	RP-010065	3.5.0	3.6.0
2	25.224	037	1	R1-01-0351	RACH random access procedure	F	InterDigital	19-69	RP-010065	3.5.0	3.6.0
3	25.224	045	-	R1-01-0016	Introduction of closed-loop Tx diversity for the PDSCH and DTX for the PUSCH/PDSCH	F	Siemens	18-19	RP-010065	3.5.0	3.6.0
4	25.224	046	2	R1-01-0358	Corrections of TDD power control sections	F	Siemens	19-68	RP-010065	3.5.0	3.6.0
5	25.224	050	-	R1-01-0209	Use of a special burst in reconfiguration	F	InterDigital	19-51	RP-010065	3.5.0	3.6.0
6	25.224	053	-	R1-01-0252	Known TFCI for the TDD special burst	F	InterDigital	19-50	RP-010065	3.5.0	3.6.0

1. 9. TS 25.225

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.225	023	-	R1-01-0107	Correction of the observed time difference to GSM measurement	F	Nokia	18-29	RP-010066	3.5.0	3.6.0

1. 10. TR 25.944

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.944	006	-	R1-01-0256	Corrections for TDD sections	F	Siemens	19-52	RP-010067	3.3.0	3.4.0

In total 42 CRs were approved in RAN WG1 #18 and #19 meetings for release 99.

2. CRs to Release 4 specifications / Technical Reports.

2. 1. Low chip rate TDD option (Physical Layer) – Work Item Code : *LCRTDD-Phys*

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.201	006	1	R1-01-0377	Inclusion of 1.28Mcps TDD in TS 25.201	B	CWTS/CATT Siemens	19-152	RP-010071	3.1.0	4.0.0
2	25.221	043	1	R1-01-0371	Inclusion of 1.28Mcps TDD in TS 25.221	B	Siemens, CWTS, CATT	19-153	RP-010071	3.5.0	4.0.0
3	25.222	055	1	R1-01-0372	Inclusion of 1.28Mcps TDD in TS 25.222	B	Siemens, CWTS, CATT	19-154	RP-010071	3.5.0	4.0.0
4	25.223	017	1	R1-01-0373	Inclusion of 1.28Mcps TDD in TS 25.223	B	Siemens, CWTS, CATT	19-155	RP-010071	3.4.0	4.0.0
5	25.224	047	1	R1-01-0374	Inclusion of 1.28Mcps TDD in TS 25.224	B	Siemens, CWTS, CATT	19-156	RP-010071	3.5.0	4.0.0
6	25.225	024	1	R1-01-0375	Inclusion of 1.28Mcps TDD in TS 25.225	B	Siemens, CWTS, CATT	19-157	RP-010071	3.5.0	4.0.0
7	25.944	005	1	R1-01-0255	1.28 Mcps TDD related changes to 25.944	B	Siemens, CATT	19-158	RP-010071	3.3.0	4.0.0

2. 2. UE positioning enhancement – Work Item Code : *LCS1-UEpos-enh*

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.215	085	-	R1-01-0411	RTD measurement in UTRAN for FDD	B	Nokia	19-91	RP-010072	3.5.0	4.0.0
2	25.221	044	-	R1-01-0226	Correction of beacon characteristics due to IPDLs	C	Siemens	19-87	RP-010072	3.5.0	4.0.0
3	25.224	048	1	R1-01-0389	Idle periods for IPDL location method	B	Siemens	19-90	RP-010072	3.5.0	4.0.0
4	25.225	025	-	R1-01-0229	RTD measurement in UTRAN for UP-TDD	B	Siemens	19-89	RP-010072	3.5.0	4.0.0

2. 3. Node B synchronisation for TDD – Work Item Code : *RANimp-NBsync*

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.221	042	2	R1-01-0381	Introduction of the Physical Node B Synchronization Channel	B	Siemens	19-79	RP-010073	3.5.0	4.0.0
2	25.223	016	-	R1-01-0202	Cell synchronisation codes for R'4 Node B sync over air interface in UTRA TDD	B	Mitsubishi	19-77	RP-010073	3.4.0	4.0.0
3	25.224	044	2	R1-01-0383	Layer 1 procedure for Node B synchronisation	B	Siemens	19-81	RP-010073	3.5.0	4.0.0
4	25.225	022	-	R1-01-0013	Measurements for Node B synchronisation	B	Siemens	19-78	RP-010073	3.5.0	4.0.0
5	25.836	001	1	R1-01-0382	Additions to the node B synchronisation procedure	C	Siemens	19-80	RP-010073	4.0.0	4.1.0

2. 4. DSCH power control improvement in soft handover – Work Item Code : *RInImp-DSCHsho*

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.214	149	1	R1-01-0414	DSCH Power Control Improvement in soft handover	B	Nokia	19-85	RP-010074	3.5.0	4.0.0
2	25.841	001	1	R1-01-0380	TFCI power control for DSCH in split mode	B	LGE	19-84	RP-010074	4.0.0	4.1.0

2. 5. Correction type CR

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.211	093	1	R1-01-0347	Application of beamforming and combination of beamforming with TX-diversity on UTRA FDD downlink	F	Nokia	19-64	RP-010075	3.5.0	4.0.0

In total, 19 CRs were approved in RAN WG1#19 meeting for release 4.

Annex B. The Participants List

Forename	Family Name	Company
Mirko	AKSENTIJEVIC	Nokia
Brenda	BACKWELL	Motorola
Uwe	BAEDER	Rohde & Schwarz
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Nader	BOLOURCHI	Motorola
Sarah	BOUMENDIL	Nortel
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Yuk	C CHOW	Toshiba Research Europe Ltd
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Dong	CHEN	Siemens AG
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Toshiyuki	FUTSUKATA	NTT DoCoMo
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Jennifer	GARNER	Real Time Engineering
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Marc	GRIGUER	France Telecom
Michael	GUILBAUD	ALCATEL France
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Kojiro	HAMABE	NEC
Andreas	HOEYNCK	Siemens AG
Henry	Horng	Mitsubishi Electric Co.
Jinling	HU	CWTS/CATT
Seung-Hoon	HWANG	LG Electronics Inc.
Shinobu	IKEDA	ETSI
Katsutoshi	ITOH	Sony Corporation
Bruno	JECHOUX	Mitubishi Electric
Farooq	KHAN	Lucent Technologies
Hunkee	KIM	Samsung Electronics Co.
Jaeheuns	KIM	Samsung Electronics Co.
Duk Kyung	KIM	SK Telecom
Young-Ju	KIM	LG Electronics Inc.
Bonghoe	KIM	LG Electronics Inc.
Shigenori	KINJO	Texas Instruments Japan Ltd
Dirk	KISTOWSKI	Deutsch Telekom Mobilnet
Janne	KOLU	Elektrobit Ltd
Frank	KOWALEWSKI	Siemens AG
Herbert	KRAUSS	Philips Semiconductors
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Ju Ho	LEE	Samsung Electronics Co.
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Hsuan-Jung	SU	Lucent Technologies
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Guiliang	YANG	CWTS/CATT
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