

Agenda Item: -
Source: Secretary
Title: Revised minutes of WG1 #15 meeting
Document for: Approval

Revised Minutes for 3GPP TSG-RAN WG1 15th Meeting

Meeting start: August 22nd, 2000, in Berlin, Germany

Day 1, started at 09.02

1. Opening of the meeting

The chairman, Mr. Antti Toskala (Nokia), opened the meeting.
 Dr. Marcus Purat (Siemens : Hosting company) welcomed the meeting.

2. Approval of agenda (R1-00-0976) (09:17)

Chairman made a brief introduction of the agenda on the screen.
 Agenda was approved with no comments.

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

No.	Title	Source	To/Cc	Tdoc No.	Discussed in	Notes
1	Response to LS (R3-001949) on CFN handling during hard handover	R2	TO	R1-00-0979 (R2-001547)	Plenary	Noted (*1) <small>Day 1 09:27</small>
2	Liaison Statement on measurements	R3	TO	R1-00-0980 (R3-001811)	Plenary	Already treated (*2) <small>Day 1 09:29</small>
3	LS on CFN handling during hard handover	R3	CC	R1-00-0981 (R3-001949)	Plenary	Noted (*3) <small>Day 1 10:15</small>
4	LS on Synchronisation of the starting timing of Power Balancing for NodeBs	R3	TO	R1-00-0982 (R3-001966)	Plenary	R1-00-1010 (*4) <small>Day 2 17:15</small>
5	Revised Overview of IMT-2000 CDMA TDD	ITU adhoc	TO	R1-00-1038 (RT-000017)	Plenary	(*5) <small>Day 1 09:42</small>
6	Revised Overview of IMT-2000 CDMA Direct Spread	ITU adhoc	TO	R1-00-1039 (RT-000018)		
7	LS on R'00 work on UE positioning in UTRA	R2	TO	R1-00-1133 (R2-001781)	Plenary	Noted (*6) <small>Day 3 13:41</small>
8	Response to LS (R1-000975) on Some study/work items with RAN WG1 having the primary responsibility	R2	TO	R1-00-1155 (R2-001845)	Plenary	Noted (*7) <small>Day 4 09:55</small>
9	LS on Iub NBAP Signaling Support for CPCH	R2	CC	R1-00-1156 (R2-001846)	Plenary	Noted (*8) <small>Day 4 10:00</small>

(*1) This is an answer liaison statement to the LS from RAN WG3 (R3-001949, See No.3). In R3-001949, RAN WG3 asked RAN WG2 several questions regarding the CFN handling during hard handover. In answering these, RAN WG2 stated as follows,

In case the OFF_{target} cannot be measured by the UE before handover no value for OFF should be reported by the UE to the network.

In 25.215 it is specified that in this case a value OFF is reported to be zero. R2 would kindly ask R1 to remove this information from their specification.

Ms. Evelyne Le Strat (Nortel) commented that we needed time to check whether the modification would effectively do. In TS 25.215, there is nothing related to what we should report when the measurement is not possible. What is indicated is one of measurement is not needed for the particular configuration and this is very different from what RAN WG2 is speaking about. We need to check with RAN WG2 colleagues before we start drafting the CR.

Chairman agreed to this comment and encouraged people to check with their RAN WG2 colleagues.

- (*2) Mr. Dirk Gerstenberger (Ericsson) commented that we had already treated this LS in the RAN WG1 #14 meeting in Oulu. He stated we already had sent the answer LS to RAN WG3 in **R1-00-0901**.

*/** The liaison statement to which we made R1-00-0901 as an answer was not R3-001811 but R3-001878. We received that LS during the last meeting. It seems that RAN WG3 had posted 2 different LSs on the same topic. Those are not completely same. R3-001181 could be considered as a draft judging from its T-doc number. ***/*

- (*3) This is the inquiry LS which was sent from RAN WG3 to RAN WG2. (See (*1).)

- (*4) There was a discussion in RAN WG3 #14 meeting regarding the synchronisation of the starting timing of power balancing for NodeBs but they were not able to reach conclusion in their meeting. In this LS RAN WG3 were requesting RAN WG1 to give them RAN WG1's point of view on this issue.

Since Alcatel had prepared the discussion paper including a possible reply to RAN WG3 in **R1-00-1010**, this document was reviewed in relation with this liaison statement.

R1-00-1010 *Need for synchronization of downlink power balancing starting times / Source : Alcatel (09:42-10: 02)*

(if the Node Bs do not receive the commands simultaneously over the Iub then there are one or more frame offset in their power balancing process and it causes some level of degradation. This paper proposed to start always at certain fixed intervals after receiving the commands.)

Nokia and Ericsson expressed their concerns against this document. A similar kind of discussion as in RAN WG3 was repeated.

Finally chairman proposed to have an offline discussion with RAN WG1 and RAN WG3 (collocated meeting) during the coffee break. We will come back to this later. (after all this was not revisited.)

- (*5) Mr. Sergio Barberis (CSELT) commented that he had sent these 2 documents on the reflector on behalf of the contact person of the ITU AdHoc. He explained the background based on the comment he had got from the contact person of the ITU Ad Hoc as follows.

These are overviews of the TDD and FDD components to be included in the ITU recommendation and we are just to check if everything is OK just in order to ask for the approval of the documents in RAN #9. After the approval of the RAN #9 they will be sent to ITU meeting planned at October. The revision is based on the update on the state of the specification of June 2000. The ITU Ad Hoc contact person recommended that we are to check the figures of those 2 reviews and the list of the physical channels in figure 7 in R1-00-1039. I think that if there are any comments they can be brought to me and I will collect them and present them at the end of this meeting. Ms. Evelyne Le Strat (Nortel) commented that we have to be aware that this contribution is not only for RAN WG1. There are a quite number of aspects that are outside of our scope since there is references to the operation of different layers above the physical layer. But we also have to note that there are RAN WG4 aspects. In particular all ACLR values for TDD and FDD have not been discussed yet neither agreed. No scenario has been provided for the low chip rate TDD. I expect there should be discussion on those particular values this week during the RAN WG4 Ad Hoc. However there was no input for the scenarios. So I expect there will be further discussion at RAN #9.

Mr. Sergio Barberis mentioned that these 2 documents had been sent in parallel to RAN WG4.

Chairman encouraged people to give the comments to Mr. Sergio Barberis.

Chairman gave his comment about terminology of 1.28Mcps TDD or 3.84Mcps TDD that we should inform and let ITU Ad Hoc decide what they want to call them. Maybe we should point out in general to the ITU Ad Hoc that in our specifications such kind of terminology is used.

On Day4 the revisions were reviewed and at the same time the answer liaison statement to ITU Ad Hoc was approved. (See No. 122)

- (*6) This LS was received on Day2 night from RAN WG2 and reviewed on Day3 plenary session.

RAN WG2 was asking us to study the performance, applicability and impacts of the new enhancements / methods on the system from a physical layer perspective. Those new methods (including OTDOA) had been presented in RAN WG2 for release 2000 positioning issue.

Siemens commented that they had one contribution about this OTDOA method.

Chairman suggested that we would consider this noted at that time and we would have a look at Siemens' paper when we come to the point of release 2000 positioning issue and then let's make an answer to RAN WG2.

(See No.92)

- (*7) This LS was received on Day3 evening from RAN WG2 and reviewed on Day4 morning.

This is an answer liaison statement to **R1-00-0975** in which we had asked them to initiate the study on the work/study items with RAN WG1 having the primary responsibilities. RAN WG2 informed us that as a leading working group we must first create TRs on those topics and provided them in order for other working groups to take necessary actions. They will not intend to proceed until we have given them TR or something like that.

Chairman suggested that we should create LS to RAN WG2 on the issue of DPCH gating and USTS to inform them that TRs have been created in RAN WG1.

- (*8) This LS was received on Day3 evening from RAN WG2 and reviewed on Day4 morning. No action was expected.

4. Change Requests for WG1 Release –99 specifications

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
10	070	-	25.211	R1-00-1030	Support of closed loop transmit diversity modes	F	Vodafone Group, Ericsson, Nokia	To be revised	(*1) 10:17
11	076	-	25.211	R1-00-1080	Clarification of SCH transmitted by TSTD	F	Panasonic Samsung	Approved	No comment 10:18
12	077	-	25.211	R1-00-1082	Clarification of FBI field	F	Panasonic	To be revised	(*2) 10:35
13	071	-	25.211	R1-00-1041 R1-00-1098	DPCH initialisation procedure	F	Philips	Approved	No comment 11:05
14	123	-	25.214	R1-00-1041	DPCH initialisation procedure	F	Philips	To be revised	(*3) 11:05
15	072	-	25.211	R1-00-1043	Correction on indicators	F	Philips	To be revised	(*4) 11:18
16	073	-	25.211	R1-00-1044	Correction on AP-AICH	F	Philips	Rejected	(*5) 11:30
17	066	4	25.211	R1-00-1047	Clarification of paging indicator mapping	F	Ericsson	Approved	(*6) 11:32
18	074	-	25.211	R1-00-1048	Correction of STTD for DPCH	F	Ericsson	Approved	No comment 11:34
19	075	-	25.211	R1-00-1049	Clarification of first significant path	F	Ericsson	Postponed	(*7) 11:49
20	071	-	25.215	R1-00-1049	Clarification of first significant path	F	Ericsson	Postponed	(*7) 11:49
21	085	-	25.212	R1-00-0858	Editorial corrections in Turbo code internal interleaver section	F	NTT DoCoMo, Nokia Nortel	Approved but revised	No (*25) comment 11:52
22	041	-	25.222	R1-00-0858	Editorial corrections in Turbo code internal interleaver section	F	NTT DoCoMo, Nokia Nortel	Approved but revised	
23	088	-	25.212	R1-00-1050	Clarifications to TS 25.212	F	Ericsson	To be revised	(*8) 12:00
24	089	-	25.212	R1-00-1058	Correction regarding DSCH	F	LGIC	Approved	No comment 12:02
25	090	-	25.212	R1-00-1059	Correction regarding CPCH	F	LGIC	Approved	(*9) 12:06 < 13:38
26	087	-	25.212	R1-00-1042	Corrections	F	Philips	Approved	No comment 12:09
27	121	-	25.214	R1-00-0991	Clarification of SSDD ID code bit transmission order	F	NEC	Approved but revised	(*10) 12:16
28	124	-	25.214	R1-00-1051	Clarification of closed loop mode TX diversity initialisation	F	Ericsson	Approved	No comment 12:21
29	125	-	25.214	R1-00-1055	Clarification and correction of ? formula	F	Siemens	Not approved	(*11) 12:24
30	126	-	25.214	R1-00-1056	Clarification of power control at maximum and minimum power	F	Siemens	Rejected	(*12) 13:55
31	110	2	25.214	R1-00-1066	Downlink inner-loop power control in compressed mode	C	Alcatel	To be revised	(*13) 14:15
32	070	-	25.215	R1-00-1028	Clarification of UTRAN SIR measurement	F	Nokia	Approved	(*14) 14:28
33	072	-	25.215	R1-00-1052	Clarification of radio link set as the measured object	F	Ericsson	Approved	No comment 14:31
34	030	-	25.221	R1-00-0996	TDD Access Bursts for HOV	F	Siemens	Postponed	(*15) 14:46
35	030	-	25.224	R1-00-0996	TDD Access Bursts for HOV	F	Siemens		

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
36	007	1	25.223	R1-00-0992	Gain Factors for TDD Mode	F	Siemens	Approved	(*16) 14:58
37	019	1	25.224	R1-00-0993	Gain Factors for TDD Mode	F	Siemens	Approved	No comment 15:00
38	032	-	25.224	R1-00-1031	Removal of ODMA related abbreviations and correction of references	F	Siemens	Approved	No comment 15:02
39	017	-	25.225	R1-00-0998	Update of TS25.225 due to recent change for FDD: Reporting of UTRAN TX carrier power	F	Siemens	Approved	No comment 15:05
40	127	-	25.214	R1-00-1088	Uplink power control in compressed mode	C	Alcatel	To be revised	(*17) 15:14
41	014	-	25.223	R1-00-0988	Synchronisation codes	F	InterDigital	Approved	No comment 15:18
42	016	-	25.225	R1-00-0990	Removal of Physical Channel BER	F	InterDigital	Approved	No (*18) comment 15:21
43	UE Capability			R1-00-1053	CR 25.926-xxx: Correction of Transport Channel Parameter	-	Ericsson	To be revised	(*19) 16:10
44	-	-	-	R1-00-1046	Uplink transmission with invalid set of transport blocks	-	Philips	LS will be produced	(*20) 16:35
45	111	-	25.214	R1-00-0809	DPCCH power control preamble	C	Alcatel	Rejected	(*21) 16:46
46	069	-	25.215	R1-00-0951	Support of parallel compressed mode patterns	F	Ericsson	Postponed	(*22) 17:23
47	073	-	25.215	R1-00-1108	Inclusion of compressed mode in support for LCS related measurement	F	QUALCOMM	Postponed	(*23) 17:23
48	-	-	-	R1-00-1109	Proposed update to TR 25.926 Compressed mode in support of LCS related measurement	-	QUALCOMM		
49	031	1	25.221	R1-00-1089	Number of codes signalling for the DL common midamble case	F	Mitsubishi Siemens	Approved	(*24) 17:37
50	040	1	25.222	R1-00-0944	Update of TS 25.222	F	Siemens	Approved	No comment 17:42
51	028	1	25.224	R1-00-1005	RACH timing in TDD mode	F	Siemens	Approved	No comment 17:43
52	033	-	25.224	R1-00-1097	Clarifications on the Out-of-sync handling for UTRA TDD	F	Nokia Siemens	Approved	No comment 17:46

(*1) This CR proposed to clarify that the support of the closed loop transmit diversity modes should be mandatory at UE and optional in UTRAN in section 5.3.1.2 as a matter of consistency.

Mr. Tim Mouldsley (Philips) commented that though there was no problem with the intention of this CR, he thought that the wording should have been elaborated. He added that normally something *mandatory* is expressed something like 'shall' and something *optional* is expressed something like 'may' and this might be the better way of describing this kind of wording.

Proponent agreed to revise this CR to reflect this comment. The revision can be found in **R1-00-1091**. This was reviewed on Day 3 and approved with no comment. (See No. 74)

(*2) Ms. Evelyne Le Strat (Nortel) commented that though she understood the objective of this CR, the added sentence is difficult to understand.

Mr. Andreas Wilde (Ericsson) commented that this CR is proposing an error handling. (Because basically the correct slot format should be selected and this filling should only happen in case there is some mismatch between higher layers and physical layer.) And error handling should be treated consistently with other many error cases. Against this comment, Ms. Evelyne Le Strat and chairman supported the concept of this CR.

Mr. Tim Mouldsley (Philips) questioned whether the contents of this CR was really needed or not though there was no problem with this CR. It can go with 'undefined' because the field is currently not being used.

Chairman commented that there might be some features using this field and the timing of using these features will not necessary be synchronized with all node Bs and UEs. So it is useful to define '1' indicating the feature being disabled or not used.

Finally chairman suggested that this should be reworded so that there would be no ambiguity left with what is meant with 'earliest position'. This would be revisited once the revision made available.

The revision can be found in **R1-00-1092**. This was reviewed on Day 3 and approved. (See No. 82)

(*3) There was one comment. The last change in CR 25.214-123, section 4.3.2.2, there is a direct reference to TS 25.212. This should be done using reference number. Therefore this was set to be revised. The revision can be

- found in **R1-00-01098**. This was reviewed on Day3 and approved with no comment. (See No. 66)
- (*4) The explicit meaning of certain downlink indicators (AICH and AP-AICH) is not currently stated in the specifications. This CR proposed to add clarifying statements in 25.211, sections 4.2, 5.3.3.6 and 5.3.3.7 in order to avoid possible ambiguity in interpretation by the UE.
Mr. Erik Dahlman (Ericsson) made 2 questions.
- Q1. Isn't it already defined in TS 25.214 in section 6 ?
A. In TS 25.214, there is just a terminology 'the positive acquisition indicator' used and no definition. It does not tell you which is +1 and which is -1. This CR tries to clarify which particular polarity means positive and which polarity means negative.
- Q2. Should there be third alternative for value 0 ?
A. We do not think there was a need to do that.
- In response to Mr. Erik Dahlman's comment that there was no usage defined here, chairman suggested to put the reference to TS 25.214 for the usage of acknowledgement.
Ms. Evelyne Le Strat (Nortel) questioned whether we should clarify as well for the CPCH-CD case in addition to these RACH and CPCH-AP cases which were dealt in this CR. Though there is a description of the relationship with the signature in Table 21, it is not necessary clear what is meant by +1 or 0.
Chairman suggested to check the needs for the CD case and if there is a need, then this can be captured in the same CR in some point. In any case this CR should be revised in order to put the reference to TS 25.214.
This was set to be revised in **R1-00-1099**. It was reviewed on Day 4 and approved after being further revised into **R1-00-1173** (See No. 101, No. 113)
- (*5) This CR proposed to add the restriction to clarify that only one positive AP-AICH can be sent at a time.
Ms. Evelyne Le Strat (Nortel) commented that at this point we could not agree on the modification of the spec unless it would lead failure of the function without that modification. She added that in the CR, it maybe means that we only need putting restriction on the acknowledgement on the CPCH part but it maybe interpreted in different way as well. In the case in which CPCH completely fails if we acknowledge more than one mobile at a time, this is a needed correction, but if this is to improve CPCH operation then it is questionable to treat it right now. In the latter case, there is a need for more explanation on CPCH operation.
Chairman supported this comment and suggested to clarify that this restriction is only for CPCH users.
Having these comments, Mr. Tim Mousley (Philips) stated he would withdraw the CR.
In relation with this CR, one problem was pointed out by Ms. Evelyne Le Strat that the formula of a_j , that is,
- $$a_j = \sum_{s=0}^{15} API_s \cdot b_{s,j}$$
- is extremely confusing. If we share the scrambling code between the AICH and AP-AICH, then full set of signature is not for the CPCH and we should restrict the summation within set of the sequences of s that corresponds to the CPCH.
Mr. Tim Mousley (Philips) and Mr. Vincent Belaiche (Mitsubishi) agreed to this comment.
As a conclusion, this CR was rejected but another CR that corrects the formulas would be produced. Eventually new CRs were created in **R1-00-1106**(Mitsubishi) and **R1-00-1099** (Philips, revision of No.15) separately.
After some discussion, **R1-00-1173**(Philips) was approved. (See No. 100, 101 and 113)
- (*6) This CR is the revision of the CR 25.211-066r3 (**R1-00-0972**) which was approved in the previous meeting. After the approval in the previous meeting, it turned out that one tiny index was still wrong ($p \neq q$) in table 22.
- (*7) In 25.215 the term "first significant path" is used in the definition of several timing measurements, both for the UE and UTRAN. Together with the term there is also a note saying that: "The definition of "first significant path" needs further elaboration". The same term is also used in 25.211, defining the UE uplink/downlink timing. These CRs had an intention to clarify the definition of "first significant path" so that the note can be removed from the R-99 specification. "the first detected path (in time)" is proposed to replace "the first significant path".
Mr. Serge Willenegger (QUALCOMM) commented he was now working on the paper on the whole timing issues across the different specifications and this 'first significant path' is one of those issues. He would present that paper on Day2. He stated that this CR is only the first step and does not solve all the problems because there are different meanings depending on which context it is used. (like in the positioning context, LCS context or demodulation context.)
Ms. Anu Virtanen (Nokia) supported this comment.
Chairman concluded that we should postpone the approval of this CR to Day2 after the reviewal of this QUALCOMM paper which can be found in **R1-00-1100**.
Eventually this CR was approved on Day3. (See No. 68, 69)
- (*8) This is editorial corrections and no functional changes included.
Ms. Evelyne Le Strat (Nortel) pointed out one editorial error in figure 10 in section 4.3.4. ' $a_{1,0} \dots a_{1,0}$ ' should be replaced by ' $a_{1,4} \dots a_{1,0}$ '. Therefore this was to be revised. The revision can be found in **R1-00-1101**. It was reviewed on Day3 and approved with no comment. (See No. 70)
- (*9) Mr. Vincent Belaiche (Mitsubishi) commented that there is an error in this CR regarding the notation of M_1 which is not consistent with the rest of the specification. He stated that M_1 was referring to the number of transport block for some transport format and not the maximum number though maybe there are some index missing. (maybe $M_{1,i}$)
Chairman asked Mr. Vincent Belaiche to help the proponent to check the notation. So this was set to be revised in **R1-00-1102**. But eventually during the lunch break it was confirmed by Mr. Vincent Belaiche that there had been no problem in this CR and this was approved as it is at 13:38 on Day1 and R1-00-1102 was released for another document.

- (*10) This CR proposed to clarify the bit order to be transmitted regarding SSDT ID codes.
 Mr. Dirk Gerstenberger (Ericsson) questioned whether there is a functional change by deleting the 2nd sentence which had stated that *if the entire ID is not transmitted within a frame but must be split over two frames* ?
 Mr. Takashi Mochizuki (NEC) answered that he removed this sentence just because it contradicted with the first sentence which states *ID must be terminated within a frame*.
 Chairman questioned whether there are cases in which more than one bits needs to be punctured ? because now in the bracket there is always only one bit ?
 Mr. Takashi Mochizuki answered that in normal mode there is always one bit and he will check the compressed mode case.
 Chairman concluded that we approve this CR here and at the same time proponent should check whether there is something needed with respect to the compressed mode case. If there was some needs, then we will come back this later.
 Eventually this CR was revised into revision 1 (**R1-00-1121**) to clarify the compressed mode case and approved on Day4 (See No. 107)
- (*11) This CR proposed to revise one section (5.1.2.3) for which there had been the approved CR from Philips, that is, **R1-00-0973** CR 25.214-118r2. There was no comment with this new change introduced by this CR but since there was a comment from Mr. Tim Mouldsley (Philips) that there would be another possibility to modify the Philips CR in addition if this change is to be approved, and since there was one error in terms of CR formality found by the chairman (the section number is not included in the CR), chairman suggested that the change in this CR should be included in the Philips original CR (CR 25.214-118) instead of approving this CR. Siemens agreed with this suggestion. New Philips CR which can be found in **R1-00-1103** was reviewed on Day4 and approved with no comments. (See No. 71)
- (*12) Mr. Tim Mouldsley (Philips) and chairman commented that the solutions proposed here need more study and since these would have some significant effect to the power control behaviour, maybe these are more appropriate for release 2000 rather than release 99. It was also commented that the category should be the functional modification of the feature rather then correction because we are definitely speaking the new requirements that the UE would need to trace.
 Siemens answered that their intention was to clarify that there is a critical problem with the minimum power level in release 99 and to make discussion about this. They added that they could put it for release 2000 taking into account the comments.
 After some discussion, chairman concluded that at this stage we would reject this CR.
 Chairman added that if we consider this for release 2000, then in order for us to be able to do something about this, we have to create some kind of Work Item for the next RAN to inform them that we are doing some modification regarding the power control for release 2000 and it should be put under some kind of work / study item from the RAN perspective although this is very much in RAN WG1 internal issue and as such there would not be coordination problem. Though firstly we have to make sure what the problem is, there is timing issue. We need to submit Work Item Sheet before we present the first proposed CR. If we agreed now to proceed this way and we would have possible proposed CR on this topic for RAN in December, then we should create work item sheet (in advance). Work item sheet can come up to RAN directly from companies. If it will be available by Day4, then it can go to RAN with source name as RAN WG1 as well.
- (*13) This CR proposed complete the current description of downlink power control in compressed mode because the change of the downlink transmit power during the compressed mode and recovery frame has not been specified so far.
 Since it was confirmed that the parameters, ?SIR or whatever, introduced in this CR already exist in RAN WG3 specification and we are just considering how they are used in the physical layer, chairman commented that this CR should be categorized as 'F (Correction)' rather than 'C(Functional modification of feature)'.
 Ms. Anu Virtanen (Nokia) commented that there is a need for clarification in RAN WG2 RRC specification in which they have also this ?SIR definition because she had a lot of comments on the usage of this ?SIR from her RAN WG4 colleagues who are currently doing simulation work for the compressed mode.
 Mr. Pascal Agin (Alcatel) answered that the current description of ?SIR compression is exactly same as that of in RAN WG2 specification. He proposed offline discussion if we should make some clarifications.
 Mr. Andreas Wilde (Ericsson) commented that there is one item yet missing with respect to this ?SIR compression that is the case for spreading factor 1/2. He stated that since in this case, there is alternative scrambling codes and thus we would have non-orthogonal interference, we might add some margin for that case. He added though he was not sure how big the value should be, it is clear that we have an interference if we use another scrambling code.
 After some discussion, Mr. Andreas Wilde proposed offline discussion.
 Mr. Tim Mouldsley (Philips) commented that it would become clearer if the parameters mentioned indicated whether they are for the uplink or the downlink. He also commented regarding the terminology used in the equation ;

$$\Delta P = \max (?SIR_{I_compression}, \dots, ?SIR_{n_compression}) + ?SIR_{coding}$$
 that in this equation, ?SIR_j has nothing to do with the Signal to Interference ratio but just used for the power offset calculation and therefore they should be denoted something like ?P. Even if these terminologies are used in other WG's specification, it would not cause any problem if we properly use the names for the quantities which are derived from these signal parameters (meaning RAN WG1 internal terminology).
 Mr. Pascal Agin agreed to this comment.

- As a conclusion chairman recommended offline discussion and stressed not to forget to change the category from 'C' to 'F' in the revision.
- The revision can be found in **R1-00-1102**. This was reviewed on Day3 (See No. 79) but further revised into **R1-00-1144**. It was reviewed on Day4 and approved with no comments. (See No. 104)
- (*14) This CR proposed to set the definition of SIR measurement to be *unbiased* and also proposed to remove the sentence "*Only the non-orthogonal part of the interference is included in the measurement*" from the ISCP definition.
- Mr. Pascal Agin (Alcatel) commented that he is not convinced of unbiased measurement.
- Mr. Erik Dahlman (Ericsson) commented that this seems to be more RAN WG4 issue rather than RAN WG1 issue. He questioned when we are talking about unbiased, is it unbiased in dB domain or linear domain ?
- Ms. Anu Virtanen (Nokia) answered that they thought it is clearer to have all the definitions of measurements in RAN WG1 specifications and then RAN WG4 would define the accuracy. With respect to the domain, it is clear when we look at the equation on how to calculate SIR that we are going to measure in linear domain.
- Chairman commented that if it is not defined whether it is *biased* or *unbiased*, RAN WG4 will have difficulty in setting the accuracy requirements. Chairman proposed to accept this CR here and let's us liaise with RAN WG4 about this to see whether there is any problem on their side. If they found some problem we can come back to this.
- Chairman asked Ms. Anu Virtanen to draft a liaison statement with this CR attached. T-doc number **R1-00-1110** had been allocated for this LS but the actual LS was drafted in **R1-00-1154**. It was reviewed on Day4 and approved into **R1-00-1164**. (See No. 120)
- (*15) This CR proposed to extend the purpose of the access burst that is currently used only for the PRACH also for the access to new cell after non synchronous handover and to name it burst type 3.
- There were several questions made after having the explanatory paper explained.
- Q. Can this access burst be used also for data traffic or only for the initial part of the handover in order to obtain synchronization ?
- A. That is controlled by higher layers. So UE will get to know that it shall use burst type 3 after handover and then it will use burst type 3 without timing advance as long as it does not get another message from the higher layers that it shall now use another burst type. So, in this period (that may take some hundred ms), the burst type 3 is also used for data traffic.
- Q. Then problem from the network is basically how fast it is to calculate the timing difference, timing deviation?
- A. As for the initial access, the network will calculate new timing advance value and it will be sent to the UE.
- Q. If there is a chance in which the UE will use burst type 3 in the slot where only burst type 2 is used ?
- A. That is clarified in the CR. The mix of burst type 3 is not possible with burst type 2 because mid-amble structure is different. But burst type 3 can be mixed with burst type 1.
- Mr. Stephen Dick (InterDigital) commented that Interdigital is basically in favour of this burst type 3 but he had a few detailed questions and he would like to have offline discussion.
- Ms. Evelyne Le Strat (Nortel) questioned whether the detection of burst type (format switching) would be done in a synchronous fashion ? meaning that at a certain frame number, the burst format changes as the slot number may change as well so that Node B is aware when such and such burst format is going to be used.
- Mr. Marcus Purat (Siemens) answered though he thought it would be synchronous, he will check it with RAN WG2 and RAN WG3.
- Ms. Evelyne Le Strat added that if we want to use burst type 2 in a cell then for the handover we need to use burst type 3 and then we will have to change for burst format 2. It means that since mix is not allowed, we will have to change slot number as well.
- Mr. Marcus Purat answered that it might be preferred also to have burst type 4 with small mid-amble and long guard period but we thought that at this stage it might be too late to introduce this new type of burst.
- Chairman proposed that this should be postponed for a while and resume after the coffee break how we proceed the exact details. In the offline discussion during the coffee break there was one concern raised in TS 25.224 part in which the procedure is described for the handover that there should be some rewording needed to be in line with signal to the UE. Therefore CR 25.224-030 and maybe CR 25.221 should be revised. Chairman suggested we would discuss those CRs after this revision has been done on Day3. These CRs were revised into **R1-00-1000** and approved with no comment. (See No. 72, 73)
- (*16) There was one question regarding power-setting command but it was answered.
- /** R1-00-0994 is CR on RACH timing but there will be an update of CR on the afternoon CD in R1-00-1005. **/
 /**R1-00-0886 has been available since last meeting but it has got a comments and so it will be revised. Postponed **/
- (*17) This document was distributed on the Day1 morning CD without T-doc number but with the file name of 'R1-00-xxxx (UL PC in compressed mode).doc' (unzipped). This CR did not also have CR number, either. This is the uplink version of **R1-00-1066** CR 25.214-110.
- Chairman commented that by the same reason as R1-00-1066 (See No.31), the category of the CR should be 'F' instead of 'C'
- Ms. Anu Virtanen (Nokia) stated that she had a similar comment as in **R1-00-1066**. (See No.31)
- Chairman commented that this should be revised with the same reason as in R1-00-1066. The revision can be found in **R1-00-1112**. It was reviewed on Day 3 and approved. (See No. 80)
- (*18) Interdigital prepared the LS to inform this change to other RAN WGs. The draft LS can be found in **R1-00-1113**. This was review on Day4 and approved into R1-00-1165. (See No. 121)
- (*19) There were a couple of concerns raised.
- Chairman commented that this should be elaborated especially on what it is meant by "*arbitrary time instant*".

If we have here difficulty to understand then for sure people somewhere much farther away from the physical layer will have difficulties to understand what is meant with this explanation.

Based on the comments made, chairman concluded that this should be revised.

The revision was made into **R1-00-1122**. It was reviewed in conjunction with the review of the liaison statement on UE capability issue on Day 2 evening. There were 2 comments but finally agreed as it was.

It was sent to RAN WG2 in the liaison statement in **R1-00-1127**. (See No. 115)

- (*20) This paper proposed a solution to the problem of what layer 1 should transmit if higher layers provide an invalid set of transport blocks.

There was long discussion made regarding how we should treat zero rate TFCI.

There was one comment that we should not treat error handling separately.

As a conclusion it was decided that we should try to make an approach for the initialization phase problem because then it would not be specific error handling but just something that happens in more or less all the time.

(In the initialization phase of DPCH, as a typical sequence there is a period of DPCCCH transmission without data. Current specification does not define the TFCI for this period. TFCI for zero rate might be beneficial.)

It was suggested by the chairman to send LS with draft CR for this to RAN WG2 and RAN WG3 to ask their opinion on this initialization phase problem. The draft LS was to be drafted by Mr. Tim Mouldsley (Philips) in **R1-00-1115**. This LS was reviewed on Day3 and approved into **R1-00-1146**. (See No. 117)

- (*21) This CR proposed to use a larger step size during the DPCCCH power control preamble with the limitation of 8 slots.

Chairman commented that in the previous meeting it was decided to increase the length because searcher needs time. Now 15 slots and 3dB step size means 45 dB power change in the worst case. It goes up continuously in case searcher is slow. This is the reason why the current step size was set in the previous meeting.

Even if there is the limitation of slot number with 3dB step size, the problem will not change. Because in any case when you increase the step size in the beginning when searcher has not acquired, you are just ramping up the power very rapidly and it does not make sense.

Chairman concluded this to be rejected at this point and stated that there could be offline discussion if needed.

- (*22) This CR was postponed in the previous meeting (RAN WG1#14).

This CR proposed a change to the number of simultaneous compressed mode patterns the UE needs to support which had been originally proposed by Nokia in **R1-00-0548** CR 25.215-050r1. The reason for this change is that the current number includes one additional count for "*other measurements*" of which meaning is not clear.

- (*23) This CR proposed to use above "*other measurements*" for LCS/GPS measurement. Long discussion was made on what we should do with this issue.

Mr. Andreas Wilde (Ericsson) commented that there are quite many changes we have to do for this. He stated we have to change TR 25.926, TS 25.215 and maybe TS 25.331 and it is quite late to do all these changes. At the same time we need to have a bit more information on what requirements we will have for this GPS measurement, (e.g. how long period do we need for this measurement) before we could agree to make changes in the documents in different WGs.

Ms. Evelyne Le Strat (Nortel) commented that we should check with RAN WG2 why there is the *other measurement* purpose included before we try to agree on assigning this other measurement to LCS/GPS measurement or to remove it.

Mr. Ville Steudle (Nokia) commented as follows.

Actually RAN WG2 discussed about this issue about 2 hours ago. (They were having meeting in parallel.) They were discussing whether to remove this *other measurement* purpose or not. To my understanding RAN WG2 chairman opposed to removing with the opinion that it might be needed for LCS measurement. According to my colleagues, the current situation in RAN WG2 is that they have stopped discussion there to see what we (RAN WG1) are doing with this measurement. RAN WG2 also requested information about our status on this issue.

Mr. Andreas Wilde (Ericsson) commented that one basic difference between compressed mode for LCS and compressed mode for inter-frequency and inter-system handover is that compressed mode for inter-frequency and inter-system handover has already been discussed for 1 or 2 years, very long time whereas compressed mode for LCS/GPS has been discussed 2 days. He added that treating this LCS/GPS measurement same as inter-system, inter-frequency handover is perhaps not the best argument.

Chairman fully agreed with this comment and stated that it is difficult for us to say that we are now considering LCS/GPS measurement for the "*other measurement*" without having any knowledge of what the actual measurement of GPS is.

Finally chairman concluded that we should send liaison statement to RAN WG2 to check their status on what they expect to do. He added that we should mention that we found some difficulties at discussing this compressed mode for LCS/GPS because we have not so far discussed GPS structure or what the actual measurement would be and RAN WG1 is not familiar with that at this point. This LS was drafted by QUALCOMM in R1-00-1116 and approved into R1-00-1128 on Day2. (See No. 116)

The approval of these CR was postponed.

- (*24) Mr. Stephen Dick (InterDigital) commented that though they support this CR he would like to have a chance to make some comments regarding wording

Chairman suggested that we should approve this CR here and if there is problems then we should revise it.

Mr. Marian Rudolf (Mitsubishi) commented that on the condition that this CR was approved, they had prepared the revision of the previously approved CR (**R1-00-0939** CR 25.221-026r1).

It will be in **R1-00-1105** (CR 25.221-026r2). It was approved on Day3. (See No. 81)

- (*25) These were revised into **R1-00-1134** on Day4 to correct editorial errors. (See No.111, No.112)

Day 2, started at 08.08 23rd August, 2000

5. Release 2000 issues

Ad Hoc configuration

AH21 : TDD 1.28 Mcchips functionality (TR)

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

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
53	22	R1-00-1029	Clarification of UE battery life calculations	Nokia	Discussed	(*1) 08:29
54	22	R1-00-1069	Revised Uplink interference reduction gain of gated DPCCCH	Samsung	Discussed	(*2) 08:53
55	22	R1-00-1071	Performance evaluation on DSCH/DCH with gating	Samsung	Not discussed	(*3) 08:55
56	22	R1-00-1079	Proposal of using both tx and rx gating	Nokia	LS shall be sent to R2	(*4) 09:30
57	22	R1-00-1070	TR on terminal power saving features	Samsung	To be revised	(*5) 11:35
58	24	R1-00-1093	Link Evaluation Methods for High Speed Downlink Packet Access (HSDPA)	Ericsson, Motorola, Nokia	Discussed	(*6) 12:18
59	24	R1-00-1096	Enhancements for High Speed Downlink Packet Access (HSDPA) using multiple antennas	Lucent	Discussed	(*7) 14:02
60	24	R1-00-1094	Common HSDPA system simulation assumptions	Ericsson, Motorola, Nokia	Discussed	(*8) 14:49
61	24	R1-00-1120	Issues for consideration in the HSDPA report	QUALCOMM	Discussed	(*9) 15:21
62	24	R1-00-1045	Performance of HSDPA	Philips	Discussed	(*10) 15:38
63	25	R1-00-1095	Text proposal on HARQ performance for HARQ TR	Nokia	Discussed	(*11) 16:18
64	25	R1-00-1090	Impact of Hybrid type II/III ARQ on the physical layer	Nortel	Discussed	(*12) 16:41
65	25	R1-00-1083	Comparison on RLC HARQ and fast HARQ complexity	Nokia	Discussed	(*13) 16:54

(*1) There were 2 comments.

- It is not obvious that gated transmission is optional for the downlink. It is kind of obvious for the uplink that it is optional.

- Is there any analysis on the EMC effects on the downlink simulation ? \approx No, but there would be no problem.

(*2) This paper is following the comments on the earlier simulation results shown in the meeting in Oulu. There was a comment in the previous meeting that said that the simulation results were slightly misleading because its assumption had been considered to be proper.

Samsung present the new simulation results with the new assumption and showed that the results were almost equivalent compared to the previous ones.

Mr. Dirk Gerstenberger (Ericsson) commented that according to the previous paper (**R1-00-0907**), the interference reduction gain was around 2.2dB under the assumption of ideal channel estimation and DPDCH/DPCCCH gain factor of 2.69dB but here in this paper now with the DPDCH/DPCCCH gain factor of 5dB and with practical channel estimation you still got even slightly bigger interference reduction gain. The changes made in the

assumption can be considered to reduce the gain. Is there any explanation for this result ?

Instead of the proponent, chairman answered that if we change the relative power level, then the operation point in the curve will change one way or the other. This could explain something at least from simulation experiences.

- (*3) This is information paper about the simulation result regarding throughput and delay aspect. Since there were some points which should be more elaborated Samsung stated that they would provide the revision later in this meeting or by the next meeting. This paper was not reviewed.

- (*4) New concept of the gating was introduced.

A lot of comments were raised and long discussion was made. Major concerns were regarding following items,

- additional delay (in relation with value K)
- impact on RRC signalling
- handover execution
- measurement problem/ measurement requirements

Mr. Tim Mouldsley (Philips) suggested that maybe we did not even need this extra parameter (K) since we could already achieve pretty well same effect by designing TTI length.

Chairman agreed to this suggestion and asked the people whether we as RAN WG1 can recommend to proceed with this particular topic forgetting the extra parameter K by setting it equal to 1. Whether there is a problem in indicating other WGs that RANWG1 sees this topic feasible and we would like to proceed with that ? He added if we did agree then we should have TR in the next RAN in order to be allowed the coordination work with the other working groups on this topic.

There was no comment/objection made for this question.

Chairman concluded as follows.

Then we should make some kind of liaison statement on this topic and then we should also review the TR that should be then submitted for the next RAN for information about this topic. Regarding what was mentioned with this topic about the parameter K, something could be raised in this LS towards RAN WG2 and RAN WG4 to inform this kind of additional proposal was made for which the conclusions do not exist yet at the moment in RAN WG1 and to ask what the feeling in RANWG2 and RAN WG4 is, what kind of things could be considered from their point of view. In any case if RAN WG2 says it is not acceptable from RRC point of view, then whatever thing we cannot proceed on that.

With respect to DCH only gating or DSCH+DCH gating or mandatory / optional issues, those should be UE capability parameter. I think there would be consensus with DSCH+DCH case and there is not really a difference because when we specify DSCH+DCH case then anyway we specify how the DCH behaves. As for details like independent / combined parameter, we can elaborate them later.

Finally chairman asked the proponent to draft the liaison statement.

This LS was drafted in **RI-00-1167** by Samsung and approved on Day4 into **RI-00-1174**. (See No. 125)

- (*5) Samsung collected comment section by section basis.

(Section 5.)

Ms. Evelyne Le Strat (Nortel) commented on 5.1.1.2 that the current description may be misunderstood or at least it will be confusing because it reads firstly it is mandatory for Node B to generate gating patterns for uplink AND downlink, secondly when you generate patterns it is uplink and downlink at the same time. Therefore this needs to be revised. We all agreed that this is an optional feature for Node B and thus we have to say that Node B generates patterns when operating DPCCCH gating mode. And we may operated in uplink AND downlink gating and donwlink only gating also. The sentence should be modified to clarify these.

Mr. Erik Dahlman (Ericsson) supported this comment and added that the same thing can be said to 5.1.1.1

Mr. Tim Mouldsley (Philips) commented that there should be a word indicating that this is 'FDD' only somewhere in the section.

(Section 6)

It was commented by Mr. Erik Dahlman regarding section 6.1, 3rd paragraph, *Gated DPCCCH transmission can be applied only when the UE is in Cell-DCH state with DSCH*, whether this is agreeable. He added that there are some places in the later part where it is stated like "*When the DPCH consists of DPCCCH only*" (section 6.1.5.1)

Mr. Tim Mouldsley commented that the description of DSCH is not necessary. Reference to DSCH might well be moved into section 5.2.

Ms. Evelyne Le Strat commented that we should not talk about logical channel here.

Chairman agreed to this comment and stated physical layer is not supposed to know whether there is dedicated control channel, what the data is as such. The logical channel should be taken out of this section. That could be covered elsewhere in this TR but not in this section.

Mr. Volker Höhn (Mannesmann Mobilfunk) that it might be useful to include EMC in uplink direction.

Chairman answered it is a bit difficult for RAN WG1 to put something related to EMC issue or simulation results sourced as RAN WG1 because T-group will eventually do the analysis of EMC issues.

Mr. Tim Mouldsley commented we should put it in the LS.

Mr. Hyeonwoo Lee (Samsung) commented that regarding EMC impact that it was already handled in the last year by T WG1 and T WG4 and therefore it can be considered that there is no need for us to put the same kind of results here.

Chairman agreed to this comment and concluded that we should leave the issue.

Ms. Anu Virtanen (Nokia) questioned whether we need both random and regular gating patterns. In terms of EMC issues we only need to have ~~regular~~ random pattern.

Chairman suggested that we should put in the LS that we are still considering whether we need both random and regular pattern. (because of parameterization of RRC.)

Samsung answered that the reason why they still put the regular pattern was that it has a bit higher gain relative to random pattern, but they did not have any strong opinion about the regular pattern.

Mr. Andreas Wilde (Ericsson) made following comments.

6.1.8.2.2, the last sentence, "the Tx diversity mode should be return to *Mode 1*" should be *Mode 2*.

≈ this was type and to be corrected. (Samsung)

6.1.8.3 "If the compressed mode is initiated during gated DPCCCH transmission, it shall be disabled."
what should be disabled ? compressed mode ? or DPCCCH gating ?

≈ gating should be disabled. (Samsung)

6.1.8.4 "If all of the Node Bs in the Active set do not support gated transmission at the same time,"
'all' should be replaced by 'any'.

≈ it should be 'any'. (Samsung)

The impact on SSDT can be considered quite similar to the transmit diversity and so it should also be mentioned in this section. ≈ Samsung will include this in the revision.

Ms. Evelyne Le Strat stated regarding 6.1.8.3 that in any case measurement should be carried on. Measurement capability needs to be there.

Mr. Young-Joon Song (LGIC) commented that 6.1.8.1 *Frame Synchronisation* should be reworded or deleted.

Chairmen agreed to this comment and suggested to remove 6.1.8.1 because it is pretty much implementation issue.

Ms. Evelyne Le Strat made a question regarding section 6.1.6. In the last sentence what does "*TFCI is not the specific codeword indicating termination of gating*" mean ?

There was long discussion made on how to initiate and terminate gating and the number of stages in gating.

It was commented though there uplink AND downlink and downlink only gating are mentioned in section 6.1.4, there is effectively uplink only gating in case long transmission of packets is made in the downlink direction and there is no data in the uplink.

Ms. Evelyne Le Strat commented that since all the discussion showed that there are a number of states, it is beneficial to have transmission state diagram including interaction detected by UE and detected by Node B so that we can know exactly the state of the elements (UE and Node B). This kind of transmission state diagram would also be beneficial for RAN WG2 as well. There must be a need to have such state diagram.

Chairman agreed to this comment.

(Section 8)

Chairman suggested to put some simulation results (curves) from Samsung and power saving calculations and summaries of them in this section.

It was agreed.

(Section 7)

Chairman suggested to ask in LS whether other WGs will produce their own TR or not.

It was questioned whether the hard handover during DPCCCH gating had been discussed or not.

Chairman suggested this should be covered in the TR.

This TR was revised into **R1-00-1166**. It was approved with no comments on Day 4 (See No. 99) and was sent as an attachment of LS (**R1-00-1174**) to RAN WG 2, RAN WG3 and RAN WG4. The TR will be sent to RAN for information. Official TR numbering will be done by the secretary in offline. Since this kind of series of TR will not necessary be published by 3GPP to outside of 3GPP community, the number will be on 25.800 series.

(*6) This document intended to provide simulation assumptions related to link-level evaluation of high-speed packet downlink packet access (HSDPA).

Long long discussion was made on the simulation assumptions / parameters.

The point was whether we had to have detailed parameters including transport block size at this very beginning stage. The reason for requesting them was that they are significant to understand how Hybrid type ARQ is applied and if in particular there are any restrictions as to the scheme used for initial transmission and retransmission. The reason for not providing them was that the intention of the initial simulations here was to show the general benefit of the proposed technologies and they will not be used to derive exact performances or to agree on the exact values. Therefore detailed parameters are not needed at this point of time, they will be provided when the actual simulations are to be done.

Conclusion : Information bit rate (before and after channel coding) shall be clarified.

Mr. Serge Willenegger (QUALCOMM) made following 2 questions and these were answered by Mr. Amitava Ghosh (Motorola)

Q. The number of retransmission is not specified.

A. The maximum number of retransmission depends upon manufacturers / companies.

Q. What is the feedback error rate considered on the Hybrid ARQ whether it is ACK or NACK ?

This should be included in the parameter table.

A. Feedback error rate is set at 0%, 4%, 10%.

With respect to the FEC coding, the same scheme as release 99 is now currently assumed.

(*7) Mr. Howard Huang (Lucent) presented PPT document (**R1-00-1096**) on the screen. They provided also the explanatory document on this topic in **R1-00-1057** (it was not presented, contents were covered by R1-00-1096.).

Q. What happens when there is correlation between different channels ?

A. Throughput would be reduced.

Q. Can we have mixed terminals of different capabilities, that is, different number of receiver antennas accessing the same high speed downlink channel in the same cell?

A. If you have one terminal with 2 antennas and another with 4 antennas then you could have mixed terminal

environment. What would happen is that you would have the maximum data rate each of those terminals dependent on the number of antennas, especially DSCH environment you could easily switch data rates between different terminal types.

Chairman concluded that some point in the future we will receive some inputs, some kind of descriptive materials on this topic for the TR.

Ms. Evelyne Le Strat (Nortel) responded to chairman's conclusion that it is not time to decide whether anything will go or will not go into the technical report. Further discussion and study are needed before such kind of decision is taken though this is an interesting technique.

Mr. Erik Dahlman (Ericsson) supported this comment from Ms. Evelyne Le Strat.

Chairman stated that of course it was not the time to conclude whether we should include this topic in TR but we could have inputs for the TR and then we can discuss about them. This was first time this was introduced and we will discuss further on this topic in later meetings assuming to get contributions by the proponents or somebody else on the topic.

- (*8) Mr. Serge Willenegger (QUALCOMM) commented that this morning it was mentioned that the feedback bit error rate of the fast HARQ was considered higher than those mentioned here like 10%. He added that even though this was the initial feasibility study, maybe we should study 0%, 5%, 10% cases rather than 0%, 1%, 4% and though he did not know which number should be used for lower side but at least for higher side, the number of 10% should be included to make sense.

Mr. Kourosh Parsa (GBT) questioned from where **100ms** of *Fixed Network Delay* comes ?

∞ Fixed Network Delay includes all the delay including all of the TCP/IP delay (from source - web-server- the point signal enters RAN. UE is not involved.)

- (*9) This paper presented issues for consideration in the evaluation and comparison of technologies proposed for High Speed Downlink Packet Access.

Some discussion was made on '*throughput*'.

Major concern was whether we could make an assumption that throughput should be same for every user.

In case of this kind of traffic model, probably the throughput is not relevant measure of the performance. It could be a relevant measure in some case but it is in other simulations.

Chairman suggested offline discussion on this '*throughput*' issue.

On the topic of 'higher order modulation',

Mr. Amitava Ghosh (Motorola) commented that he could not agree with the C/I limit of 13-15dB.

Chairman suggested that C/I limit issue would be suitable for consideration not in RAN WG1 but in RAN WG4.

He added that he would mention this in RAN from WG coordination point of view to find out the opinion whether RAN WG4 chairman is eager to study this or not.

On the topic of 'interference',

There were a couple of common comments that the interaction between voice and data is something more general rather than just in high speed downlink packet access. It will occur even for release 99 system and therefore if there is a problem we should look at it in general.

- (*10) This is the first simulation result presented in RAN WG1.

There were comments regarding simulation assumptions. Chairman suggested offline discussion.

Chairman summarized about the high speed downlink packet access issue as follows.

There will be now 2 of these inputs for this Technical Report on the simulation parameters. They will experience some slight revision because there were a couple of comments to be reflected. For the input from QUALCOMM, a couple topics might be helpful. We will create inputs intended for this RAN WG1 Technical Report. Regarding other items, there is definitely some coordination needed to do with RAN WG2 on this high speed downlink packet access though we have not received any response from RAN WG2. I think it is quite obvious that for the issues like modulations and stuffs like that, RAN WG2 does not have time nor expertise to deal with those kind of physical layer issues. I will discuss with RAN WG2 chairman what the best way of dealing with this issue is and whether there will be some point of time in future some kind of joint Ad Hoc on this high speed downlink packet access ? or what the best way with this 2 working groups will be. I think RAN WG2 is still be killed by the release 99 stuffs. They have a lot of stuffs in the RRC so I can understand why they have not been able to spend that much time on the topic so far. In the RAN, I will have a chance to have some discussion on the coordination of the work. Maybe potentially we will have some kind of physical Ad Hoc between RAN WG1 and RAN WG2 some point of time during this year so that this report can have the shape that is needed for this kind of feasibility study at each working group to know what they are supposed to do. That will be discussed in the RAN meeting next time.

Regarding this RAN WG1 Technical Report, it seems that the outline has not been made by anybody. The Technical Report in RANWG1 on this high speed downlink packet access. We have seen the outline for the report in RAN WG2. I think on this simulation issue, it will clearly make sense as I discussed with RAN WG2 chairman that we do create RAN WG1 Technical Report. We should also plan this kind of outline of own TR starting with the simulation issues and then later other aspects will be covered in here.

- (*11) This paper proposed the texts based on the earlier presented simulation results (**RI-00-0869**) to be included in the Technical Report.

Ms. Evelyne Le Strat (Nortel) commented that she definitely supported the inclusion of such material into the technical report but it might be useful to add some more explanation in particular on the simulations assumptions. She stated that the current assumptions are characteristic of a case in which the bit rate is fixed and this means that it is not clear at this stage how we can base on these results to evaluate what would happen for the variable bit rate.

It remains to be studied how Hybrid type ARQ is supported in the variable bit rate case.

Chairman agreed with this comment.

We will produce liaison statement to RAN WG2 on this Hybrid ARQ and this or revision of this would be attached to this liaison statement. The revision of this document can be found in **R1-00-1142**. This was reviewed on Day4 in the process of the LS approval. (See No. 118)

- (*12) This paper discussed the impact of HARQ onto the physical layer.

Ms. Evelyne Le Strat (Nortel) added to the presentation that if people agreed that some of the conclusions here with possible modification could go into the RAN WG2 technical report then they should be provided to RAN WG2 because in RAN WG2 technical report although there is a section dealing the impact on physical layer, it is empty apart from complexity description, and there were no contributions available for the RAN WG2 to discuss the impact on the physical layer. RAN WG1 is the group best placed to evaluate such impact.

Chairman agreed with comment of the Ms. Evelyne Le Strat.

Mr. Vincent Belaiche (Mitsubishi) agreed with concern raised on the impact of MAC but he commented that about the preventing of the transport channel from being punctured, in fact what was stated in this was not exactly true. This was revised into **R1-00-1147**. It was reviewed in the review of the LS and agreed to be sent in the LS.

(See No. 118)

- (*13) This paper compared the complexity of RLC level HARQ to L1 HARQ (fast HARQ). There was also a text proposal to be included in the HARQ technical report.

It was confirmed that in the complexity assumption the same amount of data is going to be retransmitted.

Chairman concluded as follows.

It is obvious that RAN WG1 is not in the position to proceed with CR based Hybrid ARQ because there are these complexity issues considered from UE memory point of view as well as this multiplexing in rate matching point of view. Some solutions are missing and we do not know actually how much complexity there would be.

I think in the liaison statement to RAN WG2 we should say that there is no agreement in RAN WG1 on the inclusion of the Hybrid ARQ in release 2000 at this point. Inputs for the technical report would be attached.

Nokia will draft this liaison statement.

Siemens requested that their contribution on multiplexing chain with Hybrid ARQ (**R1-00-0962**) to be attached to the LS.

Nortel commented that their contribution R1-00-1090 covers (discusses) R1-00-0962 wider including the uplink which was not dealt with in R1-00-0962. She added that R1-00-0962 did not go into the details and have not reached any conclusion.

Ericsson agreed with this comment from Nortel.

Chairman commented that the figure in R1-00-0962 is useful and good picture. Therefore it can be attached as a reference.

The draft liaison statement can be found in **R1-00-1129**. It was approved into **R1-00-1162** on Day 4.

(See No. 118)

Day 3, 24th August, 2000

6. **AH21** : TDD 1.28 Mchips TDD (08:00-12:30)

7. **AH26** : TX-diversity (08:30-12:30)

Plenary session started at 13:37

8. Approval of postponed/revised Release –99 CRs.

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
66	123	1	25.214	R1-00-1098	DPCH initialisation procedure	F	Philips	Approved	No (*1) comment 13:54
67	-	-	-	R1-00-1100	UE Timing related issues	-	QUALCOMM	LS will be produced	(*2) 15:03
68	075	-	25.211	R1-00-1049	Clarification of first significant path	F	Ericsson	Approved	(*3) 15:08
69	071	-	25.215	R1-00-1049	Clarification of first significant path	F	Ericsson	Approved	
70	088	1	25.212	R1-00-1101	Clarifications to TS 25.212	F	Ericsson	Approved	No (*4) comment 15:12
71	118	3	25.214	R1-00-1103	Clarification of power control at maximum and minimum power	F	Philips	Approved	No (*5) comment 15:15
72	030	1	25.224	R1-00-1000	TDD Access Bursts for HOV	F	Siemens	Approved	No (*6) comment 15:22
73	030	1	25.221	R1-00-1000	TDD Access Bursts for HOV	F	Siemens	Approved	No (*6) comment 15:30
74	070	1	25.211	R1-00-1091	Support of closed loop transmit diversity modes	F	Vodafone Ericsson, Nokia	Approved	No (*7) comment 16:06
75	092	-	25.212	R1-00-0986	Bit separation and collection for rate matching	F	InterDigital Mitsubishi	To be revised	(*8) 16:17
76	043	-	25.222	R1-00-0986	Bit separation and collection for rate matching	F	InterDigital Mitsubishi	To be revised	(*8) 16:17
77	093	-	25.212	R1-00-1104	Puncturing Limit definition in WG1 specification	F	InterDigital	Approved	No comment 16:21
78	048	-	25.222	R1-00-1104	Puncturing Limit definition in WG1 specification	F	InterDigital	Approved	No comment 16:21
79	110	3	25.214	R1-00-1102	Downlink inner-loop power control in compressed mode	F	Alcatel	To be revised	(*9) 16:37
80	127	1	25.214	R1-00-1112	Uplink power control in compressed mode	F	Alcatel	Approved but Revised	(*10) 16:44
81	026	2	25.221	R1-00-1105	Some corrections for TS25.221	F	Siemens Mitsubishi	Approved	No (*11) comment 16:46
82	077	1	25.211	R1-00-1092	Clarification of FBI field	F	Panasonic	Approved	No (*12) comment 16:50
83	014	-	25.225	R1-00-0886	Clarification of the Timeslot ISCP measurements	F	Siemens	Approved	No (*13) comment 17:10

(*1) This is the revision of **R1-00-1041**, TS 25.214 part (See No.14).

The direct reference was replaced by the indirect reference. TS 25.211 part remained unchanged.

(*2) This paper highlighted undefined areas and inconsistencies regarding UE timing related issues in various RAN specifications in order to clarify or complete the specifications.

Mr. Serge Willenegger (QUALCOMM) presented this paper and gathered comments on topic by topic basis.

' *First significant path* '

Mr. Dirk Gerstenberger (Ericsson) confirmed that there are no objections against the former Ericsson CR.

R1-00-1049 in which it was redefined as "first detected path (in time)". (See No. 19, 20) It was also confirmed that the intention of this document was to discuss these issues among RAN WG1, 2, and 4 and liaison statement would be sent to see some edition of CR required.

' Valid Rx timing range '

- the range for UE Rx-Tx time difference threshold

Chairman commented that RAN WG4 should be involved in this discussion because though there is some range in the RRC specification, it does not mean that that is the minimum-maximum requirement. RAN WG4 should have some requirement on this. We should mention this in the liaison statement to ask RAN WG4 to specify the requirements.

For other topics, chairman suggested we should also check with RAN WG4.

'DL timing selection for cell addition '

TS 25.214 specifies that the network shall select the DL timing of a RL such that the UE receives the RL within +/- 148 chips of its DL time reference (UL_Tx - T0). Referring the background history of this value(+/-148 chip) which had an origin in the LS from RAN WG3 one year ago, this paper proposed that this value should be +/-128 chips because the granularity is 256chips and there is no reason for 20chips margin.

There were some discussions made but major opinion was that we should keep the value of +/- 148 chips. It was said that it is good to have some margin.

Mr. Serge Willenegger (QUALCOMM) stated that if that was the RAN WG1 view then it was ok, but that should be put on the minutes.

Chairman concluded that we could say our understanding is that margin for UE for DL DPCCCH/DPDCH starting is to be preferred, operated with +/- 148 chips. For the operation after this has been set, there is a need checking from RAN WG4 what the requirements would be.

'UE timing adjustment (slewing) '

There was long discussion. Finally chairman proposed an offline discussion because it seems there is some difficulty to fix this immediately here.

Chairman asked Mr. Serge Willenegger to draft liaison statement on this UE timing related issues.

The draft LS was produced in **R1-00-1138**. It was review and approved in **R1-00-1163**. (See No. 119)

(*3) This CR had been postponed on Day1 to wait for the discussion of above **R1-00-1100**. (See No. 19, 20).

There was one comment on CR 25.211-075 part from Mr. Tim Mouldsley (Philips) that in section 7.6.3, it should be "first detected cell (in time) *in the active set* " according to requirement from Mr. Serge Willenegger.

Mr. Serge Willenegger answered since this CR intended only to change the term, it can be considered no problem. (for the multiple cell case there is a room to be elaborated.)

(*4) This is the revision of **R1-00-1050** (See No. 23). A typo in figure 10 in section 4.3.4 had been corrected.

(*5) This CR was revised in relation with another CR (**R1-00-1055** CR 214-125, Siemens) which was reviewed on Day1 and not approved. (See No.29) Since this was approved here, the replaces the **R1-00-0973** CR 25.214-118r2 which was approved in the RAN WG1 #14 meeting.

(*6) This is the revision of **R1-00-0996** which was reviewed on Day1. (See No. 34, 35)

(*7) This is the revision of **R1-00-1030** which was reviewed on Day1. (See No.10) Comment was reflected.

On Day4 afternoon Mr. Hyeonwoo Lee (Samsung) stated that he had found problem in this CR but this was not reviewed due to the lack of time.

(*8) Mr. Vincent Belaiche (Mitsubishi) presented this CRs. In presenting these CRs, he mentioned that there were editorial mistakes found in these CRs and so he would revised these. It was commented that there were a couple of spelling errors to be corrected in the revision. The revision can be found in **R1-00-1143**. It was reviewed on Day4 and approved with no comments. (See No. 102, No. 103)

(*9) This is the revision of **R1-00-1066** which was reviewed on Day 1(See No.31)

Mr. Dirk Gerstenberger (Ericsson) commented that the very last sentence in the CR was somewhat misleading.

In case several compressed mode patterns apply to the same frame, a ?P offset is computed for each compressed mode pattern and the sum of all ?P offsets is applied to the frame.

He added that it was not really allowed to apply several compressed mode patterns simultaneously to one frame.

Chairman agreed with this comment and suggested to revise this to remove the ambiguity.

It was pointed out that there is one direct reference to TS 25.433. This should be indirect.

Mr. Andreas Wilde (Ericsson) made a comment regarding the paragraph which begin with

"Due to transmission gaps in uplink compressed frames, there may be missing TPC commands in the uplink "

that during the downlink transmission gap we do not take into account any TPC commands sent on uplink and this is not clear from that paragraph in question.

Mr. Pascal Agin (Alcatel) proposed an offline discussion.

The revision of this CR can be found in **R1-00-1144**. It was reviewed on Day4 and approved with no comment. (See No. 104)

/*** R1-00-0966(Nokia) is on the CD but it got comment and so it will be revised into R1-00-1145 ***/

(*10) This is the revision of **R1-00-1088** which was reviewed on Day1 (See No.40)

This was updated on Day4 in **R1-00-1159**. (See No.105) Therefore this CR is no longer valid.

(*11) This is the update of already approved CR.(**R1-00-0939** CR 25.221-026r1, approved in RAN WG1#14 meeting).

This was updated in relation with the change in **R1-00-1089** CR 25.221-031 (See No.49).

(*12) This is the revision of **R1-00-1082** which was reviewed on Day1 (See No. 12)

(*13) This had been postponed in the RAN WG1 #14 meeting because it had got some concerns. After having offline discussion it was agreed to change the definition of time slot ISCP.

9. Release 2000 issues (Part II)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
84	27	R1-00-1025	DSCH power control improvement in Soft Handover: Further elaboration of the proposal	Nokia	Discussed	(*1) 17:32
85	27	R1-00-1119	Improved PDSCH power control	QUALCOMM	Discussed	(*2) 17:43
86	27	R1-00-1024	Softest Hand-over with Rate Matching	LGIC	Discussed	(*3) 18:08
87	27	R1-00-1135	Draft TR for Softest handover with Rate Matching	LGIC	Noted	18:20
88	27	R1-00-1107	Pseudo Dynamic Rate Matching for Downlink flexible positions	Mitsubishi	Discussed	(*5) 18:47

(*1) This paper provided further elaboration to the proposed enhancement for the DSCH fast power control operation combined with SSDT in the case soft handover is possible which had been already presented in the previous meeting.

Ericsson, QUALCOMM and Motorola expressed their support of this proposal.

Mr. Vincent Belaiche (Mitsubishi) asked for the potential impact (change) for the RAN WG1 specification.

In response to this comment, Mr. Jussi Kahtava (Nokia) briefly introduced the relevant section in the draft TR for *DSCH power control improvement in soft handover*. (**R1-00-1111**)

Mr. Vincent Belaiche stated he would have offline discussion.

(*2) This paper provided a summary of proposals received in RAN WG1 in relation to improved PDSCH power control. Description/Benefit/Drawbacks/Open issues had been summarized. In addition, 2 new schemes were introduced.

Chairman suggested that the technical report would be elaborated to cover these 2 new proposals. The revision would be presented on Day4. The revision was produced in **R1-00-1158**. It was approved on Day4 (See No.96)

Regarding this way of progressing of this topic chairman stated that in order for us to produce CRs, we need to generate Work Item Description Sheet because this topic is the one of the study items. Chairman asked proponents to provided that along with the TR for RAN.

(This work item description sheet was drafted into **R1-00-1161** by Nokia but not reviewed.

(*3) This paper presented proposed two soft hand-over schemes to enhance the radio link performance.

Maximum performance gain of 0.5dB was shown as a result.

In the simulation it was assumed that the average received power from the 2 base stations were equal. It was questioned whether the performance gain would decrease in case the power from the base stations were not equal. Mr. Young-Joon Song (LGIC) answered that the maximum performance gain can be obtained in case the equal received power is assumed for each signal from 2 base station.

Mr. Pascal Agin (Alcatel) and Mr. Erik Dahlman (Ericsson) commented that it might be better if it could be taken into account that mobiles do not always receive same power. Even though about 50% of mobile stations are in handover, very fewer mobile stations can have the equal average received power from each base stations and then performance gain would be even smaller than 0.5dB and it is quite small. It is questionable whether this will work over its complexity.

Mr. Young-Joon Song answered that it depends on the viewpoints. Although 0.5dB assumes the equal power from the base station, this can be considered as a potential gain. It is worth working to find out the better way of radio link performance and there is no reason not to work on this study item.

There were some other questions made. Further simulation results including the multi-path fading case will be presented.

Chairman concluded based on the comments made as follows.

We have not been convinced by the results that the gains would justify the required changes to release99 and resulting complexity including concerns to another rate of turbo coding or something like that.

Regarding the technical report of this topic, I do not think we should send that to RAN. I will give a reference for this draft TR just for background information in my report to RAN. But I do not think we want at this point to submit it to RAN sourced as RAN WG1. I will put a reference with RAN WG1 Tdoc number so that people can find the information if needed.

Conclusion: TR is not submitted to RAN sourced as RAN WG1 by us.

(*5) There were several questions/comments made on added complexity or problem of backward compatibility.

Chairman summarized based on the comments.

So far there are not much supporting comment that we should proceed with this for release 2000.

RAN WG1 is not clear what kind of benefits can be achieved with this to justify the changes needed to this rate matching operation. It is also a bit difficult for the people to find out what the complexity would be because this is the first time to have presentation on this issue and there is not necessary enough time. Since there is no TR, I would refer to this particular presentation in my report to RAN with RAN WG1 Tdoc number.

Day 4, started at 08.08 25th August, 2000

10. Release 2000 issues (Part III)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
89	28	R1-00-1033	GBT's response to Nokia's contribution: R1-00-890	GBT	Discussed	(*1) 08:30
90	28	R1-00-1034	CLPC-FACH simulations	GBT	Discussed	(*2) 09:03
91	28	R1-00-1035	Advantages and disadvantages of CLPC-FACH	GBT	Discussed	(*2) 09:29
92	29	R1-00-1123	Air interface methods for TDD location services	Siemens	Discussed	(*4) 11:12
93	30	R1-00-0946	Sequences for the cell sync burst	Siemens	Discussed	(*5) 11:25
94	30	R1-00-0878	Accuracy for TDD node B synchronisation	Siemens	Discussed	(*6) 11:39
95	30	R1-00-0945	Draft TR on " NodeB Synchronisation for TDD"	Siemens	Discussed	(*7) 11:59
96	27	R1-00-1158	Draft TR on DSCH power control improvement in soft handover	Nokia	Discussed	No (*8) comment 12:14
97	31	R1-00-1114	Answer to questions and comments on USTS	SK Telecom	Discussed	(*9) 14:06
98	30	R1-00-0879	Draft TR on " NodeB Synchronisation for TDD"	Siemens	Approved	No (*10) comment 15:55
99	22	R1-00-1166	Draft TR on Terminal Power Saving Features	Samsung	Approved	No (*11) comment 16:12

(*1) Nokia presented a contribution in RAN WG1#14 where they analysed the delay associated with the CLPC-FACH scheme especially when the packet is re-transmitted once. GBT had performed a similar analysis and was providing responses to Nokia's comments and analysis. In consequence following points were derived.

1. Nokia's analysis showed an increase of 130% in delay associated with usage of CLPC-FACH for packet re-transmissions.
2. Agreeing with Nokia's assumptions, GBT shows this increase to be 60%.
3. Invoking some new assumption (UE protocol processing delay of 20 ms), GBT shows this delay to increase by 35% as compared to OLPC-FACH (delay with one re-transmission)

Ms. Anu Virtanen (Nokia) commented regarding delay calculations,

1. UE processing delay (20ms) should be bigger
2. Scheduling depends on the implementation and it could be twice as the value that is used in the calculations. she stated that the main point we should conclude here is that there is an increase of delay and because of that there should be some clear benefits from this scheme before we can think it is sensible.

(*2) GBT presented the updated simulation results and advantages and disadvantages of CLPC-FACH.

There was very long discussion made about the simulation assumptions, conditions, inaccuracy on the open loop power control and overall system benefit.

Based on the discussion, chairman commented as follows.

Before letting the comments continue very long, we need to try to figure out what we as RAN WG1 are now expected to say about this topic at this point of time in the first place.

Though we have not received any answer from RAN WG2, I would like to try to recall you what we did ask from RAN WG2 about this topic in the last time. We did ask for which areas of the proposal we are expected to provide them, some detailed feedback in the first place so that we can avoid the duplication of some lengthy discussion in both working groups. And then we indicated that we have been discussing the simulation results comparing power control versus non power control case and also indicated that the other areas we could do is the complexity aspect.

I think that in general we can say that the environment has been simulated and there is a link level gain from this fast loop power control versus open loop power control. But still we do have some problem with the whole picture. We have not seen at least here any draft or outline of the possible technical report that would list what points RAN WG2 has covered and whether there are other points that we are supposed to cover besides this benefit of the closed loop power control versus open loop power control. I do not know whether such TR or proposal has been made in RAN WG2 on this particular topic.

(Mr. Kourosh Parsa (GBT) informed that there had not been so much discussion in RAN WG2 and GBT had not prepared TR because discussion had not come to that point where actual TR is needed.)

We can note that regarding the link level simulation which is what we are looking at, it is OK, but on the other issues we are in some sense expecting the leading working group to give some indication that what topics are in first place covered in their discussion and then we can see whether there are some requirements, those specific from RAN WG1 point of view.

For Hybrid ARQ, we did indeed provide material for their TR but it was at that point of time clear that they are going to make the TR in any case as it was appearing in the RAN WG2 on the reflector. But in this case it is unclear. I will put this situation in my report for RAN. I do not think we have to send LS, there is not expected impact. We are supposed to be on the receiving side on this topic at the moment.

Conclusion:

We have discussed the certain set of the link level simulation results and RAN WG1 sees that there is a gain in general. It has been noted that there are maybe particular cases this assumption may not fall in other environment or scenarios. It is also noted that there is an effect of inaccuracy on the open loop including inaccuracy elsewhere as well that should be looked at. On top of the link level simulation for one service with fast power control, there has been raised a question of the overall system benefit. We are now waiting the instructions from RAN WG2, what are the areas where we are expected to provide and at this point we are not in the position to provide input for TR in RAN WG2. We also discussed about the resulting delay of this scheme and alternative calculation has been presented but again it depends on the assumption also out side of the RAN WG1 scope.

- (*4) This paper presented an analysis of the existing methods for LCS location service and possible candidates for other air interface based methods.

Mr. Andreas Wilde (Ericsson) that we should use same terminology for OTDOA as we use in FDD. "idle period" should be used instead of "blanking".

He also commented regarding the other air interface method that it should be clear that we should only take them into account for release 2000 if there is a significant gain compared to OTDOA method. We maybe have to see those results and compare them with OTDOA as a guideline.

Chairman agreed to this comment and chairman will briefly mention this in his report to RAN.

Regarding the LS from RAN WG2 (**R1-00-1133**, R2-001781, See No.7), Siemens agreed to draft the answer liaison. The draft LS was produce in **R1-00-1168** by Siemens but it was not reviewed due to the lack of time.

- (*5) This contribution discussed some aspects of the Sync Burst construction that can be used for the special synchronisation bursts in the PRACH timeslot. 11 stage Gold code was introduced for the synch sequences. Chairman explained the background of the TDD cell synchronization burst. Originally there were 2 schemes. Through long offline discussion we have come to an agreement to use PRACH based scheme and the other scheme so-called SCH scheme would now be withdrawn. Now we can agree or confirm that we will proceed with this PRACH based scheme and this is that which is really important for other working groups to be informed. What the exact signal structure we are sending is not really the matter of relevant actually for them as long as they know how many sequences there are. Now very detailed signal structure has been shown in this paper. We will come back to this when we produce actual CR. People should have a look at this from the complexity point of view. Mr. Mirko Aksentijevic (Nokia) and Mr. Stephen Dick (InterDigital) commented that basically we need some time to evaluate this proposal. It seems that the information on complexity analysis is not enough. Do Siemens believe that this is the sufficient information for the implementation people to verify the complexity of the process and to verify the performance ?

Siemens answered that complexity detail depends on the hardware being used and they thought there were enough details and figures to show that complexity is not the issue.

Chairman stated that the conclusion is that now we can say that we agree to proceed with PRACH scheme though the exact sequence may require some investigation. In any case it is RAN WG1 related issue and will not impact on any other WGs besides how many those sequences we have.

Mr. Mirko Aksentijevic proposed to send liaison to other WGs to inform that we have actually selected the method as RAN WG1. This was agreed by the chairman.

Siemens had already made the LS at that time which included all the topics that have been discussed so far to RAN WG2. Chairman suggested one more liaison to inform all other groups of this change only.

The draft LS to RAN WG2 can be found in **R1-00-0926**. It was approved in **R1-00-0880**. (See No. 123)

The LS to other RAN WGs can be found in **R1-00-1002**. This was also approved. (See No. 124)

- (*6) This paper discussed the cell synchronization accuracy. There was a question why only class1 support LCS. Siemens answered that of course all classes can support LCS. But except class1, there will be a need to have an additional hardware for instance GPS receiver in order to get exact timing on Node Bs. Class1 can support LCS without additional hardware because it has already good timing between Node Bs.

There are some discussion made regarding the accuracy and objective of this paper.

Finally chairman commented that we should keep in mind that these values of accuracy should be laid down in RAN WG4 but it is useful for us to understand what the physical layer relationship with these values is. Probably it will be useful to understand the what difference these values for the handover procedure is and to understand whether it is important or not important to have strict requirements in that sense. In any case we should indicate to RAN WG4 that we intend to discuss something related to accuracy but then it is their scope to define the actual requirement for it.

- (*7) Chairman suggested that the definition of "large cell" and "small cell" (section 7.3) should be clarified even if it depends on the synchronization accuracy.

There was some discussion about accuracy requirement with the current status of RAN WG4.

Chairman suggested to add in 7.3 one sentence "Values which are mentioned in this TR and accuracy

requirements are subject to RAN WG4 studies."

There was one comment that the word 'proprietary' in section 7.1 should be removed.

The TR was to be revised. The revision can be found in **R1-00-0879**. It was reviewed on Day 4 afternoon and approved with no comments. (See No. 98)

(*8) This is the revision of **R1-00-1111**. Mr. Jussi Kahtava (Nokia) explained the difference. (But R1-00-1111 had not been reviewed in this meeting except section 7, See No.84)

- The other solutions presented in **R1-00-1119** (QUALCOMM, See No.85) had been incorporated in section 6.2.

- There had been also slight modification in figure.1.

This TR would be submitted to RAN for information.

(*9) There had been many questions and comments on USTS at TSG RAN WG1 #14 meeting and also on e-mail reflector afterward. This paper presented the summary of them and answer to them.

There were some comments/questions were raised. The proponents made answers to each of them.

The major concerns were

1. The interval of UE timing adjustment. Every 20ms compared to current requirement of 200ms is too fast.

2. In which environment / model does the gain obtained ?

3. It needs to be studied further before we decide to proceed with this scheme. We should not rush to the conclusion to include this in release 2000. (Several companies expressed this kind of opinion.)

The proponent answered as follows.

What I would like to remind all of you is this USTS scheme was once included in release 99 last year. The main reason this scheme was postponed to release 2000 was the lack of work in other working groups. At that time there is no soft handover. I think only remaining work to be done in RAN WG1 is mainly about soft handover case. And for that issue now we are working on and we can present some more details by the next meeting.

Chairman concluded based on the discussion as follows.

I think what appears to be clear is that at this point of time we are not able to create Technical Report on this topic to be forwarded to RAN and other working groups. What we should inform to the other working groups is our exact situation in this meeting where we are not able to yet come to the point we could provide Technical Report on this topic and we are expecting to have some performance matters to be covered still in the coming RAN WG1 meetings.

So what can we say from the release schedule point of view ?

I think I will have to report in the RAN that we will have simulation results on the certain issues available after the next RAN and then it is maybe subject to some discussion also in RAN about what is to be done. But at this point of time we cannot provide such Technical Report for TSG RAN or other working groups on this topic.

Mr. Hyeonwoo Lee (Samsung) commented that in release 99 procedure, though the conceptual techniques had been frozen at December meeting, corrections/modifications were still allowed to release 99 even at this point. So he questioned whether it is possible or not to have USTS still be handled in release 2000 with details being discussed fully next year if we finalized the concept by this coming December.

Chairman answered that we would see what RAN say about the situation. But considering the current situation that we are not able to create required Technical Report for the other working group to continue their work it seems difficult. We will see what RAN will say about the situation. We have to report the current situation as it is. R1-00-1075 and R1-00-1160 (Revision of R1-00-0905) were postponed to next RAN WG1.

(*10) This is the revision of R1-00-0945 which was discussed in the morning. It was explicitly stated that final accuracy values are subject to RAN WG4. Since this was approved, this would be submitted to RAN #9

(*11) This is the revision **R1-00-01070** which was discussed in Day2. (See No.57) Whole TR had been revised to reflect the comments. This would be presented the RAN #9.

11. Approval of postponed/revised Release –99 CRs. (Part II)

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
100	078	-	25.211	R1-00-1106	Clarification on AICH signature set	F	Mitsubishi	Not approved	(*1) 14:15
101	072	1	25.211	R1-00-1099	Correction on indicators	F	Philips	To be revised	(*2) 14:40
102	092	1	25.212	R1-00-1143	Bit separation and collection for rate matching	F	InterDigital Mitsubishi	Approved	No (*3) comment 14:43
103	043	1	25.222	R1-00-1143	Bit separation and collection for rate matching	F	InterDigital Mitsubishi	Approved	
104	110	4	25.214	R1-00-1144	Downlink inner-loop power control in compressed mode	F	Alcatel	Approved	No (*4) comment 14:48
105	127	2	25.214	R1-00-1159	Uplink power control in compressed mode	F	Alcatel	Approved Updates	No (*5) comment 14:52
106	122	1	25.214	R1-00-1145	Clarification on RACH and CPCH subchannel definition	F	Nokia Vodafone	Approved	(*6) 15:15
107	121	1	25.214	R1-00-1121	Clarification of SS-DT ID code bit transmission order	F	NEC	Approved Updates	(*7) 15:19
108	027	1	25.224	R1-00-1118	CCTrCH UL/DL pairing for DL inner loop power control	F	InterDigital Siemens	Approved	No (*8) comment 15:27
109	128	-	25.214	R1-00-1136	Clarification of downlink quality measurement in SS-DT	F	NEC	Postponed	(*9) 15:38
110	026	1	25.224	R1-00-0974	Synchronisation of yiming qdvance adjustment and timing deviation measurement	F	InterDigital	Approved	No (*10) comment 16:27
111	085	1	25.212	R1-00-1134	Editorial corrections in Turbo code internal interleaver section	F	NTT DoCoMo Nokia, Nortel	Approved Updates	No (*11) comment 16:31
112	041	1	25.222	R1-00-1134	Editorial corrections in Turbo code internal interleaver section	F	NTT DoCoMo Nokia, Nortel	Approved Updates	
113	072	3	25.211	R1-00-1173	Correction on indicators	F	Philips	Approved	No (*12) comment 16:33
114	069	-	25.215	R1-00-0951	Support of parallel compressed mode patterns	F	Ericsson	Postponed	(*13) 17:25

(*1) This CR was created based on the discussion on **R1-00-1044** which was reviewed on Day1 (See No.16)

This CR proposed to correct the summation formulas for the AICH's channels because the current formulas are misleading. There was a comment that the CR from Philips (**R1-00-1099**, See No.101) contained the equivalent correction but in different manner and it was more preferable. After having a look at R1-00-1099, it was concluded to adopt Philips CR for this correction.

(*2) This is the revision of **R1-00-1043** which was reviewed on Day 1 (See No.15).

(There was another revision R1-00-1157 CR 25.211-072r 2 ??)

This CR included the comments made to the previous version and also included the correction to the same problem as treated in **R1-00-1106** (See No.100).

It was pointed out that in the last modification in section 5.3.3.8 there was an error because CD-ICH and CA-ICH were described separately.

Mr. Tim Mousley (Philips) answered he would revise this CR.

Mr. Serge Willenegger (QUALCOMM) commented there were errors in the indices in the table 21, they were signature $S_k = 6$ and 10 cases. These should be swapped. He asked Mr. Tim Mousley to correct them on the condition that this CR was to be revised though this correction was nothing to do with this CR.

There was small discussion how summation formulas for AICH's should be clarified. The wording should be consistent with other specification (TS 25.214). Chairman suggested revision of this CR and discussion on the reflector if necessary.

The revision can be found in **R1-00-1173**. This was reviewed later and approved with no comments. (See No. 114)

(*3) This is the revision of **R1-00-0986** which was discussed on Day 3 (See No.75, No. 76)

(*4) This is the revision of **R1-00-1102** which was discussed on Day 3 (See No.79)

(*5) This is the updated of the already approved CR in **R1-00-1112** CR25.214-127r1 (See No.80)

(*6) This is the revision of **R1-00-0966** which was not reviewed previously.

This is the follow up CR of **R1-00-0787** CR 25.214-096r3 (Nokia, Lucent) which had been approved in RAN WG1 #13 meeting. This CR proposed to clarify the uplink RACH access procedure particularly with respect to

RACH sub channels. The same clarifications are extended to the CPCH access procedure in TS 25.214.

Mr. Said Tatesh (Lucent) requested to have time to check the contents with his colleague who had made the original CR with Nokia in RAN WG1 #13 meeting.

There was some discussion made about "selected set" by Mr. Vincent Belaiche (Mitsubishi) but eventually he agreed to accept this CR saying that though there was a room to refine the definition of "selected set", this CR was good progress on the current text. Based on the discussion chairman concluded that this CR to be approved.

If some further refinement was needed then we would discuss the revision for the next RAN WG1 meeting.

Chairman stated to Mr. Said Tatesh that if Lucent found really fundamental problem with this CR before the RAN, it could be suggested to put it on-hold in the RAN. Mr. Said Tatesh agreed to chairman's comment.

- (*7) This is the update of **R1-00-0991** which was approved on Day1 (See No. 27)

In order to clarify the uplink compressed mode case following one sentence had been added.

"The alignment of the ID codes to the radio frame structure is not affected by transmission gaps resulting from uplink compressed mode."

- (*8) This is the revision of **R1-00-0989** which had not been reviewed.

- (*9) This CR proposed to specify that UE should measure downlink reception quality only on the primary cell signal. Chairman commented as follows.

I think this is not necessary clear because there is some possibility that one would mistake that you are not supposed to take into account DPCCH of the secondary cells although they are transmitted on from all cells all the time. You are not very specific what you mean with this "UE measures downlink reception quality". Because DPCCH is transmitted from all cells, I think UE should directly consider DPCCH from all the cells even if the SSDT is being used. I understand that if you mean if you are referring, for example, on which data the CRC checks have been done but that is a different story.

I think the intention of the SSDT was not that you only take one cell into account for the power control processing or has that been really the intention ?

Mr. Takashi Mochizuki (NEC) answered that we must do power control via DPCCH of primary cell. If we mix up DPCCHs from several cells, then the power control command would not be correct for the DPCCH of the primary cell. It should be prioritized.

Mr. Tim Moulsey (Philips) commented that this seemed to be a functional change because without this CR we would assume that we should take into account the power control from all the cells. It is not easy to see the justification of such a change. He was not convinced.

Chairman commented.

Somehow you are now conflicting with what has been specified for the UE behaviour in soft handover just stating this kind of things without justification. Like Tim was saying, also from my understanding this sounds as functional thing rather than just a clarification because I always understood that when we send control channel we should always measure the quality on those power control commands based on the joint signal quality. And even if that was the case, you are not very clear either on what point of time UE is supposed to switch its reference. If it determines it by itself then will it change the primary command after this primary command has been received by the Node B ? It is not straightforward to say just ignore others than the primary cell in this case. Mr. Takashi Mochizuki stated that in the simulation results which had been submitted by NEC so far, they had considered the principle presented here. They had been just calculating the DPCCH signal from the primary cell and they had seen no problem even if the cells other than primary cell were transmitting DPCCH.

Mr. Serge Willenegger (QUALCOMM) commented that this is inconsistent because in just beginning of 5.2.1.4.5, it clearly implies that DPCCH is power control based on all cells in the active set. It is not explicit but implicitly it is very clear P1 is updated based on the power control feedback based on all the cells in the active set.

Chairman commented that he expected that people had implemented UE algorithm so that they were taking all the cells into account because it was not normally stated in the spec that you should not do so. We should be a bit cautious. And even if the change were accepted there would be inconsistency in the specification. If you change it then you should change throughout the specification or not change at all .

Conclusion:

This CR was rejected at this point. This is also very late submission. People need some time to think about this. We should be a bit cautious. There is inconsistency. It may be clarified offline by the next meeting. Thus approval was postponed to the next meeting.

- (*10) This is the revision of **R1-00-0963** which was discussed on Day4 of RAN WG1 #14 meeting.

- (*11) These are updates of already approved CRs in **R1-00-0858** (Day1, See No.21, No.22)

Editorial errors made in the previous version were corrected and the other editorial corrections were done to improve the description. The differences from the previous version were summarized in the cover sheet.

- (*12) This is the revision of **R1-00-1099** which was discussed in the morning. (See No. 101 and No.100)

Mitsubishi wordings on the definition of set of signatures were incorporated. The other comments also had been reflected. (There was an intermediate revision **R1-00-1157** CR 25.211-072r 2 which had not been presented.)

- (*13) Mr. Dirk Gerstenberger (Ericsson) commented that there had been 2 CRs (Ericsson and QUALCOMM) on this and we had asked RAN WG2 for the conclusion but RAN WG2 had not discussed it yet. He requested the approval of this CR because now QUALCOMM seemed to agree to accept Ericsson CR. Though chairman agreed to this proposal, there was one comment from Mr. Ville Steudle (Nokia) that the format of the table should be changed to the one used in the QUALCOMM CR. Thus this was postponed.

12. Reports from the Ad Hocs (when available)

12.1 R1-00-1137 AH26 report to RAN WG1 meeting #15 (16: 34 - 16: 41)

AH26 chairman Mr. Kari Pehkonen (Nokia) presented the report.

Twelve contributions were handled in the AH26 meeting #3. The modeling principle of the channel model for Tx diversity simulations with correlated antennas was agreed upon. It was also agreed that no new Tx diversity or beamforming solutions will be included to Rel.-00. Furthermore, the planned TR on Tx diversity solutions for multiple antennas was agreed not to be made. The issue of how to continue the Tx diversity studies was left to be discussed and decided in the plenary.

Chairman commented.

I think RAN WG1 agrees we would need to have some kind of study item with this for release 2000 or release 2001 like the radio link performance enhancement or whatever is the particular name. There is a possibility to study this certain or new proposals that we have been made though they do not necessary fit release 2000. But after deciding such a thing, it is not next spring before we can start discussing these things again.

I could report to RAN whether it is acceptable to everybody that RAN WG1 would like to continue this kind of study item with release 2001 in mind without going into any specific proposal. I think they should provide us the framework for continuing this issue or study even after deciding it is not something for release 2000.

12.2 R1-00-1001 Report from Ad Hoc #21: 1.28 Mcps TDD option (16: 42 - 17: 16)

Regarding working CRs, they would not be reviewed in this meeting due to lack of time. They will be reviewed in the next meeting.

There was one comment that there had been a comment on the technical applicability (?) of smart antenna system to different radio environments and this should be included in the technical report.

There was one comment regarding section 2.3 that it had been concluded that **R1-00-1131** should be presented in the plenary session.

12.2.1 R1-00-1131 Coexistence between the 3.84 Mcps TDD option and the 1.28 Mcps TDD option

Source : Telia, Vodafone Group, BT, Mannesmann Mobilfunk, Telenor

Following was proposed in this paper.

Since the issue of coexistence aspects is still not analyzed with respect to the operation of the TDD options in various deployment scenarios as described in R1-00-0614 it is proposed to analyze those consequences before any decision is made on frame and timeslot structures for the 1.28 Mcps TDD option. It would be beneficial that this issue is addressed in TR 25.928.e

Discussion was made regarding which working group (RAN WG1 and RAN WG4) should do this kind of study. They should all be in the same place using the consistent values or assumptions.

Chairman concluded that he would report this issue to RAN and try to have discussion with RAN WG4 chairman though personally he was not in favour of doing this kind of co-existence studies / simulation works in RANWG1.

Ad Hoc report was approved with no other comments.

12.2.2 R1-00-1152 The proposed TR structure on Smart Antenna

Approved with no comments at 17:28

13. Approval of the liaison statements as output from WG1

No	Discussed Tdoc	Source	To	Title	Approved Tdoc	Notes
115	-	Ericsson	R2	Liaison statement on UE capability parameter definitions	R1-00-1127	(*1) Day 2 17:15
116	R1-00-1116	QUALCOMM	R2 C:R4, R3	LS on compressed mode for measurement purpose "other"	R1-00-1128	(*2) Day 2 17:22
117	R1-00-1115	Philips	R2,R3	LS on TFCI in the case of invalid set of transport blocks and during DPCH synchronisation	R1-00-1146	(*3) Day 3 18:53
118	R1-00-1129	Nokia	R2	Liaison statement on the status of HARQ type II/III work item in RAN WG1	R1-001162	(*4) Day 4 09:51
119	R1-00-1138	QUALCOMM	R2,R3,R4	LS on issues related to UE timing	R1-00-1163	(*5) Day 4 10:27
120	R1-00-1154	Nokia	R2,R4 C:R3	Liaison Statement on UTRAN SIR measurement	R1-00-1164	(*6) Day 4 10:32
121	R1-00-1113	InterDigital	R2,R3,R4	LS on the removal of Physical Channel BER from TDD specification TS 25.225	R1-00-1165	No (*7) comment Day 4 10:34
122	R1-00-1141	CSELT	ITU Ad Hoc	LS on Revisions of documents TSGR1-00-1038 "Revised overview of IMT-2000 CDMA TDD" and TSGR1-00-1039 "Revised overview of IMT-2000 CDMA Direct Spread"	R1-00-1169	(*8) Day 4 12:30
123	R1-00-0926	Siemens	R2	LS to WG2: Open issues for work item on Node B synchronisation	R1-00-0880	(*9) Day 4 15:57
124	-	Siemens	R2,R3,R4	Progress Report for work item on Node B synchronisation	R1-00-1002	No (*10) comment Day 4 16:00
125	R1-00-1167	Samsung	R2 C:R3,R4	LS on Terminal Power Saving Features	R1-00-1174	(*11) Day 4 16:24
126	-	Chairman	R2,R3,R4	LS on the study/work items with RAN WG1 having the primary responsibility	R1-00-1172	(*12) Day 4 17:22

(*1) This was reviewed on Day2 evening and was sent to RAN WG2 on Day2 night.

In conjunction with this LS, the core proposal for TR 25.926 was reviewed. (**R1-00-1122**) It was the revision of **R1-00-1053** (See No.43).

R1-00-1122 CR 25.926-xxx: *Correction of Transport Channel Parameter / Source : Ericsson*

There were 2 comments made but finally approved as it was.

Same T-doc number as the draft version was used since the draft version had not been distributed.

With respect this liaison statement, no comments were made except one suggestion from chairman that attached file had not better be embedded into the liaison statement but should be included in the zip file.

(*2) This was reviewed on Day2 evening. This related to **R1-00-1108** (See No.47).

Mr. Ville Steudle (Nokia) commented that we had not been yet discussed about compressed mode with GPS/LCS in RAN WG1. We do not have really feasibility study.

(*3) This LS was reviewed on Day3 evening and sent to RAN WG2 and RAN WG3 on Day3 night.

This was based on the discussion of **R1-00-1046**. (See No.44)

Mr. Tim Mouldsley (Philips) commented at the end of the presentation that the idea had been to draft CR but it had not done yet and it might have needed some further offline work to write CR. He added that but the point of changes were described clearly enough in the liaison statement.

Mr. Vincent Belaiche (Mitsubishi) commented that in order to avoid confusion when we say that TFCI is set all "1", we should make it clear that it is TFCI coding bit and not information bit.

Mr. Tim Mouldsley answered that the intention was actually that it is the information which is set be "1" because it could be considered to be more consistent solution with getting valid TFCI code word on the radio interface. So in that sense it should be clarified that it is TFCI information bit before coding. ✗ this will be revised.

Mr. Andreas Wilde (Ericsson) commented regarding the error handling whether we should ask the other group how we should handle error handling. Do other group say something about the error handling ?

It was answered that though the general approach to error handling is rather physical layer issue, it would not be a problem if we just asked something about error handling.

Mr. Hidetoshi Suzuki (Panasonic) commented that since Node B in layer 1 did not know whether UE was in soft handover or not, could we say " *In the case of FDD in soft handover the TFCI will not be transmitted in the downlink (i.e. DTX will be applied to the TFI field).*" ?

Mr. Tim Mouldsley answered that he would provide the new solution (2 options) for this.

Chairman commented that anyway we are leaving the exact definition still bit open because this is LS and not CR and we can think about the details before making the CR. In any case we will be waiting the response to this.

The revision was made into **R1-00-1146** and approved with no comment at 18:53 on Day3.

(*4) This was reviewed on Day4. This LS was based on the discussion of Hybrid ARQ issues. (See No.63-65)

Mr. Tim Mouldsley (Philips) commented that the final conclusion in the last paragraph did not make any mention of

the potential gains. Is there any feeling about exactly how much gain is to be expected ?

⚡ Though there were some results but it might be too early to say how big the gain is.

Chairman commented that we were sending some results in attachment.

Following 3 documents would be sent as attachments. (the number in [] corresponds to the reference number in the LS.)

[9] **R1-00-1142** *Revised text proposal on HARQ performance for HARQ TR* (Nokia)

This is the revision of **R1-00-1095** which was reviewed on Day 2.(See No.63) Comment on variable bit rate had been reflected.

[6] **R1-00-1084** *Comparison on RLC HARQ and fast HARQ complexity* (Nokia)

This is the revision of R1-00-1083 (Day2, See No. 65) It was not discussed on Day 2 that this should be revised. Mr. Kari Pehkonen (Nokia) explained that he had got a comment from Ms. Evelyne Le Strat (Nortel) before Day2 and he added one sentence to reflect that comment. And there had been already some discussion in RAN WG2 about Hybrid ARQ the day before. Mr. Kari Pehkonen modified **R1-00-1083** based on that discussion in order to be in line.

[10] **R1-00-1147** *Proposal for inclusion of text on Impact of Hybrid type II/III ARQ on the physical layer in the Technical report 25.835* (Nortel)

This was the revision of **R1-00-1090** which was reviewed on Day2 (See No. 64)

Ms. Evelyne Le Strat (Nortel) explained that it had been transformed into true text proposal from R1-00-1090. Correct headers had been attached and reference to the TR had been elaborated.

The contents were almost same as that of R1-00-1090.

The LS was approved into **R1-00-1162**. This was sent to RAN WG2 on Day 4 by Mr. Kari Pehkonen.

(*5) This was reviewed on Day4. This LS was based on the discussion of **R1-00-1100** *UE Timing related issues* (Day 3, See N.67)

In section 3, "Valid" range, following sentences were to be added for clarification.

In addition RAN WG1 noticed that the reporting range for the measurement "Rx-Tx time difference" is limited to 876 to 1172 chips. This is a smaller range than the range of possible values for the reporting thresholds (768 to 1280 chips).

In section 4., PC combining, it was proposed to add "In such situations where the timing requirement is not met " by Mr. Tim Mouldsley (Philips).

In section 5, Timing adjustment. This issue was put into an offline discussion on Day 3.

Mr. Serge Willenegger (QUALCOMM) summarized the outcome the offline discussion as follows.

In our original document, we made proposal to change the way the UE adjusts its timing or the target for timing adjustment. Although from the UE point of view, our proposal would not have changed anything with respect to the time available for power control command processing, this would have still implied on the network side that on average, the time available would have been reduced. We had discussion whether the proposed solution should be included or not in the specification. We concluded from RAN WG1 (this needs to be confirmed here) point of view there was not necessary an issue that UE constantly adjust its timing though there could be an issue from other groups point of view. From what we saw, from RAN WG1 perspective the current definition seems to be acceptable.

Mr. Tim Mouldsley pointed out that it should be clarified that in any case RAN WG1 may consider possible solutions on this because otherwise it seems that we have studied this and come to conclusion already. Current conclusion is something like intermediate conclusion.

A sentence "RAN WG1 expects further discussion on this issue in its future meetings." was add to the very last.

With above modification this LS was approved into R1-00-1163 at 10:27.

(*6) This was reviewed on Day4. This LS was based on the approval of **R1-00-1082** CR25. 215-070 (See No.32).

This was approved with no modification. CR 25.215-070 was attached.

(*7) This was reviewed on Day4. This LS was based on the approval of **R1-00-0990** CR 25.225-016 (See No.42).

(*8) This is the answer liaison to ITU Ad Hoc (See No. 5, 6)

Mr. Sergio Barberis (CSELT) on behalf of ITU Ad Hoc contact person had gathered the comments for 2 documents from ITU-Ad Hoc (**R1-00-1038** [RT-000017], **R1-00-1039** [RT-000018]) and revised them accordingly.

Revised 2 documents (**R1-00-1139**, **R1-00-1140**) were reviewed.

R1-00-1139 *WG1 Revision of document TSGR1-001-1038 (Revised Overview of IMT-2000 CDMA TDD)*

R1-00-1140 *WG1 Revision of Document TSGR1-00-1039 (Revised Overview of IMT-2000 CDMA Direct Spread)*

There were a couple of comments and these would be revised. The revisions are in **R1-00-1170** and **R1-00-1171** respectively. The LS was revised to reflect the new Tdoc number for the attachments into

R1-00-1169. Though revisions were not reviewed but they were approved officially and sent to ITU Ad Hoc contact person by Mr. Sergio Barberis.

(*9) This was reviewed on Day4 (12:10). This LS was based on the discussion on **AH30** : TDD NodeB synchronisation (See No.93 – 95)

There were several comments of the 3rd bullet point.

- concept in WG1 ⚡ concept proposed in WG1

⚡ It should be clarified that further discussion is still needed.

⚡ "The UE can use this information to adjust the autonomously calculated timing advance value." should be revised.

This was to be revised. The revision is in **R1-00-0880**. This was approved. (15:10)

(*10) This LS intended simply to inform other working groups that RAN WG1 had selected a concept based on

transmissions of special synchronisation bursts in the PRACH timeslot. Tdoc describing this method and TR were attached.

(*11) This LS was based on the discussion on DPCCH gating on Day2 (See No.53-57)

Ms. Anu Virtanen (Nokia) commented regarding point 3.

- " However, the problem of turning off the receiver (is *≈ might be*) that the UE cannot fulfil the handover measurement requirement "

- " (The *≈ One*) proposed solution is to (loose *≈ loosen*) the handover measurement requirement - - -"

- We should not use deterministic wording but should leave some room so that we have more time to study.

Mr. Said Tatesh (Lucent) commented we should mention something regarding EMC. After short discussion chairman concluded to postpone to mention about EMC in this LS.

(*12) Mr. Young-Joon Song (LGIC) comment on the sentence of " *Softest handover was not agreed to proceed for release00* " that the conclusion was not that the softest handover was not agreed to proceed for release 00.

Though chairman did not agree to this comment, finally that sentence was removed.

(For detail, see No.86)

WG1 meeting schedule in year 2000 (Tentative)

Meeting	Month	Date	Location	Notes
RAN WG1 #10	January	18-21	China	Host Nokia
RAN WG1 #11	February	29 – March 3	USA	Host T1P1
RAN #7	March	13-15	Madrid, Spain	
RAN WG1 #12	April	10-13	Korea	Host TTA
RAN WG1 #13	May	22-25	Tokyo, Japan	NTT DoCoMo
RAN #8	June	21-23	Dusseldorf, Germany	
RAN WG1 #14	July	4-7	Finland	Host Nokia
RAN WG1 #15	August	22-25	Germany	Host Siemens
RAN #9	September	20-22	Hawaii	
RAN WG1 #16	October	10-13	Pusan, Korea	Samsung, LGIC
RAN WG1 #17	November	20-24	Sweden	Ericsson
RAN #10	December	6-8	Bangkok	
RAN WG1 #18	January	16-19	U.S.A. (with R4)	T1P1
RAN WG1 #19	February	27 – March 2	T.B.D.	
RAN #11	March-	14-16	U.S.A.	
Physical Ad Hoc	April	Tentative		
RAN WG1 #20	May	middle (5days?)	T.B.D	
RAN #12	June	13-15	Europe	

Annex A : List of approved CRs (Approved in RAN WG1 #14 and #15 meetings)

A.1 TS 25.211

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.211	065	-	R1-00-0897	Correction of reference	F	Ericsson	14-20
2	25.211	066	4	R1-00-1047	Clarification of paging indicator mapping	F	Ericsson	15-17
3	25.211	068	-	R1-00-0924	Editorial modification of the 25.211 about the CD/CA-ICH	D	Samsung	14-63
4	25.211	070	1	R1-00-1091	Support of closed loop transmit diversity modes	F	Vodafone, Ericsson, Nokia	15-74
5	25.211	071	-	R1-00-1098	DPCH initialisation procedure	F	Philips	15-13
6	25.211	072	3	R1-00-1173	Correction on indicators	F	Philips	15-113
7	25.211	074	-	R1-00-1048	Correction of STTD for DPCH	F	Ericsson	15-18
8	25.211	075	-	R1-00-1049	Clarification of first significant path	F	Ericsson	15-68
9	25.211	076	-	R1-00-1080	Clarification of SCH transmitted by TSTD	F	Panasonic Samsung	15-11
10	25.211	077	1	R1-00-1092	Clarification of FBI field	F	Panasonic	15-82

A.2 TS 25.212

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.212	079	-	R1-00-0698	Clarification of compressed mode terminology	F	Ericsson	14-22
2	25.212	085	1	R1-00-1134	Editorial corrections in Turbo code internal interleaver section	F	NTT DoCoMo Nokia, Nortel	15-111
3	25.212	086	1	R1-00-0918	Clarification on DL slot format for compressed mode by SF/2	F	Lucent	14-66
4	25.212	087	-	R1-00-1042	Corrections	F	Philips	15-26
5	25.212	088	1	R1-00-1101	Clarifications to TS 25.212	F	Ericsson	15-70
6	25.212	089	-	R1-00-1058	Correction regarding DSCH	F	LGIC	15-24
7	25.212	090	-	R1-00-1059	Correction regarding CPCH	F	LGIC	15-25
8	25.212	092	1	R1-00-1143	Bit separation and collection for rate matching	F	InterDigital Mitsubishi	15-102
9	25.212	093	-	R1-00-1104	Puncturing Limit definition in WG1 specification	F	InterDigital	15-77

A.3 TS 25.214

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.214	110	4	R1-00-1144	Downlink inner-loop power control in compressed mode	F	Alcatel	15-104
2	25.214	112	-	R1-00-0888	Adding reference for power offset variation text in TS 25.214	F	Nokia	14-8
3	25.214	113	-	R1-00-0846	Combining TPC commands in soft handover	F	Philips	14-10
4	25.214	115	1	R1-00-0919	Corrections to power control	F	Philips	14-58
5	25.214	116	-	R1-00-0855	Corrections to 25.214	F	Siemens	14-9
6	25.214	117	-	R1-00-0857	Clarification to downlink power control	F	Nokia	14-26
7	25.214	118	3	R1-00-1103	Clarification of power control at maximum and minimum power	F	Philips	15-71
8	25.214	119	-	R1-00-0860	Clarification of SSDD text	F	Panasonic	14-13
9	25.214	120	-	R1-00-0947	Corrections to CL transmit diversity mode 1	F	NEC	14-73
10	25.214	121	1	R1-00-1121	Clarification of SSDD ID code bit transmission order	F	NEC	15-107
11	25.214	122	1	R1-00-1145	Clarification on RACH and CPCH subchannel definition	F	Nokia Vodafone	15-106
12	25.214	123	1	R1-00-1098	DPCH initialisation procedure	F	Philips	15-66
13	25.214	124	-	R1-00-1051	Clarification of closed loop mode TX diversity initialisation	F	Ericsson	15-28
14	25.214	127	2	R1-00-1159	Uplink power control in compressed mode	F	Alcatel	15-105

A.4 TS 25.215

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.215	067	-	R1-00-0899	Insertion of UTRAN SIR error measurement in 25.215	F	Ericsson	14-38
2	25.215	068	-	R1-00-0900	Reporting of UTRAN Transmitted carrier power	F	Ericsson	14-60
3	25.215	070	-	R1-00-1028	Clarification of UTRAN SIR measurement	F	Nokia	15-32
4	25.215	071	-	R1-00-1049	Clarification of first significant path	F	Ericsson	15-69
5	25.215	072	-	R1-00-1052	Clarification of radio link set as the measured object	F	Ericsson	15-33

A.5 TS 25.221

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.221	022	1	R1-00-0921	Correction to midamble generation in UTRA TDD	F	Mitsubishi Siemens	14-61
2	25.221	026	2	R1-00-1105	Some corrections for TS25.221	F	Siemens Mitsubishi	15-81
3	25.221	028	-	R1-00-0940	Terminology regarding the beacon function	F	Siemens Mitsubishi	14-69
4	25.221	030	1	R1-00-1000	TDD Access Bursts for HOV	F	Siemens	15-73
5	25.221	031	1	R1-00-1089	Number of codes signalling for the DL common midamble case	F	Mitsubishi,S iemens	15-49

A.6 TS 25.222

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.222	040	1	R1-00-0944	Update of TS 25.222	F	Siemens	15-50
2	25.222	041	1	R1-00-1134	Editorial corrections in Turbo code internal interleaver section	F	NTTDoCoMo Nokia, Nortel	15-112
3	25.222	042	-	R1-00-0943	Paging Indicator Terminology	F	Siemens	14-68
4	25.222	043	1	R1-00-1143	Bit separation and collection for rate matching	F	InterDigital Mitsubishi	15-103
5	25.222	048	-	R1-00-1104	Puncturing Limit definition in WG1 specification	F	InterDigital	15-78

A.7 TS 25.223

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.223	007	1	R1-00-0992	Gain Factors for TDD Mode	F	Siemens	15-36
2	25.223	014	-	R1-00-0988	Synchronisation codes	F	InterDigital	15-41

A.8 TS 25.224

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.224	019	1	R1-00-0993	Gain Factors for TDD Mode	F	Siemens	15-37
2	25.224	025	-	R1-00-0940	Terminology regarding the beacon function	F	Siemens	14-70
3	25.224	026	1	R1-00-0974	Synchronisation of timing advance adjustment and timing deviation measurement	F	InterDigital	15-110
4	25.224	027	1	R1-00-1118	CCTrCH UL/DL pairing for DL inner loop power control	F	InterDigital, Siemens	15-108
5	25.224	028	1	R1-00-1005	RACH timing in TDD mode	F	Siemens	15-51
6	25.224	030	1	R1-00-1000	TDD Access Bursts for HOV	F	Siemens	15-72
7	25.224	032	-	R1-00-1031	Removal of ODMA related abbreviations and correction of references	F	Siemens	15-38
8	25.224	033	-	R1-00-1097	Clarifications on the Out-of-sync handling for UTRA TDD	F	Nokia,Siem ens	15-52

A.9 TS 25.225

No	Spec	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.225	012	1	R1-00-0922	Alignment of TDD measurements with FDD: GPS related measurements	F	Siemens	14-62
2	25.225	013	1	R1-00-0911	Alignment of TDD measurements with FDD:SFN-CFN observed time difference	F	Siemens	14-29
3	25.225	014	-	R1-00-0886	Clarification of the Timeslot ISCP measurements	F	Siemens	15-83
4	25.225	015	-	R1-00-0940	Terminology regarding the beacon function	F	Siemens	14-71
5	25.225	016	-	R1-00-0990	Removal of Physical Channel BER	F	InterDigital	15-42
6	25.225	017	-	R1-00-0998	Update of TS25.225 due to recent change for FDD: Reporting of UTRAN TX carrier power	F	Siemens	15-39

A.10 TR 25.944

No	TR	CR	R	R1 T-doc	Subject	C	Source	Ref.
1	25.944	002	2	R1-00-0928	TDD related changes for TR25.944	F	Siemens	14-72

(Total 65 CRs were approved.)

Annex B The Participants List

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Family Name	Forename	Company
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