

Mueller Exhibit 3

Agenda Item: -

Source: Secretary

Title: Revised minutes of TSG RAN WG1 #24 meeting

Document for: Approval

Revised Minutes for 3GPP TSG-RAN WG1 24th Meeting

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Revised Points:

- 1) p.26 : note for R1-02-0502 (*12)
 - 2) p.31 : note for R1-02-0439 (*3)
 - 3) p.7 : note for R1-02-0201 (*8)
- The participants list was slightly updated.

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Meeting start: February 18th, 2002, in Orlando, Florida, U.S.A.

Day 1, started at 09.05

1. Opening of the meeting

(19:05 - 09:06)

The chairman, Mr. Antti Toskala (Nokia), opened the meeting.

Mr. Jean-Aicard Fabien (Motorola) welcomed the delegates to the meeting on behalf of hosting company. (Motorola)

2. Approval of agenda

(09:06 - 09:25)

R1-02-0200 *Draft Agenda for TSG RAN WG1 meeting No.24*

Chairman made a brief introduction of the agenda on the screen.

- Social event was scheduled on Day3 and meeting will be closed by 5PM.
- Some comments were made on HSDPA agenda item.
 - The issue on HI should be added to the agenda item.(prior to the joint session)
 - accepted and it was added into agenda item 6.x.
 - The issue on *HSDPA Open Issues for RAN WG3* (R1-02-0438) should also be discussed prior to the joint session.
 - Chairman answered that it would be discussed in the beginning of HSDPA discussion.
 - To what extent can we have open issues remaining in the CRs we are going to submit to RAN #15 ?
 - Chairman answered.
Somewhat similar to the R99 case. Having too many FFS in the spec would not be nice though the details e.g. tables on beamforming or Tx-diversity applicability could be covered in the later stage. We should like to put something like "minor issues need to be still checked on what needs to be reflected in the spec" in the meeting minutes rather than putting "FFS" or "Editor's Note" in the specification. We can have square brackets for the values.
 - General downlink signalling issues should be added to the agenda.
 - They will be discussed under 6.11 *other issues on HSDPA*.
 - When will the open issues on power control be discussed ?
 - We will rearrange the agenda items after checking what kind of papers are to be presented. (Chairman)

Eventually agenda was approved with one amendment on HI issue.

3. Report from joint TSG RAN WG1/WG2 meeting

(09:26 - 09:37)

Chairman made brief presentation on the report from joint TSG RAN WG1/WG2 meeting which had been held in Sophia Antipolis, France during 5-6, February 2002.

- One of the key topics was to provide further input to TSG-T WG1 on the RAB parameter combinations to be used in R99 testing. Most of the meeting time was spent on this issue. Finally the LS was drafted and sent out to TSG T WG1 in T-doc **12A020031 LS on 34.108 updates**.
- The other issue was the discussion on R99 stuffs to be removed or deferred. There was an input provided by several operators which lists the functional priorities on various features. (**12A020009 Functional priorities of operators**). The discussion was made based on this priority list and several features shown below were identified as candidates for removal/deferral. For those features, companies had been assigned to provide CRs for the next RAN.

The list of candidates (RAN WG1 concerned features.)

- Closed loop Tx diversity mode 2 -- Nokia to provide CRs
- Power control Algorithm 2 -- Qualcomm to provide CRs
- No coding -- Siemens to provide CRs
- DPC mode1 -- Panasonic to provide CRs
- SSDT -- Nortel to provide CRs

(Among above, the removal of "No Coding" (except 1.28Mcps TDD) was agreed by consensus.)

These CRs are to be checked by RAN WG1 during this meeting whether their technical contents are correct or not.

TSG RAN #15 will be asked to make the final decision on these CRs except "No Coding".

/** As for the "Power control Algorithm 2", RAN WG1 received a liaison statement from TSG T WG1 on Day 2 afternoon saying that TSG T WG1 would like to keep this function. (**R1-02-0446**, T1R020060r1). Having received this LS, RAN WG1 and RAN WG2 concluded not to remove this function. (See Annex A)

The answer LS for this was drafted by Qualcomm and sent to TSG T WG1 in **R1-02-0485**. (See No. 201) ***/
The report of this meeting can be found in **R1-02-0436** (12A020033).

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

No.	Title	Source	To/Cc	Tdoc No.	Contact point	Notes
1	LS on HSDPA Control channel error rate	RAN WG2	TO	R1-02-0209 (R2-020148)	Qualcomm	(*1) <small>Day 1 1342-1349</small>
2	LS on support of flexible signalling approach for Node B synchronisation for 1.28 Mcps TDD	RAN WG3	TO	R1-02-0210 (R3-020271)	InterDigital	(*2) See No. 196
3	LS on TFCI power control in hard split mode	RAN WG3	TO	R1-02-0211 (R3-020285)	LGE	(*3) See No. 178
4	Liaison statement on impacts of subscriber and equipment trace	SA WG5	TO	R1-02-0212 (S5-020013)	Nokia T-mobil	Noted (*4) <small>Day 1 0940-0945</small>
5	Liaison statement on "Procedure for specifying UMTS QoS Parameters per Application"	CN WG3	TO	R1-02-0227 (N3-020119)	Ericsson	Noted (*5) <small>Day 1 0946-0949</small>
6	Liaison Statement on downlink power control (DPC_Mode = 1)	RAN WG4	CC	R1-02-0228 (R4-020474)	Lucent	Noted (*6) <small>Day 1 0949-0955</small>
7	LS on physical layer measurement aspects and new concept of UP	RAN WG4	CC	R1-02-0229 (R4-020488)	Nokia	→ Joint session with R2 (*7) <small>Day 1 0955-1002</small>
8	Liaison Statement on HSDPA open issues	RAN WG4	TO	R1-02-0230 (R4-020519)	Vodafone	See No. 117
9	Response liaison on "Performance of Dedicated Pilot Demodulation" (answer to LS R4-020085)	RAN WG4	TO	R1-02-0231 (R4-020521)	Ericsson	Noted (*8) <small>Day 1 1003-1008</small>
10	LS on Speech Codecs references in GERAN specifications	GE-RAN	CC	R1-02-0249 (GP-020505)	Nortel	Noted (*9) <small>Day 1 1008-10014</small>
11	Liaison Statement on deletion of power control algorithm 2 from R99	T1-RF	TO	R1-02-0446 (T1R020060r1)	Agilent	(*10) → Joint session with R2

(*1) Mr. Serge Willenegger (Qualcomm) proposed that this should be reviewed in the HSDPA agenda item.

This proposal was agreed but eventually this LS was not reviewed during this meeting.

(*2) Chairman suggested that this should be reviewed in connection with the discussion of Node B synchronisation for 1.28 Mcps TDD. Eventually this LS was revisited on Day 2 midnight. (See No. 196)

(*3) Chairman suggested that this should be reviewed in the relevant agenda item 7.1. Eventually this LS was revisited on Day 2 midnight. (See No. 178)

(*4) This LS was sent to all TSG WGs.

SA WG5 is currently specifying Subscriber and Equipment Trace for Release 5. The Work Item Description (WID) for

Trace on a feature level was approved in TSG-SA #14 in December 2001. The approved WID was attached to this LS. (SP-010758). In this LS SA WG5 was asking all WGs to identify their own WIs, which would be affected by this Subscriber and Equipment Trace, and to provide SA WG5 with their names and unique identifiers in the 3GPP work plan. The list which shows the issues that SA WG5 has so far identified as being related to Trace was provided in the attachment.

Chairman made a question to the floor whether people had identified any impacts from physical layer point of view. There was no response raised. Chairman concluded that this LS was noted. Mr. Dirk Gerstenberger (Ericsson) remarked that since SA WG5 was asking us to identify work items that would receive impact, we had better write an answer LS even if there was no such work items identified in this group. Chairman agreed to this remark and asked the floor to draft a brief answer. **R1-02-0422** was allocated for this answer but no one was specifically assigned for drafting. Eventually R1-02-0422 was not provided during this meeting.

- (*5) Mr. Dirk Gerstenberger (Ericsson) presented this LS.

CN WG3 has identified the need for guidance when setting the UMTS BS Attributes in the UE. CN WG3 has special concerns for how the information from the SDP parameters can be used for setting the UMTS QoS parameters. Also the UE must have guidelines for setting the UMTS BS Attributes for applications not using SDP. CN WG 3 has agreed to implement a procedure for specifying UMTS BS Attributes per Application that very much relies on cooperation from other WGs within 3GPP. In this LS they were asking us following.

- To provide input to Radio Bearers corresponding to the UMTS BS Attributes specified by SA WG4 and SA WG1.
- To investigate the possibility of making the Radio Bearers above "reference RBs" (as specified in TS 34.108).

Mr. Dirk Gerstenberger remarked that there was nothing to do for us until we see the inputs from SA WG1 or SA WG4. Chairman agreed with this comment and concluded that this LS as noted. **R1-02-0423** was allocated for the brief answer. R1-02-0423 was drafted by Mr. Dirk Gerstenberger and approved on Day5. (See No. 202)

- (*6) Lucent presented this paper.

In this LS RAN WG4 was asking RAN WG3 to inform RAN WG4 in which Release of the RAN WG3 technical specifications the signalling protocols on Downlink Power Control Mode DPC_MODE = 1 will be specified. Chairman stated that this DPC_MODE=1 is the one of the candidates of removal/deferral that were discussed in the joint session with RAN WG2 in Sophia Antipolis. He said that this issue would be discussed in the upcoming RAN meeting. He concluded that this LS was noted. We will see the response from RAN WG3 on this issue.

- (*7) Mr. Ville Steudle (Nokia) presented this LS.

This was the answer LS to R2-012773. RAN WG2 had decided to extend the applicability of UE positioning measurements to all connected mode states for R99 and it had been asking RAN WG4 to align their specification based on the agreed changes in RAN WG2. (The CR RAN WG2 had agreed can be found in R2-012755. This was modified in RAN #14 into RP-010941 and approved.) In this answer LS, however RAN WG4 stated with several reasons that it would be unrealistic to assume those changes to be completed to R99 nor Rel-4 because it is too late and has too big impact.

This LS was sent to RAN WG1 as CC but since RAN WG1 was going to approve some related CRs on TS 25.215, Chairman stated that this issue would be revisited when we discuss those related CRs. (from Nortel)

Ms. Sarah Boumendil (Nortel) remarked that RAN WG2 would also discuss this issue in this meeting and we need to have good coordination with RAN WG2. Mr. Dirk Gerstenberger (Ericsson) suggested that this issue had better be discussed in the joint session with RAN WG2 this week since it would be difficult to make our own decision without RAN WG2. Chairman agreed with this suggestion. (See Annex A, No.14,15 18-21)

- (*8) Mr. Dirk Gerstenberger (Ericsson) presented this LS.

This was the answer LS to **R1-02-0191** which RAN WG1 had sent out from RAN WG1 #23 meeting in Espoo as an answer LS to **R1-01-1282** (R4-011615). In the original LS RAN WG4 had stated that the performance requirements for demodulation of dedicated pilots within the Rel-5 WI Beamforming may depend on the number of dedicated pilot bits in the slot format. There had been some concerns in RAN WG4 that the performance with 2 or 4 pilot bits will not be sufficient for satisfactory operation of UTRA FDD. In this current LS RAN WG4 was informing us further clarification on this issue in answering the question RAN WG1 raised in R1-02-0191.

Chairman concluded this LS as "Noted".

- (*9) Ms. Evelyne Le Strat (Nortel) presented this LS.

This was sent to us as CC and no action was expected to RAN WG1.

This LS was noted.

- (*10) This LS was received from TSG T1-RF on Day2 afternoon.

Eventually this LS was reviewed in the joint session with RAN WG2 held on Day 2 evening. (See Annex A)

The answer LS was drafted by Mr. Serge Willenegger (Qualcomm) in **R1-02-0485** and approved on Day 4.

(See No.201)

/** Leftovers from RAN WG1#23 ***/

R1-02-0022 *Setting of S-field length as 0 bit in SSDT* : Source : NEC, Vodafone

This was postponed in RAN WG1#23. There had been a discussion that the proposed change in this CR should be reflected in RAN WG3 specifications rather than RAN WG1 specification. Ms. Nahoko Takano (NEC) now clarified that they reached conclusion to withdraw this CR after having had RAN WG3 opinion on this issue offline. (Day1 10:16)

5. Change Requests for WG1 Release –99 & Release-4 specifications

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
12	99	113	-	25.215	R1-02-0330	Clarification of UE measurements applicability	F	Nortel	Reversion to be provided for joint session with R2	(*1) Day 1 1049-12:26
13	4	114	-	25.215	R1-02-0330	Clarification of UE measurements applicability	A			
14	99	100	3	25.215	R1-02-0331	Correction to the definitions of UE and UTRAN GPS timing of cell frames for UE positioning	F	Nortel	To be discussed in the joint session. Coversheet to be modified.	(*2) Day 1 1227-12:39
15	4	101	3	25.215	R1-02-0331	Correction to the definitions of UE and UTRAN GPS timing of cell frames for UE positioning	A			
16	99	XXX	-	25.306	R1-02-0170	Clarification of Maximum number of TFC in the TFCS	F	Panasonic	→ e-mail discussion	(*3) Day 1 1240-12:59
17	-	-	-	-	R1-02-0252	Simultaneous reception of DPCH and SCCPCH	-	Intel	→ Joint Session with R2 (Day2)	(*4) Day 1 1300-13:08
18	99	115	-	25.215	R1-02-0448	Correction to the definition of UTRAN GPS timing of cell frames for UE positioning	F	Nortel	Approved	(*5) Day 4 14:14
19	4	116	-	25.215	R1-02-0448	Correction to the definitions of UTRAN GPS timing of cell frames for UE positioning	A			
20	99	117	-	25.215	R1-02-0454	Correction to the definition of UE GPS timing of cell frames for UE positioning	F	Nortel	Approved	(*6) Day 4 14:16
21	4	118	-	25.215	R1-02-0454	Correction to the definition of UE GPS timing of cell frames for UE positioning	A			
22	99	113	1	25.215	R1-02-0455	Clarification of UE measurements applicability	F	Nortel Nokia	Approved	(*7) Day 4 14:30
23	4	114	1	25.215	R1-02-0455	Clarification of UE measurements applicability	A			
24	99	124	-	25.212	R1-02-0201	Introduction of a new frame type in uplink compressed mode	C	Huawei	Not approved	(*8) Day 4 14:39
25	4	125	-	25.212	R1-02-0201	Introduction of a new frame type in uplink compressed mode	A			
26	99	230	-	25.214	R1-02-0023	Setting of Qth threshold parameter in SSDT	F	NEC Fujitsu	To be revised	(*9) Day 4 14:47
27	4	231	-	25.214	R1-02-0023	Setting of Qth threshold parameter in SSDT	A			
28	99	239	-	25.214	R1-02-0310	TPC procedure in UE when SSDT is activated	F	Nokia	To be revised	(*10) Day 4 15:02
29	4	240	-	25.214	R1-02-0310	TPC procedure in UE when SSDT is activated	A			
30	99	235	-	25.214	R1-02-0207	Clarification of closed loop transmit diversity during soft handover	F	Motorola	To be revised	(*11) Day 4 15:24
31	4	236	-	25.214	R1-02-0207	Clarification of closed loop transmit diversity during soft handover	A			
32	-	-	-	-	R1-02-0392	Closed Loop Transmit Diversity for DSCH during SHO	-	Motorola	Noted	(*11) Day 4 15:13-24
33	99	226	-	25.214	R1-02-0305	Clarification on DPCCCH dedicated pilot bits with closed loop mode 1	F	NEC	Approved coversheet to be corrected	(*12) Day 4 15:28
34	4	227	-	25.214	R1-02-0305	Clarification on DPCCCH dedicated pilot bits with closed loop mode 1	A			
35	99	138	1	25.211	R1-02-0424	Clarification of different diversity modes used in the same active set	F	Panasonic	Approved coversheet to be corrected	(*13) Day 4 15:48
36	4	139	1	25.211	R1-02-0424	Clarification of different diversity modes used in the same active set	A			
37	-	-	-	-	R1-02-0251	Physical channel reconfiguration	-	Intel	Noted	(*14) Day 4 16:54-17:01

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
38	99	009	-	25.201	R1-02-0253	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	F	Siemens	To be revised	(*15) Day 4 17:09
39	4	010	-	25.201	R1-02-0253	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	A			
40	99	127	1	25.212	R1-02-0308	Removal of channel coding option "no coding" for FDD	F	Siemens	Approved (coversheet to be corrected)	(*15) Day 4 17:15
41	4	128	1	25.212	R1-02-0308	Removal of channel coding option "no coding" for FDD	A			
42	99	110	-	25.215	R1-02-0306	Removal of channel coding option "no coding" for FDD	F	Siemens	Approved	(*15) Day 4 17:17
43	4	111	-	25.215	R1-02-0306	Removal of channel coding option "no coding" for FDD	A			
44	99	067	1	25.222	R1-02-0309	Removal of channel coding option "no coding" for 3.84 Mcps TDD	F	Siemens	Approved	(*15) Day 4 17:19
45	4	068	1	25.222	R1-02-0309	Removal of channel coding option "no coding" for 3.84 Mcps TDD	A			
46	99	044	-	25.225	R1-02-0307	Removal of channel coding option "no coding" 3.84 Mcps TDD	F	Siemens	Approved	(*15) Day 4 17:20
47	4	045	-	25.225	R1-02-0307	Removal of channel coding option "no coding" for 3.84 Mcps TDD	A			
48	99	142	-	25.211	R1-02-0304	Deferring of mandatory UE support of SSDT to Rel-4	F	Nortel	Technical contents were checked.	(*16) Day 4 17:42
49	99	238	-	25.214	R1-02-0303	Deferring of mandatory UE support of SSDT to Rel-4	F			(*16) Day 4 17:44
50	99	249	-	25.214	R1-02-0160	Deferral of DPC_MODE=1 of downlink power control	F	Panasonic	To be revised	(*17) Day 4 17:53
51	99	074	3	25.221	R1-02-0442	Correction to a transmission of paging indicators bits	F	InterDigital	Approved	(*18) Day 4 18:01
52	4	075	3	25.221	R1-02-0442	Correction to a transmission of paging indicators bits	A			
53	99	070	2	25.221	R1-02-0337	Clarification of spreading for UL physical channels	F	IPWireless	Approved	(*19) Day 4 18:03
54	4	071	2	25.221	R1-02-0337	Clarification of spreading for UL physical channels	A			
55	99	072	1	25.221	R1-02-0336	Common midamble Allocation for beacon time slot	F	IPWireless Siemens	Approved	(*20) Day 4 18:04
56	4	073	1	25.221	R1-02-0336	Common midamble Allocation for beacon time slot	A			
57	99	064	3	25.222	R1-02-0282	Clarification of the requirement for the determination of the rate matching parameters and editorial corrections to 25.222	F	InterDigital	Approved	(*21) Day 4 18:05
58	4	065	3	25.222	R1-02-0282	Clarification of the requirement for the determination of the rate matching parameters and editorial corrections to 25.222	A			
59	99	062	1	25.222	R1-02-0338	Correction to addition of padding zeros to PICH in TDD	F	IPWireless	Approved	(*22) Day 4 18:05
60	4	063	1	25.222	R1-02-0338	Correction to addition of padding zeros to PICH in TDD	A			
61	99	070	-	25.222	R1-02-0339	Second stage interleaving and physical channel mapping	F	IPWireless	Postponed	(*23) Day 4 18:10
62	4	071	-	25.222	R1-02-0339	Second stage interleaving and physical channel Mapping	A			
63	99	024	1	25.223	R1-02-0340	Removal of quantisation of β_3 gain factor when calculated from a reference TFC	F	IPWireless	Approved	(*24) Day 4 18:12
64	4	025	1	25.223	R1-02-0340	Removal of quantisation of β_3 gain factor when calculated from a reference TFC	A			

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
65	99	027	-	25.223	R1-02-0341	Channelisation code-specific multiplier operation under autonomous SF change	F	IPWireless	Approved	(*25) Day 4 18:14
66	4	028	-	25.223	R1-02-0341	Channelisation code-specific multiplier operation under autonomous SF change	A			
67	99	029	-	25.223	R1-02-0342	Alignment of gamma(i) gains of 25.223 with SIR target of WG2 25.331	F	IPWireless Siemens	Approved	(*26) Day 4 18:16
68	4	030	-	25.223	R1-02-0342	Alignment of gamma(i) gains of 25.223 with SIR target of WG2 25.331	A			
69	99	078	1	25.224	R1-02-0343	Removal of quantisation of β_3 gain factor when calculated from a reference TFC	F	IPWireless	Approved	(*27) Day 4 18:18
70	4	079	1	25.224	R1-02-0343	Removal of quantisation of β_3 gain factor when calculated from a reference TFC	A			
71	99	085	-	25.224	R1-02-0344	Transmit diversity on PICH	F	IPWireless Siemens	Approved	(*28) Day 4 18:22
72	4	086	-	25.224	R1-02-0344	Transmit diversity on PICH	A			
73	99	083	-	25.224	R1-02-0284	TDD MAC layer subchannel assignment	F	InterDigital	Approved but revised	(*29) Day 4 18:22
74	4	084	-	25.224	R1-02-0284	TDD MAC layer subchannel assignment	A			
75	-	-	-	-	R1-02-0410	Response to WG3 - setting of appropriate synchronisation channel powers for TDD	-	IPWireless	Noted	(*30) Day 4 17:53
76	99	009	1	25.201	R1-02-0495	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	F	Siemens	Approved	(*31) Day 5 10:41
77	4	010	-	25.201	R1-02-0495	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	A			
78	99	145	-	25.211	R1-02-0496	Deferring of closed loop mode 2 transmit diversity from R99	F	Nokia	Technical contents were checked.	(*32) Day 5 10:43
79	99	243	-	25.214	R1-02-0497	Deferring of closed loop mode 2 transmit diversity from R99	F			
80	99	249	-	25.214	R1-02-0498	Deferral of DPC_MODE=1 of downlink power contrl	F	Panasonic	Reviewed	(*33) Day 5 10:47
81	4	236	1	25.214	R1-02-0489	Clarification of closed loop transmit diversity during soft handover	A	Motorola Samsung	Approved	(*34) Day 5 10:49
82	99	230	1	25.214	R1-02-0487	Qth threshold parameter in SSDT	F	NEC Fujitsu	Approved	(*35) Day 5 10:41 Day 5 14:42
83	4	231	1	25.214	R1-02-0487	Qth threshold parameter in SSDT	A			
84	99	239	1	25.214	R1-02-0488	TPC procedure in UE when SSDT is activated	F	Nokia	Approved	(*36) Day 5 14:45
85	4	240	1	25.214	R1-02-0488	TPC procedure in UE when SSDT is activated	A			
86	99	083	1	25.224	R1-02-0501	TDD MAC layer subchannel assignment	F	InterDigital	Approved	(*37) Day 5 14:48
87	4	084	1	25.224	R1-02-0501	TDD MAC layer subchannel assignment	A			

(*1) Ms. Sarah Boumendil (Nortel) presented this pair of CRs.

In RAN WG1#23 there had been a CR proposed by Nokia on the clarification of RAN WG1 understanding of applicability of the measurement with respect to "idle/active" mode to clarify the relation between those modes and RRC states (**R1-02-0174**). The current CR presented Nortel's approach for this problem in terms of UE. Since Mr. Ville Steudle (Nokia) announced that Nokia had withdrawn their CR in R1-02-0174, the current paper became an unique proposal for the solution. There was a relevant LS from RAN WG4 in **R1-02-0229**. (See No. 7)

Mr. Ville Steudle commented that the *summary of change* in the coversheet should be modified because the current description might give an impression that TS 25.215 specifies the reporting requirements or performance requirements which are in the area of RAN WG4. The comment was agreed by the proponent. It was clarified that the intention was

to clarify when or in which RRC state UE is required to perform certain measurement (one-to-one mapping).

/*** Day1 Coffee break 11:01-11:44 ***

After coffee break, detailed review was done on section-by-section basis. The intention was to clarify first the RAN WG1 understanding of the measurements. Discussion would continue with RAN WG2 in the joint session to see if there are some mismatches with RAN WG2 in the understanding of measurements. Ms. Sarah Boumendil stated that Nortel had already presented paper in the joint meeting with RAN WG1/RAN WG2 in Sophia Antipolis in which they listed all the measurements regarding what they can be used for and the RRC state applicability in **12A020010**. Several points were noted for the joint session with RAN WG2 scheduled on Day 2. Chairman asked proponents together with other interested party to provide new version for the discussion with RAN WG2 reflecting the comments received. The revision can be found in **R1-02-0431**.

- (*2) Ms. Sarah Boumendil (Nortel) presented this pair of CRs. This was the revision of **R1-02-0108**. UE part modifications had been unchanged from R1-02-0108. It proposed "reference cell" instead of current "cell within the active set". UTRAN part had been slightly modified from the previous revision.

Chairman stated that making "reference cell" instead of "cell within the active set" would definitely have impacts on the layer 1 implementation and it is not just the change of the terminology. He said that we need to discuss with RAN WG2 about the motivation of this change for R99. Why is this needed ?

Mr. Ville Steudle (Nokia) remarked that this change would require much work in RAN WG4 as well and it would not be feasible at this stage. (It is too late for R99 and Rel-4. It might be possible for Rel-5.)

Chairman commented that the *Consequences if not approved* in the coversheet needs to be clarified because with the current description, it is not clear exactly what requirements are conflicting and incorrect. He asked the proponent to revise this to clarify the conflicting items.

Chairman concluded this issue to be revisited in the joint session with RAN WG2.

- (*3) Mr. Hidetoshi Suzuki (Panasonic) presented this pair of CRs.

Mr. Markku Tarkiainen (Nokia) and Mr. Dirk Gerstenberger (Ericsson) remarked that they did not see that much additional gain by having this proposed text. Ms. Evelyn Le Strat (Nortel) remarked that she either did not see the real need of having this CR in terms of point 1 in the *reason for change* in the coversheet however she added that there is a certain ambiguity in DSCH case (point 3 in the *reason for change*) although the current proposed text needs to be modified. ("the difference of channelisation code" → "the difference of the number of channelisation code") After some discussion, chairman suggested that the issue on point 3 could be discussed in the joint session with RAN WG2.

On Day5 Mr. Hidetoshi Suzuki announced that agreement had not been obtained by the offline discussion. He proposed to have e-mail discussion on this issue prior to the RAN#15. If we can make agreement on the e-mail discussion

Mr. Hidetoshi Suzuki will provide the CR directly to RAN#15 with source name as Panasonic. (Day5 14:47)

- (*4) Mr. Alex Margulis (Intel) presented this discussion paper.

Simultaneous reception of DPCH and SCCPCH is an optional UE capability and may be used for:

- Reception of Cell Broadcast Service (CBS) mapped to FACH when dedicated channel is allocated to the UE.
- DRAC control of an uplink DCH

But according to the current description in TS 25.331 this capability of simultaneous reception is tied to the DRAC procedure since there is a following restriction;

A UE that supports the simultaneous reception of one SCCPCH and one DPCH shall support the DRAC procedure

This paper suggested removal of this restriction from TS 25.331.

A couple of comments raised saying that this is maybe inconsistency between 2 RAN WG2 specifications and therefore it should be discussed in RAN WG2 internally.

Chairman agreed with these comments and suggested the proponent to present this paper in RAN WG2. Intel questioned if it is possible to discuss this issue in the joint session because currently there is no Intel delegate attending in RAN WG2. Chairman accepted this request. (See Annex A)

/*** Day1 lunch break 13:09 - 14:19 ***

- (*5) Ms. Sarah Boumendil (Nortel) presented this pair of CRs. This CR was the revision of **R1-02-0331** which had been reviewed on Day1. (See No.14, 15) Nortel divided the original CR into 2 separate CRs. This paper contains the UTRAN part. This CR was approved without any comments.

- (*6) Ms. Sarah Boumendil (Nortel) presented this pair of CRs. This paper was the revision of **R1-02-0331** which had been reviewed on Day1. (See No.14, 15) Nortel divided the original CR into 2 separate CRs. This paper contains the UE part. "cell within the active set" was now proposed to be changed as "chosen by the UE". This CR was approved with no comments.

- (*7) Ms. Sarah Boumendil (Nortel) presented this pair of CRs. This paper was the revision of **R1-01-0330** which was reviewed on Day1. (See No.12, 13)

There short clarification discussion took place but finally this CR was approved.

TDD version would be presented in RAN WG1#25 in **R1-02-0375** and **R1-02-0376**. (measurement applicability and UTRAN GPS timing.)

- (*8) ~~Although a delegate from Huawei was attending the meeting no presentation was done on this paper.~~

Judging from the CR coversheet this paper seemed to be proposing some kind of potential optimisation but there was no supporting simulation data. Chairman commented that we could not approve this kind of optimisation for R99. He said that even if there would be some performance improvement in certain cases it would not justify introducing new slot or frame structure for R99 at this stage. In conclusion this CR was not approved.

- (*9) Ms. Nahoko Takano (NEC) presented this pair of CRs. This CR had been postponed from RAN WG1#23.

Ms. Evelyn Le Strat (Nortel) commented that in RAN #14 we had agreed a work item for the introduction of SSDT in the UTRAN side for Rel-5 and it means in effect that we agreed that SSDT in the UTRAN is not part of the R99 and Rel-4 specifications anymore. She said therefore we should rather state clearly that the behaviour for SSDT in the

UTRAN is not specified for R99 and Rel-4.

Mr. Dirk Gerstenberger (Ericsson) shared the view with Ms. Evelyne Le Strat.

Lucent commented that whole sentence (see below) should be removed.

"The received uplink signal quality satisfies a quality threshold, Q_{th} a parameter defined by the network."

Chairman suggested the proponent to revise the CR taking into account the comments received.

This CR was revised in **R1-02-0487** and approved on Day5. (See No. 82, 83)

(*10) Mr. Markku Tarkiainen (Nokia)

A couple of comments made for each modification. Some simpler modifications were suggested. This was concluded to be revised. The revision was made in **R1-02-0488** and approved on Day5. (See No. 84, 85)

There was a CR which is almost identical to this one from NEC in **R1-02-0348** but this was not presented after this paper.

(*11) Motorola presented this pair of CRs.

There was a revision of this paper in **R1-02-0484**. As it was not available at the time of this presentation, the previous version(R1-02-0207) was presented. Motorola commented that the difference was very small. The original of the CR had already been presented in RAN WG1#23 in **R1-01-1328** without official CR number. This revision had reflected the comments made in RAN WG1#23. Simulation results which had also been requested in the RAN WG1#23 was provided in the separate T-doc **R1-01-0392**.

Once concern was raised against having this change in R99. Chairman suggested the proponent to propose this CR for Rel-4 or Rel-5 and not for R99 because of the high threshold of R99 CR approval in RAN. There was one typo pointed out. Proponent agreed with this suggestion.

R1-02-0392 contained supporting analysis for the CRs 25.214-235 and 25.214-236 contained in R1-02-0207 which cover the operation of closed loop transmit diversity (both modes 1 and 2) during soft handover. This paper was noted. Conclusion : Only Rel-4 part was to be approved. The revision for typo correction would be made in **R1-02-0489**.

R1-02-0489 was approved on Day5. (See No. 81)

(*12) Mr. Jean-François Labal (NEC) presented this pair of CRs.

There was one comment on the CR coversheet saying that the isolated impact should be added and "Consequences if not approved" needs to be corrected.

Chairman suggested the proponent to provide the corrected coversheet to the secretary.

This CR was approved with the suggestion above.

(*13) Mr. Hidetoshi Suzuki (Panasonic) presented this pair of CRs.

This CR was the outcome of RAN WG1 / RAN WG2 joint session held in Sophia Antipolis. There we understood that RAN WG2 signalling allows UE to derive information on per cell basis even though it was not allowed earlier. From RAN WG1 point of view there is a complexity issue if UE needs to do different processing for different radio links when the Tx-diversity modes are different. On the other hand if we can utilize the information presented in RRC we can take advantage of this information especially for open/closed Tx-diversity modes. This CR proposed to clarify the description on this issue.

A bit long discussion took place on which releases this CR should be applied.

One opinion was that this CR should be applied only to R99 because the basis for doing this is to allow existing implementation to work properly. For later releases than R99 the situation would be different.

Chairman answered that we should have R99 and Rel-4 specifications in line with RAN WG1 and RAN WG2 and this CR should be applied for Rel-4 as well if we agree this one for R99.

In the end this pair of CRs was approved with a condition that CR coversheet was to be revised.

/*** Day 4 coffee break 15:49 -16:32 ***/

(*14) Mr. Alex Margulis (Intel) presented this discussion paper.

This paper discussed synchronized physical channel parameters reconfiguration that may require on-the-fly receiver reconfiguration. This paper said that this kind of procedure is described in RAN WG2 specification but L1 requirements definition is missing from RAN WG1 specifications. It is proposed to clarify the L1 behaviour during this procedure.

There were a couple of comments asking what the problem really is.

It was suggested that we would postpone this issue until next meeting and meanwhile the delegates investigate the issue and the proponent put some clarification of the problem on the e-mail reflector.

Chairman agreed with this suggestion and concluded this paper as noted for the time being.

(*15) These CRs on removal of "No coding" were reviewed in succession. All these CRs were presented by

Mr. Marcus Purat (Siemens).

There was one comment pointing out an editorial error with respect to CR 25.201-009 (**R1-02-0253**). ("three" should now be replaced with "two"). So this was to be revised.

The revision was made in **R1-02-0495** and approved on Day5 (See No.76, 77).

Mr. Jean-François Labal (NEC) confirmed the intention of the procedure of these "removal/deferral" CRs. He said that in the joint session with RAN WG1 and RAN WG2 it had been concluded that we would just check those CRs in terms of technical aspect in the WG level. Chairman answered "Yes". He said that for the removal of "no coding" however there had not been any objections raised in the joint session and therefore we could make approval for this "no coding" related specific issue. For the other CRs, the intention was just to check them technically. Mr. Jean-François Labal agreed to this answer.

There were no other comments for all these "no coding" removal CRs presented by Siemens. But all coversheets for all these CRs needed to be more elaborated with respect to the "Consequences if not approved".

These CRs would be presented to RAN#15 with source as "TSG RAN WG1".

(*16) Ms. Evelyne Le Strat (Nortel) presented these 2 CRs for deferral of SSDT.

In these CRs, following sentence which is identical to the modification to TS 25.331 was proposed to be inserted into

the relevant sections.

SSDT is not supported in this version of the specification.

Chairman commented "Consequences if not approved" in the CR coversheet could be kept open with this CR.

Mr. Jean-François Labal (NEC) commented that we should respect the procedure for the CR coversheet and put something in the "Consequences if not approved". He said that furthermore the "Reason for change" should have some technical reasons. There was no technical reasons in that box. He continued that what we had been tasked by the joint session with RAN WG2 was to check the technical contents of these CRs and therefore we need to discuss the technical advantages and technical drawbacks of those CRs here in RAN WG1.

Chairman answered that the actual discussion whether we should really approve these CRs would take place in RAN#15 and those coversheet details should also be discussed in RAN with this kind of CRs.

Mr. Sunil Vadgama (Fujitsu) commented that we should use the word "may" in the proposed sentence, for instance,

Certain slot formats that support SSDT may not be necessary (or supported in the UE).

The word "may" should be there. But this suggestion was not accepted by the group.

These CRs were to be provided to RAN #15 by the proponent company with its name. Chairman would check this procedure (how to submit these CRs) with other RAN WG chairmen.

- (*17) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.

Mr. Hidetoshi Suzuki by himself commented that he thought some modifications on the CR descriptions as well as the coversheet would be needed. Chairman agreed to this comment. So this was to be revised. The revision was made in **R1-02-0498** and approved on Day5. (See No. 80)

- (*18) Ms. Liliana Czapla (InterDigital) presented this pair of CRs.

The revision number of these CRs were 3. The original CRs contained in **R1-02-0136** were reviewed in RAN WG1#23 in Espoo and concluded as "agreed in principle". InterDigital had modified those CRs three times before this presentation. (R1-02-0136 → R1-02-0218 → R1-02-0283 → R1-02-0442)

These CRs were approved without reviewal.

- (*19) Mr. Martin Beale (IPWireless) presented this pair of CRs.

The original CRs contained in **R1-02-0175** (CR 25.221-070r1, CR 25.221-071r1) were reviewed in RAN WG1#23.

These CRs were approved with no comments.

- (*20) Mr. Marcus Purat (Siemens) presented this pair of CRs.

The original CRs contained in **R1-01-0092** (CR 25.221-072, CR 25.221-073) were approved in principle in RAN WG1#23. The original CR was draft by IPWireless however this revision was made based on the suggestion from Siemens for better wording.

These CRs were approved with no detailed presentation, no comments.

- (*21) Ms. Liliana Czapla (InterDigital) presented this pair of CRs.

The revision number of these CRs were 3. The first revision contained in **R1-02-0167** was reviewed in RAN WG1#23 in Espoo and concluded as "agreed in principle".

These CRs were approved with no comments.

- (*22) Mr. Martin Beale (IPWireless) presented this pair of CRs.

The original CRs contained in **R1-02-0093** (CR 25.222-062, CR 25.222-063) were already approved in principle in RAN WG1#23.

These CRs were approved with no comments.

- (*23) Mr. Martin Beale (IPWireless) presented this pair of CRs.

Before this presentation IPWireless had already received comments from InterDigital and Siemens about the change of notation proposed. IPWireless would like to have these CRs postponed to RAN WG1#25 in Paris. Chairman agreed.

- (*24) Mr. Martin Beale (IPWireless) presented this pair of CRs.

The original CRs contained in **R1-02-0094** (CR 25.223-024, CR 25.223-025) were already approved in principle in RAN WG1#23.

These CRs were approved with no comments.

- (*25) Mr. Martin Beale (IPWireless) presented this pair of CRs.

These CRs were approved with no comments.

- (*26) Mr. Marcus Purat (Siemens) presented this pair of CRs.

This CR was based on the discussion paper from IPWireless in **R1-02-0145** which had been reviewed in RAN WG1#23 in Espoo.

These CRs were approved with no comments.

- (*27) Mr. Martin Beale (IPWireless) presented this pair of CRs.

The original CRs contained in **R1-02-0095** (CR 25.224-078, CR 25.224-079) were already approved in principle in RAN WG1#23.

These CRs were approved with no comments.

- (*28) Mr. Marcus Purat (Siemens) presented this pair of CRs.

These CRs were approved with no comments.

- (*29) Ms. Liliana Czapla (InterDigital) presented this pair of CRs.

There was one concern raised from IPWireless in connection with RAN WG2..

Chairman suggested that we approve these CRs now. If something was found after offline checking then these would be revised on Day5. Eventually these CRs were revised in **R1-02-0501** and approved again on Day5. (See No. 86,87)

- (*30) Mr. Martin Beale (IPWireless) presented this paper.

This paper was related to the CR in **R1-02-0175** that had been reviewed but not approved in RAN WG1#23 with the reason that it was not suitable for R99. Now RAN WG3 seemed to have some issues on this.

Chairman asked to the floor if people think that this is an essential correction that should be applied to R99 or some kind

optimisation or improvement that should be done in later releases.

There was one comment saying that the proposed change in R1-02-0175 is nothing but optimisation and should not be incorporated in R99.

IPWireless asked for the opinion from the operators but there were no responses from them.

Finally chairman stated that if there would be something from RAN WG3 to our specification for R99 which is for optimisation or some kind of enhancement then we should say to RAN WG3 that we do not have any indication that there would be certain performance loss or anything like that if we did not have it in our specification. If RAN WG3 would have something in R99 then they should set sufficient threshold in accepting it. Chairman suggested to the proponent to propose the CR in RAN WG3 for Rel-4 or Rel-5 as a small technical enhancement. RAN WG1 would not have any problem if it was proposed for later releases.

- (*31) These CRs were the revision of **R1-02-0253** which had been reviewed on Day 4. (See No.38)

A small editorial correction had been done. Only R99 CR had been modified. These CRs were approved without reviewal.

- (*32) Mr. Markku Tarkiainen (Nokia) presented these CRs.

The contents of these CRs were checked in terms of technical aspects. These CRs are to be submitted to RAN #15 by the drafting individual company. (with source name being individual company.)

- (*33) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.

This was the revision of **R1-02-0160** which had been reviewed on Day4. (See No. 50)

The technical contents of this CR were checked. This CR is to be submitted to RAN #15 by the drafting company.

- (*34) Motorola presented this CR. This was the revision of **R1-02-0207** which had been reviewed on Day4. (See No.30, 31)

In accordance with the decision made on Day4, this paper was containing only Rel-4 CR.

Only a typo pointed out on Day4 had been corrected. CR coversheet was modified.

This CR was approved with no comments.

- (*35) Mr. Sunil Vadgama (Fujitsu) presented this pair of CRs. This was the revision of **R1-02-0023** which had been reviewed on Day 4. (See No. 26, 27).

In accordance with the decision made on Day 4, the whole sentence was removed.

Ms. Evelyne Le Strat (Nortel) made a following comment

This type of specification may not work in the multi-vendor environment. SSDT on the UTRAN side is not anymore in R99 and Rel-4 however with this proposed text one may have the impression that it still is while it is not specified anymore. If the feature is not supported in the multi-vendor environment then it is outside the scope of 3GPP.

/*** Day5 coffee break 10:58-11:25 ***/

Later Chairman stated that after offline discussion it was agreed to approve these CRs now in this meeting. He said that the related discussion would take place in RAN#15.

- (*32) Mr. Markku Tarkiainen (Nokia) presented this pair of CRs.

This was the revision of **R1-02-0310** which had been discussed on Day4.(See No. 28, 29)

This CR was approved with no comments.

- (*37) Ms. Liliana Czapla (InterDigital) presented this pair of CRs.

This was the update of **R1-02-0284** which had been already approved. (See No. 29)

InterDigital made a small correction after offline discussion.

This CR was approved without presentation, any comments.

6. High Speed Downlink Packet Access (Ad Hoc 24)

No.	Category	T-doc	Title	Source	Conclusion	Notes
88	TR	R1-02-0199	TR 25.858 V1.0.4 High Speed Downlink Packet Access: Physical Layer Aspects	Rapporteur (Motorola)	Approved	(*1) Day 1 14:22-14:36
89	Draft CRs	R1-02-0206	CR 25.211-xxx : Draft CR for Specification of HS-DSCH in 25.211	Motorola Ericsson	To be revised	(*2) Day 1 14:38-15:10
90		R1-02-0250	CR 25.212-xxx : Changes to source coding and multiplexing for HS-DSCH	Siemens	To be revised	(*2) Day 1 15:10-15:30
91		R1-02-0134	CR 25.213-xxx : Working draft for inclusion of HSDPA into 25.213	Panasonic	To be revised	(*2) Day 1 15:30-15:51
92		R1-02-0333	CR 25.214-xxx : Introduction of power control aspects for HSDPA feature in TS25.214	Nortel	reviewed	(*2) Day 1 16:38-16:57
93		R1-02-0268	CR 25.214-237 : Introduction of HSDPA feature to TS25.214	Nokia	reviewed	(*2) Day 1 16:57-17:09
94		R1-02-0294	CR 25.221-076 : CR to include HSDPA in TS25.221	Siemens	reviewed	(*2) Day 1 17:11-17:26
95		R1-02-0213	CR 25.222-066 : Working Draft on update of 25.222 for HSDPA	CATT	reviewed	(*2) Day 1 17:27-17:36
96		R1-02-0239	CR 25.223-026 : CR to include HSDPA in TS25.223	Samsung	reviewed	(*2) Day 1 17:36-17:39
97		R1-02-0219	CR 25.224-081 : Power Control and Procedures for HSDPA	InterDigital	reviewed	(*2) Day 1 17:39-17:44
98		R1-02-0205	CR 25.201-xxx : Specification of HS-DSCH for Release 5 in 25.201	Motorola Ericsson	Approved in principle	(*2) Day 1 17:45-17:51
99	R3 Open Issues	R1-02-0438	HSDPA Open Issues for RAN WG3	Nokia Motorola	Noted	(*3) Day 1 17:53-17:55
100		R1-02-0380	Proposals for HSDPA Open Issues for RAN WG3	Ericsson	To be revised	(*4) Day 1 17:55-18:52
101	Ack/ Nack Signalling Issue	R1-02-0215	Power control of uplink ACK/NACK in soft handover	Huawei	Noted	(*5) Day 1 18:55-19:12
102		R1-02-0264	Power offset for uplink ACK/NAK	Nokia	Noted	(*5) Day 1 19:13-19:25
103		R1-02-0216	Transmitting ACK/NACK using different OVSF codes	Huawei	Noted	(*5) Day 1 19:26-19:38
104		R1-02-0379	HS-DPCCH link imbalance in soft handover	Ericsson	Noted	(*5) Day 1 19:39-19:59
105		R1-02-0363	Further results on the different power offsets for ACK/NACK signalling	LGE	Noted	(*5) Day 2 08:09-08:13
106		R1-02-0420	Energy requirements for UL ACK/NACK signalling under different sets of constraints	Lucent	Noted	(*5) Day 2 08:14-08:30
107		R1-02-0421	Energy requirements for UL HS-DPCCH signalling with and without special pilot bits	Lucent	Noted	(*5) Day 2 08:30-09:12
108		R1-02-0371	HSDPA UL and UL/DL imbalance	Qualcomm	Noted	(*5) Day 2 09:12-09:39
109		R1-02-0349	Further results on methods for reducing the power required for ACK/NACK signalling	Philips	Noted	(*5) Day 2 09:41-10:01
110		R1-02-0288	Uplink Signalling Issues	Motorola	Noted	(*5) Day 2 10:01-10:32
111		R1-02-0361	Acknowledgement scheme with HS-SCCH error	LGE	Noted	(*5) Day 2 10:33-10:46
112	Code Allocation	R1-02-0027	Channelisation code allocation for HS-DSCH	Mitsubishi	Not agreed	(*6) Day 2 10:54-12:04

No.	Category	T-doc	Title	Source	Conclusion	Notes
113	UE Capability	R1-02-0378	UE Capability Classes for HSDPA	Motorola	Reformulated in R1-02-0450 → R2	(*7) <small>Day 2 12:06-12:09</small>
114		R1-02-0258	Text proposal for UE capability section in TR25.858	Nokia		(*7) <small>Day 2 12:09-12:36</small>
115		R1-02-0295	HS-DSCH UE capabilities for 1.28 Mcps TDD	Siemens	Agreed	(*7) <small>Day 2 12:36-12:51</small>
116	Uplink Feedback	R1-02-0411	Higher layer support for quality indicator feedback scheme	Sony	Agreed → To be revised	(*8) <small>Day 2 14:47-14:56</small>
117		R1-02-0230	Liaison Statement on HSDPA open issues	RAN WG4	Noted	(*9) <small>Day 2 14:57-15:03</small>
118		R1-02-0262	Comments to R4-02-0519, LS on HSDPA open issues	Nokia	Offline Discussion	(*9) <small>Day 2 15:03-15:35</small>
119		E1-02-0233	Comments on RAN4 LS R4-020519 – HSDPA Open Issues	Motorola		(*9) <small>Day 2 15:36-16:01</small>
120		R1-02-0440	On the issue of DL channel quality feedback in HSDPA	NEC	Noted → Home Work	(*9) <small>Day 2 16:01-16:21</small>
121		R1-02-0261	Finalising TFRC reference list and uplink signalling definition	Nokia	Offline Discussion	(*9) <small>Day 2 16:08-16:21</small>
122		R1-02-0352	HI and Shared Control Channel performance issues	Philips	Noted	(*10) <small>Day 2 21:20-21:35</small>
123	HI related	R1-02-0353	Unblocking HS-SCCH conflicts	Philips	Noted	(*10) <small>Day 2 21:36-21:47</small>
124		R1-02-0287	HSDPA performance w/wo HI bit	Motorola	Noted	(*10) <small>Day 2 21:47-22:13</small>
125		R1-02-0323	Fast (MAC-hs) Signalling in HSDPA	Lucent	Noted	(*10) <small>Day 2 22:14-22:21</small>
126		R1-02-0324	Considerations on HI and HS-SCCH	Lucent	Noted	(*10) <small>Day 2 22:21-22:31</small>
127		R1-02-0332	Way forward on HI	Nortel	Noted	(*10) <small>Day 2 22:31-22:48</small>
128		R1-02-0449	Power offset for layer 1 signalling of HS-SCCH code set	Nortel	Noted	(*10) <small>Day 2 22:48-23:03</small>
129		R1-02-0426	Serving HS-SCCH set reconfiguration signalling (MAC-hs signalling)	Samsung	Noted	(*10) <small>Day 2 23:04-23:25</small>
130		R1-02-0414	Modified proposal for HS-SCCH	Motorola Philips	Noted	(*10) <small>Day 2 24:00-24:26</small>
131		R1-02-0224	HS-SCCH Signalling for 3.84 Mcps TDD	InterDigital	Noted	(*10) <small>Day 3 10:01-10:18</small>
132		R1-02-0286	Enhancement to two-stage rate matching scheme for HS-DSCH	Motorola	Noted	(*11) <small>Day 3 11:31-11:57</small>
133	ARQ/ HS-DSCH channel coding	R1-02-0285	Enhancement of IR for HSDPA	Motorola	Noted	(*12) <small>Day 3 11:57-12:03</small>
134		R1-02-0443	An optimisation of the bit distribution function for HSDPA	Siemens	Postponed → No.148	(*13) <small>Day 3 12:17-12:22</small>
135		R1-02-0427	Text proposal for Calculation of second rate matching parameters (revision)	Siemens	Approved	(*14) <small>Day 3 13:54-13:57</small>
136		R1-02-0234	Enhancement of IR for HSDPA	Motorola	Agreed in principle	(*15) <small>Day 3 13:59-14:16</small>
137		R1-02-0369	On the selection of the redundancy versions for HARQ functionality	Texas Instruments	Noted	(*16) <small>Day 3 14:02-14:11</small>
138		R1-02-0345	HSDPA Bit collection	IPWireless	Postponed → No.148	(*17) <small>Day 3 14:17-14:32</small>

No.	Category	T-doc	Title	Source	Conclusion	Notes
139	ARQ/ HS- DSCH channel coding	R1-02-0260	Interleaver for HSDPA: text proposal	Nokia	Approved	(*18) <small>Day 3 1432-1436</small>
140		R1-02-0265	Comparison of different interleaver and bit arrangement schemes	Nokia	Noted	(*19) <small>Day 3 1437-1453</small>
141		R1-02-0182	Text Proposal for TR 25.858 on constellation rearrangement	Panasonic Nokia	Approved → TR, CR	(*20) <small>Day 3 1453-1506</small>
142		R1-02-0248	SMP interleaving with CoRe: Text proposal	Samsung	Noted	(*21) <small>Day 3 1457-1502</small>
143		R1-02-0273	DL Signalling for 2-stage rate matching and constellation rearrangement	Panasonic	Agreed	(*22) <small>Day 3 1508-1522</small>
144		R1-02-0276	Signalling of redundancy versions and constellation rearrangement for HSDPA	Siemens	Noted	(*23) <small>Day 3 1522-1547</small>
145		R1-02-0463	Way forward on HS-SCCH	Motorola Philips	Approved	(*24) <small>Day 3 1553-1609</small>
146		R1-02-0248	SMP interleaving with CoRe: Text proposal	Samsung	Noted	(*25) <small>Day 4 0923-0927</small>
147		R1-02-0286	Enhancement to two-stage rate matching Scheme for HS-DSCH	Motorola	Noted	(*25) <small>Day 4 0929-0935</small>
148		R1-02-0289	Text Proposal for two-stage Rate Matching Scheme for HS-DSCH	Motorola	To be revised	(*25) <small>Day 4 0936-0944</small>
149	CQI	R1-02-0362	Comparison of CQI coding methods	LGE	Noted	(*26) <small>Day 4 0947-1001</small>
150		R1-02-0391	On the CQI coding scheme	Samsung	Noted	(*27) <small>Day 4 1001-1010</small>
151		R1-02-0412	Coding scheme for quality channel indicator	Sony	Noted	(*28) <small>Day 4 1010-1016</small>
152		R1-02-0354	Coding of channel quality information (rev1)	Philips	Approved	(*29) <small>Day 4 1022-1026</small>
153		R1-02-0245	Adaptive signalling of CQI report	Samsung	Noted	(*30) <small>Day 4 1029-1047</small>
154		R1-02-0429	Need for variable rate channel quality indication in HSDPA	Lucent	Text proposal → R1#25	(*31) <small>Day 4 1048-1105</small>
155		R1-02-0432	Proposal on I/Q mapping of the HS-DPCCH	Mitsubishi	Noted → CR	(*32) <small>Day 4 1147-1152</small>
156		R1-02-0372	HSDPA UL PAR analysis	Qualcomm	Noted → CR	(*32) <small>Day 4 1152-1210</small>
157		R1-02-0473	CR 25.214-237 : Introduction of HSDPA feature to TS25.214	Nokia	To be revised	(*33) <small>Day 4 1220-1245</small>
158		R1-02-0373	Draft text for HS-DPCCH power control (under review by interested parties)	Qualcomm	→ CR	(*34) <small>Day 4 1248-1300</small>
159		R1-02-0478	Text proposal for HS-DPCCH formats including HS-pilot insertion	Lucent Samsung Motorola	Noted → Next meeting	(*35) <small>Day 4 1839-2009</small>
160		R1-02-0444	Text Proposal for Bit Distribution unit for HS-DSCH	Siemens Motorola Samsung	→ CR	(*36) <small>Day 4 2015-2025</small>
161	UE Specific CRC	R1-02-0482	UE specific masking for HS-SCCH	Siemens	approved → CR	(*37) <small>Day 4 2029-2036</small>
162		R1-02-0416	Comparison of schemes for UE Specific CRC	Lucent	Postponed	(*37) <small>Day 4 2037-2050</small>
163		R1-02-0490	Text Proposal for HS-DSCH	Motorola	Approved	(*37) <small>Day 4 2051-2056</small>
164	TR	R1-02-0510	Text Proposal for TDD Sections of TR 25.858	Siemens IPWireless	Approved	(*38) <small>Day 5 1407-1413</small>

(*1) Mr. Amitava Ghosh (Motorola) presented this paper.

This was the latest version of the TR which included texts approved in RAN WG1#23 in Espoo.

This was approved with no comments. Chairman thanked the rapporteur for including all the changes. The version number was now to be raised to v1.1.0

Chairman suggested that in the next version section 10 *Overview of the changes required in the specification* should be removed since we already entered in the actual CR drafting phase.

- (*2) Following draft CRs were reviewed in succession. The intention was to identify open issues which needs to be solved during this week.

R1-02-0206 (CR for TS 25.211) was presented by Mr. Jean-Aicard Fabien (Motorola).

General comments:

- We should try to have the description for the uplink and downlink signalling in the same specification. We do need to describe all the fields as well as their meaning in a single specification. (The meaning of the different fields may be distributed in the different specifications.) However we should do try to have the description of the fields and high level view of the mapping to the physical channels in the same specification.
- We should not have "Editor's Note" for the version we will submit to the RAN. If we do not have enough time to discuss the issue then we should just omit the issue from the specification for the time being. If we can have time to discuss it and conclude it then we can put it in the specifications.
- HI issue would be discussed in detail and fixed during this week.

R1-02-0250 (CR for TS 25.212) was presented by Mr. Peter Chambers (Siemens)

Several open issues such as HARQ details, rate matching, interleaving, exact number of bits with respect to HS-SCCH, etc were identified by this draft CR. The exact way of calculating CRC needs to be covered as well. Samsung seemed to have a proposal for the calculation of CRC-2. Chairman suggested Samsung to provide a simple paper with figures describing their proposal for discussion.

R1-02-0134 (CR for TS 25.213) was presented by Mr. Hidetoshi Suzuki (Panasonic)

β_{HS} should not be quantized in the same way as β_c or β_d (section 4.2.1). It was suggested that β_{HS} should just be defined in TS 25.213 and calculated in TS 25.214. → The best way to be sought later.

/** Day1 coffee break 15:51-16:36 ***/

R1-02-0333 (CR for TS 25.214, Power control aspect) was presented by Ms. Sarah Boumendil (Nortel).

- It should be mentioned that in case of multiple HS-PDSCH transmissions to one UE, all the HS-PDSCHs intended for that UE should be transmitted with equal power.
- It should be mentioned that it is 16-QAM that requires keeping power constant during HS-DSCH subframe.

R1-02-0268 (CR for TS 25.214, The other aspect) was presented by Ms. Anu Virtanen (Nokia).

- Regarding section 7.1, the most of the descriptions here are related to MAC-HS procedures. The physical layer should just do what is told to do so by MAC-HS. The title of section 7.1 should also be changed.
 - It would be a bit difficult to expect MAC-HS specification to have this level of details regarding the physical procedures. If we are to delete these descriptions from our specification then in advance we need to check the RAN WG2 specifications carefully if there are corresponding descriptions or not.
- (Chairman)

- The issue on the compressed mode in conjunction with the HSDPA should be mentioned in TS 25.214.

R1-02-0294 (CR for TS 25.221) was presented by Mr. Marcus Purat (Siemens).

There were some comments that were similar to the ones made to TS 25.211. There was also a comment that the descriptions should be consistent with those in FDD side. (especially for the description about the information to be transmitted over the HS-SCCH) → There are certain differences between FDD and TDD. (Siemens)

R1-02-0213 (CR for TS 25.222) was presented by CATT. No comments raised.

R1-02-0239 (CR for TS 25.223) was presented by Samsung. No comments raised.

R1-02-0219 (CR for TS 25.224) was presented by Ms. Liliana Czapla (InterDigital). No comments raised.

R1-02-0205 (CR for TS 25.201) was presented by Mr. Jean-Aicard Fabien (Motorola).

There was no comments for the contents of the CR. Chairman concluded that we could agree with this CR.

R1-02-0437 CR 25.201-013 was allocated for this CR.

Mr. Peter Chambers commented with respect to figure 2 and 3 that the term "+1/-1" should be modified because "+1/-1" cannot be used as constellation points for QAM and QPSK. Since it was considered that the modification would be needed for both R99 and Rel-4, chairman suggested Mr. Peter Chambers to provide a pair of CRs for R99 and Rel-4 because the change would automatically be reflected to Rel-5.

Eventually this CR was not provided during this meeting.

- (*3) Chairman presented this paper. This document had been sent on the RAN WG1 e-mail reflector one week prior to this meeting. This paper summarised open issues on HSDPA after RAN WG3 meeting #26. The purpose was to inform RAN WG1 & WG2 about issues to be discussed by the groups. This list had been reviewed by RAN WG3 on its email reflector.

As Ericsson had prepared answers for those questions in **R1-02-0380**, Chairman suggested going through Ericsson paper in succession.

- (*4) Mr. Stefan Parkvall (Ericsson) presented this paper.

This paper addressed some of the RAN WG1 related open issues identified by RAN WG3 in **R1-02-0438** and suggested answers that can be provided to RAN WG3.

A number of comments were made.

- In general it should be clarified that all these answers are for FDD mode.

Scrambling code for HS-PDSCH, HS-SCCH

- Why DPCCH should be allowed to use different scrambling code ?
→ to reserve enough channelisation codes for HS-PDSCH. (in some scenarios there are a lot of different DPCCHs)

UL feedback configuration

- It should be clarified that UL feedback parameters are UE specific setting controlled by SRNC. And it should be mentioned that we are discussing some UE specific layer 1 method to adjust the rate.

HS-DSCH power & HS-SCCH power

- Second paragraph needs to be more elaborated. It is not clear which is referencing which.

HS-SCCH power offset definition and necessity

- The current assumption is that there should be recommended power offset given by the UTRAN. It is up to Node B how this information would be taken into account for the power setting.
- The power offset should be relative to the TFCI field (the current assumption is that there is always TFCI. If this assumption would not stand then we need to inform RAN WG3.)

Transport Block sizes

- We need to discuss the issue together with RAN WG2 before we can make our answer.

Chairman asked Mr. Stefan Parkvall to revise these answers taking into account the comments received. The revision can be found in **R1-02-0439** in the LS form. This was reviewed on Day3 morning and approved in **R1-02-0439**.

(See No.198)

(*5) Following papers were discussing about Ack/Nack signalling issue and reviewed in succession.

R1-02-0215 was presented by Huawei. TPC commands in the downlink DPCCH to control the ACK/NACK offset.

R1-02-0264 was presented by Mr.Asbjorn Grovlen (Nokia)

It was proposed to use a 2 bit uplink power offset parameter which would be sent on HS-SCCH with other HARQ parameters especially for the soft handover case. With these 2 bits, four different power offsets would be possible to signal, e.g., 0, 3, 6 and 9 dB. A text proposal for the TR was attached.

R1-02-0216 was presented by Huawei

It was proposed modify the structure of the uplink HS-DPCCH so that ACK/NACK information can be transmitted with different OVSF codes. It can be further used to spread coded bits of the channel quality indicator.

Chairman commented that the proposal of having different OVSF codes would imply quite big complexity increase in the Node B when multiple UEs are taken into account. He pointed out peak-to-average ratio problem as well.

There were a couple of comments that were in favour of this proposal.

R1-02-0379 was presented by Mr. Stefan Parkvall (Ericsson)

Instead of increasing the energy of the ACK/NAK message by increasing the output power, it was proposed to extend the duration of the ACK/NAK message by repeating it 3 times by stealing (puncturing) the CQI area. This will reduce the peak power requirements of the UE and, consequently, increase the coverage for HSDPA services.

Several comments were made.

- In soft handover region, the rate of CQI will increase and this would imply conflict between this proposed scheme and CQI requirement. → It is true but this is only the other possibility than increasing peak power. There would not be a major problem with this (conflicting) respect. (Ericsson)
- This scheme would require Node B processing speed.
- Before we agree with this scheme we need to see concrete evidence about how this scheme works in the soft handover situation. Node B processing requirements would not be negligible.
- In the first place we need to understand whether there is really a problem due to this large power offset we may need for the Ack/Nack and in which conditions we face such a problem. If there is a problem then we really need to consider the solution which is maybe different from what we have worked on up to now.
- Dynamic aspect of this scheme (the uplink receiver needs to change its behaviour dynamically) will certainly put additional requirements on Node B including the reduction of the processing time left to Node B.
- Nortel has another proposal that will increase the redundancy of Ack/Nack in a regular(fixed) fashion based on the fact that CQI needs not to be sent in every sub-frame.

/*** Day1 closed at 20:01 ***

/*** Day2 started at 08:06 ***

R1-02-0363 was presented by LGE.

In this paper further simulation results on the power offset requirements of ACK/NACK signalling were presented considering receiver antenna diversity and various UE speeds. The simulation results showed that the difference in the power requirements between ACK and NACK may be large even in various simulation environments. It recommended to allocate the different transmission power for ACK and NACK in a viewpoint of power consumption in UE.

No comments were raised.

R1-02-0420 was presented by Mr. Nandu Gopalakrishnan (Lucent). This paper was a resubmission of **R1-02-0075** which had been provided in R1#23 but not reviewed due to unavailability of the document.

In this paper constraints were prescribed for the probabilities of misreading ACK as NACK and vice versa. Two state and three state receivers were considered depending on the false alarm constraints. In most of the situations, it was suggested that to satisfy all constraints optimally in fading channel the ACK and NACK symbol energies need to be different. No specific comments were made for this paper. Since **R1-02-0421** contained the issue on the range aspect, Chairman suggested to go through R1-02-0421 in succession.

R1-02-0421 was presented by Mr. Nandu Gopalakrishnan (Lucent).

In this paper several proposals and modifications to the current scheme were proposed. It was proposed to have special pilot bits after Ack/Nack in soft handover in order to improve channel estimation and to allow special power control for the HS-DPCH. In addition, specific TPC procedure for HS-DPCCH, two different coding schemes on CQI and separate Ack/Nack power offsets were proposed.

Some concerns were raised.

- It is not clear how this scheme would work with non-continuous transmissions of HS-DPCCH.
- We need to consider the power-drifting problem if we now separate different channels in the uplink to be in the different power control processes.
- If we do not do anything for Ack/Nack transmission itself but we only add other stuffs then it would be a bit difficult to solve the problem if the problem is the terminal at the cell edge which is already power limited.
- Was the simulation done with the assumption of unlimited power control headroom ? → No, it is FFS.
- If we can manage different power control process for different channels then there will be certain benefit with this proposal.

Chairman commented that there are certain issues that could raise problems at the cell edge power limited situation. Chairman personally felt Ack/Nack extension in time domain would be an intuitively interesting alternative than trying to build a lot of other stuffs to be transmitted simultaneously together with Ack/Nack in order to overcome the coverage problem.

R1-02-0371 was presented by Mr. Serge Willenegger (Qualcomm).

This paper described the potential impacts associated with the transmission of the HSDPA related feedback information in the uplink. A concern was raised against the additional UL power requirement because it may affect the deployments based on R99. Instead this paper suggested that the possibility to repeat the HSDPA related feedback information over multiple HSDPA sub frames should be introduced in Rel-5.

As a solution, this proposal was very similar to Ericsson's proposal. The difference is that this does not propose puncturing the CQI.

Some discussion took place.

- Whether this scheme would be semi-static or dynamic depends on the details on how we configure the modes.
- One thing to note is that all these schemes, meaning Lucent's one, Ericsson's one or Qualcomm one, require that Node B is aware of the soft handover status. But the current situation is that this is not necessarily the case according to the RAN WG2.
- It may be useful to have the status of soft handover for various topics. This would be a topic to discuss with RAN WG3.
- Some kind of parameterisation would be needed but we should not talk about the active set size issue because we would not have it in layer 1 specifications in any case.
- This proposed scheme is more practical than the Ericsson's one because this scheme is less dynamic and easier for Node B.
- If parameter X is equal to or less than 3 then there would be no impact with this scheme for low end mobiles. For higher end mobiles, there would be certain decrease of maximum bit rate but still it would not mean that we will have problem in the throughput in the cell.
- The parameter X should be multiple of 3.

R1-02-0349 was presented by Mr. Tim Mouldsley (Philips).

This paper is a sequel to **R1-01-1198** and **R1-01-1199**. It says that the use of a REV command to correct a misinterpreted NACK, and a timer to avoid using DTX in the ACK/NACK field during packet clusters, can reduce the transmit power required for the uplink HSDPA signalling by 3 – 4 dB when not in soft handover, and 4.5 – 5.5 dB when in soft handover. This paper suggested that signalling should be provided to enable the Node B to signal the duration of a timer. This paper proposed that the UE should be able to use a REVERT command to allow the potentially problematic consequences of misinterpreting a NACK to be corrected.

- Given Ack or Nack and the PROBABILITY of deciding it as Rev. It would cost severe throughput loss.
- 3 state (DTX) transmitter would make sense from capacity point of view
- The protocol would not be anymore Stop-and-Wait Hybrid ARQ protocol because of REV command being added in. This would imply impacts on the buffer and throughput loss.
→ there would not be buffer impact. The protocol issue is to be discussed in RAN WG2 (Philips)
- There would be buffer impact on Node B side because it might receive REV command.
- Consequences of Ack/Nack applied to the shared control channel and packet itself are different. → FFS

R1-02-0288 was presented by Mr. Amitava Ghosh (Motorola)

This paper summarized signalling issues related to HS-DSCH associated uplink dedicated control channel (HS-DPCCH) which are so far presented in RAN WG1 meeting. (Proposals from Ericsson and Qualcomm have not included due to the lack of time.) Following conclusions were addressed in this paper.

- Having different power level for Ack/Nack will meet the error requirements for the reverse link Ack/Nack channel.
- Additional requirements on error probability have to be introduced if REVERT command is used. Further it will affect the N-channel stop-and-wait protocol. This requires further study. → RAN WG2 issue (Philips)
- The use of a timer to avoid DTX in Ack/Nack field may be feasible.
- *To avoid loss of Nack/Ack during soft-handoff a fixed power boost on HS-DPCCH can be used.*

Ms. Anu Virtanen (Nokia) made a following comment.

- Although this paper says "if it decodes the HS-SCCH incorrectly a Nack indication is sent to the Node-B." this should not be done because if the HS-SCCH was decoded incorrectly then the UE does not even try to decode HS-DSCH, which means there is nothing in UE's buffer. Then, if we think about IR, it is not possible for Node B anymore to send non-self decodable versions because it does not know if there is something or not. Therefore if the shared control channel was decoded incorrectly then the UE should send DTX so that the Node B can know that UE does not have anything and Node B can know that it has to send self-decodable version. → this kind of error cases (side effect) need to be considered further

R1-02-0361 was presented by LGE.

This paper was on UE acknowledgement with HS-SCCH or HI errors and proposed following text proposal to be included in the TR.

When UE does not detect HI or detects errors by CRC1 of part 1 in HS-SCCH, UE does not transmit any acknowledgement (i.e., DTX). When UE does not detect any errors by CRC1 of part 1 in HS-SCCH but detects errors by CRC2 of part 2, UE transmits Nack indication.

Mr. Stefan Parkvall (Ericsson) commented that the latter part of the proposal would imply the same problem pointed out by Ms. Anu Virtanen (Nokia) with respect to the previous paper.

→ Nack should be sent only after CRC failure on the HS-DSCH, if HS-DSCH is decoded.

As a conclusion the proposed text proposal was not approved.

After having all these Ack/Nack signalling related paper presented Chairman made following suggestions.

- Extension of Ack/Nack in time domain (Ericsson's and Qualcomm's proposal) seems to be most feasible in terms of impacts on the current assumption. (+simple and not complicated). Some kind of *UE specific* RRC signalling to allow the changes in Ack/Nack repetition period could be done. (UE definitely has some limitation about inter-TTI interval.) A bit more elaborated paper proposing the scheme based on the Ericsson and Qualcomm paper should be presented because this scheme would be rather straightforward for Rel-5 time frame.
- If we get some nice proposals that have UE specific signalling which is not too much complicated, then we will have a look at it. But it needs to be supported by more than one or two companies. If we would not be able to have such joint proposal by multiple companies then we would stay with the current assumption. The current assumption would work even though it might not be optimal at the cell edge.

There were a couple of comments made against these suggestions.

- We have to look at the receiver requirement if we decide Ack/Nack repetition.
- If we cannot get correct channel estimation, then there would not be any gain even if we combine the repeated Ack/Nack by the maximum ratio combining. Channel estimation is a really important factor.

(*6) Mr. Michiaki Takano (Mitsubishi) presented this paper.

In this paper the channelisation code allocation for HS-DSCH was reviewed from UE processing complexity point of view. In conclusion,

1. It was recommended to assign HSDPA users successive codes from $C_{ch,16,8}$ - $C_{ch,16,15}$ (or $C_{ch,16,0}$ - $C_{ch,16,7}$) and not to assign channelisation codes crossover the above two range, in order to reduce processing amount in 2nd stage.
2. In case of assigning 4 codes to each UE, it was recommended to allocate from $C_{ch,16,N}$ ($N \bmod 4=0$).
3. In case of assigning 2 codes to each UE, it was recommended to allocate from $C_{ch,16,P}$ (P is even).

/*** Day2 coffee break 11:01 – 12:01***/

After coffee break, Motorola, Qualcomm and Panasonic expressed their view of not supporting this proposal with the reason of the impacts on the total UE complexity.

Chairman concluded that no new restrictions should be added for the code allocation. This paper was noted.

(*7) Following 3 papers were addressing UE capabilities and reviewed in succession.

R1-02-0378 was presented by Mr. Kenneth Stewart(Motorola).

In this paper, it was proposed to combine the parameter for the number of soft channel bits with the rest of the UE capability parameters, and make the implicit coding rates more meaningful.

R1-02-0258 was presented by Ms. Anu Virtanen (Nokia).

In this paper it was proposed to adopt the term "category" for the combined parameter instead of "class".

The general idea was in line with an earlier Panasonic text proposal in **R1-02-0169**.

A bit long discussion took place on how we should define HS-DSCH categories. After coffee break chairman presented following table on the screen and this table was agreed to be presented to RAN WG2 by the RAN WG1. Table was mainly based on the proposal from Motorola.

Mr. Hidetoshi Suzuki (Panasonic) commented that in this table the assumption was that the entire soft buffer is equally segmented into each HARQ buffer that has full HARQ capability. He said that this assumption was too much for some cases e.g. DCH case and therefore though he agreed with this table in principle, some kind of optimisation should be necessary in the future meetings. Mr. Hidetoshi Suzuki strongly opposed to have Category 11 at this point in time.

Chairman agreed to this comment and stated that some of the categories may be added at a later stage.

Chairman would provide official inputs for the joint session with RAN WG2 based on the following table. Eventually it was documented in **R1-02-0450**.

(Day 2 14:47)

/*** The difference between Category 1 and Category 11 is the capability of dealing maximum number of Turbo encoding/decoding blocks. Category 1 means 4 Turbo coding blocks and Category 11 exceeds beyond 4. ***/

The definition of HS-DSCH categories

HS-DSCH category	Maximum number of HS-DSCH codes received	Minimum inter-TTI interval	Maximum number of HS-DSCH transport-channel bits that can be received within an HS-DSCH TTI	Total number of soft channel bits
Category 1	15	1	20456	172800
Category 2	10	1	14600	115200
Category 3	5	1	7300	57600
Category 4	5	2	7300	28000
Category 5	5	3	7300	19200
Category 6	10	1	14600	153600
Category 7	5	1	7300	96000
Category 8	5	1	7300	76800
Category 9	5	3	7300	48000
Category 10	5	3	7300	38400
Category 11	15	1	[28800]	172800

R1-02-0295 was presented by Siemens.

In this paper, a set of HS-DSCH UE capabilities for 1.28 Mcps UEs was proposed.

It was questioned by Chairman if it is possible to classify the parameters in terms of category like in FDD mode. It was answered it is possible. Siemens said that there is one-to-one mapping between so-called "category" and combination of "Time slots per TTI" and "Number of TrCH bits per TTI". Siemens said however we have to wait for those parameters for 3.84Mcps TDD being presented.

Mr. Marcus Purat (Siemens) remarked that the term "class" had been tentatively agreed in RAN WG2 and so the name "class" is still valid. In those classes we can have a number of categories. He said that "class" and "category" would be a different story and we need to discuss this issue with RAN WG2.

Chairman answered that the main point is to indicate RAN WG2 that these are the parameters that need to be signalled but there is no need for signalling them separately, those can be grouped. He said the terminology itself can be left to RAN WG2 decision. Chairman asked TDD colleagues to provide similar table as above for TDD.

/** There was a topic that had been postponed from RAN WG1#23. That was on the pilot ratio signalling issue. Mr. Makis Kasapidis (Panasonic) clarified that Panasonic had reached a conclusion that with proper channel estimation there is no significant difference in the performance hence there would be no problem with the current assumption (explicit signalling of the pilot-data ratio estimate was unnecessary – at least for QAM constellations of order up to 16-QAM). Since the decision had been made on-hold by the request of Panasonic, Chairman concluded that we would proceed with the current assumption now. (Day2 12:54) ***/

/** Day2 Lunch break 13:01- 14:26 ***/

(*8) Mr. Katsutoshi Itoh (Sony) presented this paper.

This paper was provided for the joint discussion with RAN WG2 (and RAN WG3).

This paper clarified some open issues related to UL feedback and defines actions needed to be taken across the WGs to complete the specifications. This paper identified following 3 issues to be defined in corresponding TRs and TSs.

- Reference timing (HSFN) for offset parameter (l) [RAN WG3]
- Iur/Iub interface and message structure for notification of feed back rate (k) and offset (l) parameter to Node-B. [RAN WG3]
- RRC message structure for notification of feedback rate (k) and offset (l) parameters to UE. [RAN WG2]

There was no comments raised with this paper however there one typo was pointed out. So this was to be revised into **R1-02-0451** and presented in the joint session with RAN WG2.

(*9) Mr. Yannick Le Pezennec (Vodafone group) presented this LS from RAN WG4.

RAN WG4 had been discussing the issues of setting the requirements linked with the uplink signalling solution for HSDPA as was requested by RAN #14. In this LS RAN WG4 was informing us of the discussion results. In short, they as a group had not yet reached conclusion. There were 2 views in RAN WG4 (details were attached to this LS). One was supporting TFRC and the other was supporting SIR report. This LS was asking us to decide the reporting scheme and inform RAN WG4 about the conclusion.

There was no comment raised with this LS. Since there were some papers addressing this issue Chairman suggested going through them in succession.

R1-02-0262 was presented by Ms. Anu Virtanen (Nokia).

This paper provided answers to those questions raised in RAN WG4 in the attachment of the LS. In conclusion this paper stated that there was no clear problem seen in the feasibility of TFRC signalling. The clear benefits of TFRC signalling, as has been claimed also before, are that it tells the real performance of the UE in the current channel condition to the network and takes into account different receiver implementations. It said that the SIR signalling does not include information of how different radio conditions affect the UE receiver performance, neither it does not take into account different receiver implementations.

R1-02-0233 was presented by Mr. Kenneth Stewart(Motorola).

This paper also provided answers to those questions raised in RAN WG4 in the attachment of the LS. In conclusion it said that for UE designers facing the need to implement the TFRC method, further work seems to be required to make clear its definition, potential measurement performance and the means by which it would be exploited by the Node-B. It seemed that the definition, performance and complexity of the SNR reporting method has been studied more extensively so far. Finally this paper suggested following 3 RAN WG1 options to report back to RAN WG4.

- to accept the current TFRC-based measurement report as presently defined;
- to work to clarify the definition and operation of the TFRC-based report, so that UE designers have a clearer vision of the requirements;
- to adopt a simpler UE measurement whose requirements are defined, such as the SNR report.

R1-02-0440 was presented by Mr. Phong Nguyen (NEC)

This paper evaluated scheme that uses TFRC (with power offset) with simulations. It was concluded that TFRC method (with power offset) does not have any advantages over other schemes that do not report power offset in terms of either throughput or normalized power efficiency performance. This paper was suggesting following 2 approaches for this issue.

1. Removing of the current TFRC (with power offset) reporting approach and replacing it by simpler reporting approach for example SNR report.
2. If TFRC scheme are still to be used, then we should consider the removal of power offset associated with TFRCs higher than TFRC1.

There was one question about the assumption in this paper on the use of the power offset. Does this paper assume to apply this power offset to the transmit power in the Node B, meaning some kind of power control ? But the intention of the power offset in the TFRC is not for the power control.

NEC responded they would provide the answer on the e-mail reflector. There was no other comment.

R1-02-0261 was presented by Ms. Anu Virtanen (Nokia).

In this paper simulation results for SIR vs BLER curves were represented, based on which it was proposed to finalise the reference TFRC list and uplink measurement report list into TR 25.858 and TS 25.214.

There took place a long discussion between Nokia side (TFRC) and Motorola side (SNR). Although in some sense both proposals seemed to be essentially equivalent, it was felt very difficult to reach consensus in on-line discussion.

In the end Chairman suggested to continue discussion in offline among interested parties.

**** Day2 coffee break 16:21 - 17:08 ****/
**** Day2 evening session started at 21:08 ****/

(*10) Papers on HI

R1-02-0352 was presented by Mr. Tim Mouldsley (Philips).

In this paper the performance of HSDPA was considered as a function of the number of shared control channels. This was considered both in terms of the number of SCCH allocated by the Node B and the number of SCCH which a UE can receive. Following recommendations were derived.

- 1) The HI is dropped from HSDPA and the UE is required to monitor only one (or possibly two) HS-SCCH.
- OR 2) The HI is retained and only used when more than two HS-SCCH's are allocated to the UE.

A couple of questions on simulation assumptions were raised.

R1-02-0353 was presented by Mr. Tim Mouldsley (Philips).

Philips had provided the revision of this paper in **R1-02-0447** though it was not made available at the time of this presentation. Hence the original document R1-02-0353 was used for the presentation. Mr. Tim Mouldsley explained that the delta was some extra results and not essential to this proposal itself.

This paper identified the problem of HS-SCCH resource-blocking in which all the active UEs will have the same HS-SCCH allocation. It had been suggested that this problem arises when the removal of HI is considered because it may occur when the UE is required to monitor only one (or two) SCCH.

This paper proposed using hopping sequences to control SCCH assignment in order to avoid this resource-blocking problem. It was proposed that this technique be adopted under current working assumptions which only require the UE to monitor one HS-SCCH when no HI is used.

Nortel commented that this proposal has a problem from Node B architecture point of view and this is not proper solution to the HI problem.

→ It would not cause any Node B architecture problem unless you have a particular architecture. (Philips)

R1-02-0287 was presented by Mr. Robert Love (Motorola).

In this paper the system impact of the HI bit was analysed by comparing two control channel approaches, one with the HI bit and the other without the HI bit. A single power scale factor was assumed for part 1 and part 2 of the HS-SCCH. It was shown that the control channel structure with the HI bit results in a slight improvement in system performance compared to the control channel structure without the HI bit because the overhead of having support two CRCs is larger than having to support the uncoded HI bit with one CRC.

There took place some this discussion on the power management (offset) including the issue of HI reliability. There was a remark saying that that this paper was a bit misleading because this assumes same power both for part1 and part2 with case C. The results would be different if different power offset was allocated on part1 and part2.

R1-02-0323 and **R1-02-0324** were presented by Mr. Farooq Khan(Lucent).

In **R1-02-0323**, the fast signalling scheme that can be used to carry the RRC like signalling from node-B (MAC-hs) to the UE was proposed for the advanced radio resource allocation techniques which require fast

signalling from the node-B to the UE. The proposed signalling scheme does not replace RRC signalling but just complements it.

In **R1-02-0324**, a new scheme was proposed in which UE monitors multiple HS-SCCHs based on down link activity indicated by the fast signalling scheme proposed in R1-02-0323. Using this scheme, it was proposed to remove HI from HSDPA specifications.

A couple of concerns were made.

- The consequence of the error case where Node B and UE would have different information on which HS-SCCH to be used is rather severe. It would be difficult to recover the situation.
- This does not seem to save any UE complexity because UE has to decode 4 HS-SCCHs in some cases.

R1-02-0332, R1-02-0449 was presented by Ms. Sarah Boumendil (Nortel).

R1-02-0332 summarized what had been discussed so far on the HI issue and proposed a way forward. The proposed way forward is as follows.

- HI is removed;
- Number of HS-SCCHs in the HS-SCCH set is 2;
- Serving HS-SCCH set can be reconfigured on an 80 ms basis using layer 1 signalling.

Node B is able to perform some fast reconfiguration of the HS-SCCH sets without informing the RRC so that the number of HS-SCCHs in the HS-SCCH set can be 2. This proposal had been already discussed in RAN WG2 and RAN WG3 and they were waiting our feedback.

R1-02-0449 presented some simulation results on the scheme presented in R1-02-0332 to assess the necessary power offset of this L1 signalling with respect to the associated DPCH to achieve a target BLER between 10^{-3} and 10^{-4} . The results showed that we can conclude that with a feasible power offset, the signalling can be transmitted on the associated DPCH over a period of 80ms by stealing one symbol per radio frame.

Philips questioned what the real Node B architectural problem was. (Nortel had commented that there was a problem in terms of Node B architecture with Philips proposal in **R1-02-0353**.) → The problem is changing the associations of different resources.

R1-02-0426 was presented by Mr. Ju Ho Lee (Samsung).

In this paper, 3 approaches were addressed as possible ways of delivering serving HS-SCCH set reconfiguration information from Node B to UE (information shared only between Node B and UE).

This paper had been presented in RAN WG2 already. There had been a concern raised on reliability issue compared to the RRC signalling.

Having all these HI related papers presented, Chairman asked the comments from the floor especially from those companies which had not presented papers on this issue.

- Panasonic preferred removal of HI.
- Ericsson preferred removal of HI and rather supported Philips proposal.
- Siemens agreed to the removal of HI and supported Philips proposal.
- Nokia agreed to the removal of HI and supported Philips proposal.
- Motorola informed that they prepared paper with Philips in which it was proposed to get rid of 2 parts CRC in **R1-02-0414**.

R1-02-0414 was presented by Mr. Amitava Ghosh (Motorola).

A simplified scheme for control channel signalling for HS-DSCH was presented. Key point was based on the Philips proposal in **R1-02-0353** (Hopping). In addition CRC was removed from the first part.

The scheme has the following features :

1. Only one HS-SCCH needs to be monitored by the UE.
2. HS-SCCH is power efficient since there is no CRC bits in the first part which results in improved throughput.
3. HS-SCCH is power efficient since no HI bit is required which improves overall throughput.
4. There is no need for different power offsets for the first and 2nd part. The first and 2nd part can be more balanced if the number of CRC bits is reduced to 12 from 16.
5. Besides call setup and handovers no signaling is required.
6. The 2 slot timing advance for the HS-SCCH can be maintained.
7. No degradation when CDM scheduling since probability of blocking is low.

There were concerns raised on following 2 points.

- Whether the CRC should be removed from the first part.
- A kind of strong objection was made on the Philips proposal from Nortel.
(A problem with respect to Node B architecture)

In the end Chairman proposed to sleep.

/*** Day 2 closed at 24:29 ***/
/*** Day 3 started at 09:08 ***/

Chairman summarised on the screen the Day2 discussions on HI as shown below.

1. HS-SCCH hopping (with two CRCs or with only one CRCs on HS-SCCH)
Concerns : Node B architecture impact (with modular architecture) (can be used with HI as well)
(Q. Is the Node B architectural impact for particular company or common to all Node B manufacturers ?)
2. L1 signalling to change between HS-SCCH sets
Concerns : Puncturing impact on DCH (impact on performance & testing) (puncturing 1 symbol per 10 ms frame)
: Error behaviour (to see R1-02-0449)
3. MAC level signalling/HS-SCCH which HS-SCCH (or set) to use

Concerns : Reliability & error cases

4. Terminal to receive 4 HS-SCCHs (but no HI)

Concerns : UE processing concerns (peak convolutional coding processing requirements with current 1 slot decoding time, estimates 120-300 kbps peak processing load)

(Alternative for part 1 convolutional coding as 32/10 block code)

R1-02-0414 was presented by Mr. Nader Bolourchi(InterDigital)

This paper discussed about the signalling of the HS-SCCH for TDD. InterDigital had prepared a corresponding paper for FDD in **R1-02-0226** however it was not distributed to everyone at the time of presentation. Therefore this paper was presented instead of R1-02-0226. It was explained that although this paper was for TDD mode similar approach can be done on the FDD mode as well.

This paper proposed a scheme that reduce the time to determine which control channel to use without doing convolutional decoding. By shortening this required processing time the paper proposed to compensate the peak processing load problem of not having HI. As there was no FDD specific description in this paper, it was felt difficult to get the image and eventually chairman suggested to consider this paper as noted for the time being.

After this presentation, Chairman asked TDD people whether they need HI or not. It seemed that no company had problem in removing HI. Chairman encouraged TDD people to proceed with the assumption of no HI.

/*** Day3 coffee break 10:33-11:17 ***/

After coffee break Chairman explained that during coffee break an intensive offline discussion was held and compromising proposal would be drafted by Motorola and Ericsson.

Main points agreed in offline session were

- The UE monitors all the four HS-SCCH's without HI
- There is no CRC bits in the first part
- No need for different power offsets for the first and 2nd part
- A UE specific scrambling sequence is used to uniquely identify the first part

- (*11) Mr. Amitava Ghosh (Motorola) presented this paper.

In this paper a bit distribution unit which is very close to the one proposed in RAN WG1#23 by Nortel was proposed. With simulation results, this paper recommended to use the proposed bit distribution unit in conjunction with the symbol interleaver in order to maximize the efficiency of the two-stage rate matching scheme.

Several comments were raised and major opinion seemed to be rather negative.

In the end Chairman concluded based on the comments received that we should keep the current assumption of 2-stage approach because there are clear preference to that approach. He added that furthermore the current assumption seems to be straightforward and many of further detail proposals are rather compatible with the current assumption approach.

- (*12) Mr. Amitava Ghosh (Motorola) presented this paper.

Having the conclusion of the previous paper, Mr. Amitava Ghosh briefly introduced this paper for information.

- (*13) Mr. Ralf Wiedmann (Siemens) presented this paper.

This paper reviewed the scheme discussed in **R1-02-0286** (Motorola, See No.132) and provided a simple optimisation of the bit distribution and interleaving function for HSDPA. Without additional complexity this mitigates the negative effect of block-wise mapping of bits to positions with the wrong reliability.

Ericsson and Nokia raised same concern on the gain of this scheme compared to other related proposals.

Chairman stated that we had better come back to this paper after having reviewed all related papers. (See No. 148)

/*** Day 3 lunch break 12:25 – 13:53 ***/

- (*14) Mr. Ralf Wiedmann (Siemens) presented this paper.

With respect to the description of two-step rate matching approach, for the buffer limited case the current second rate matching rule is not well-balanced and does not maintain the proportion between systematic and parity bits after first rate matching. The available number of repetition bits is simply subdivided equally to systematic, parity 1 and parity 2 bits.

The outcome of this is, that the repetition rate is unequal for parity and systematic bits. In order to avoid this it was proposed to modify the description to have equal repetition on all three bit streams of the channel rate matching. The text proposal for TR 25.858 was attached.

This text proposal was approved with no comments. Chairman suggested that this change should be reflected to the actual CR as well.

- (*15) Motorola presented this paper.

This paper proposed small enhancement with respect to rate-matching e_{mi} variation scheme. Based on the simulation this paper recommended the proposed scheme to be adopted to the TR and CR. Text proposal was attached to this paper. Since there was a related paper from Texas Instruments (**R1-02-0369**), Chairman suggested having a look at TI's paper before making a conclusion. As Texas Instruments did not give any feed back on this proposal, Chairman concluded this text proposal as agreed in principle. This is because there was a comment saying that we should be careful about the consistency among various sections of the actual CR for TS 25.212. (mainly with respect to the maximum number of the Redundancy Versions.) and Chairman considered some offline checking would be needed in terms of consistency.

- (*16) Mr. Hisashi Onozawa (Texas Instruments) presented this paper.

In this paper, a selection rule of the redundancy versions for Hybrid ARQ functionality in re-transmissions was clarified. In addition, it was shown that the currently defined RVs could give enough Hybrid ARQ performance in practical environment when the redundancy versions were selected based on the RVs selection rule. No explicit proposal was made in this paper and the proponent did not give any feed back for the previous Motorola paper (**R1-02-0234**).

- (*17) Mr. Martin Beale (IPWireless) presented this paper.

In this paper an HSDPA bit collection block was proposed. The proposed bit collection block performs as per the R99

bit collection operation if first stage rate matching is transparent. When a UE buffer limitation applies, the proposed bit collection functionality bunches systematic bits towards the tail of the output bitstream.

Some comments were raised mainly on Figure 2.

- No need for introducing new figure with respect to "bit pruning". One sentence to avoid misunderstanding would be sufficient.
- "bit pruning" is a part of 1st rate matching function.
- As for the "bit collection" equivalent function, there are 3 different options. This paper, Siemens paper (**R1-02-0443**) and Motorola paper (**R1-02-0286**).

Chairman commented that some clarifying sentence would probably be sufficient for bit pruning. With respect to the bit collection, he said that we should review all related papers before we make a conclusion. (See No. 148)

- (*18) Mr. Asbjørn Grøtlen (Nokia) presented this paper. This paper was in principle same as **R1-02-0189** presented in RAN WG1#23. Text proposal was included for TR 25.858.

There was no comment raised. Chairman concluded this paper as approved. He suggested this to be included in the CR as well.

- (*19) Mr. Asbjørn Grøtlen (Nokia) presented this paper.

In RAN WG1#23 Ericsson had presented comparison of several different bit arrangement schemes and concluded that the differences for the first transmission are minimal. And there had been a comment that the comparison should be done taking into account the re-transmissions. This current paper presented simulation results also for retransmissions. In conclusion it was shown that the constellation rearrangement scheme yields the biggest gains for the retransmissions and the dual interleaver is a simple way to break the clustering effect of the rel99 interleaver.

Some discussion took place.

- Constellation Rearrangement (CoRe) and bit priority mapping techniques are only applicable for 16-QAM.
- 80% of the time the packet will go through in the first transmission. So CoRe will have gain only in 20% of the time and only for 16-QAM.
- We should look at how much we gain with bit priority mapping schemes. There are basically no difference regardless what kind of scheme is used. So there is no need for doing something particular. We should select the simplest one.
- CoRe is a scheme which makes retransmissions more robust with no complexity increase.
- etc.

As this paper did not have any proposals chairman concluded this as noted.

- (*20) Mr. Christian Wengerter (Panasonic) presented this paper.

This was the re-submission of the text proposal which had already been presented in RAN WG1#23.

Samsung commented that they had a related paper in **R1-02-0248** and decision should be made after the re-evaluation of it. Chairman agreed to this comment. After the re-evaluation of Samsung paper, it turned out that it had nothing to do with this current text proposal on CoRe. So this text proposal was approved with no comments.

This would go also to the CR. There was one question asking from where the bit rearrangement parameter b would come. It was answered that this would be provided in a similar way as rate matching parameters. Panasonic would provide the proposal on this signalling aspect in **R1-02-0273**. (See No. 143)

- (*21) Mr. Hunkee Kim (Samsung) presented this paper.

In this paper it was shown that SMP and CoRe are compatible. Text proposal on SMP was also provided.

Chairman commented that the text proposal attached was rather too high level description. He said that at this stage we need to have more concrete and detailed text proposals before we can start saying that we include SMP or not.

We cannot do simulation or anything from this level of text proposal.

- (*22) Mr. Christian Wengerter (Panasonic) presented this paper.

So far it had not been discussed yet how to signal the constellation rearrangements. This paper presented a scheme for a joint signalling of the 2-stage rate matching redundancy versions and the constellation rearrangements allowing full flexibility for partial IR, full IR and CC operation. It was proposed to use in total 3 bits for the 2-stage rate matching and CoRe functionality.

A couple of comments were made on the Table 3 saying that the average throughput would scale down by the number of retransmissions. Gains in Table 3 did not reflect the throughput loss. It was responded that the intention of the table is to show we can get those benefit by using proposed signalling scheme and not to show the system level gain because it does not help us to select signalling scheme. System level results are not relevant to this paper.

As there was a proposal from Siemens that was proposing to use 2 bits for this signalling, Chairman suggested reviewing it in succession.

- (*23) Mr. Ralf Wiedmann (Siemens) presented this paper.

This paper proposed to use an improved RV parameter signalling scheme. This scheme allocates the available bits differently to the HARQ parameters s , r and the Constellation rearrangement b according to the puncturing rate in the second rate matching stage. It therefore allows to accommodate the entire signalling within the two-bit RV parameter and offers additional gains of up to 0.5 dB.

There was one concern raised saying that there could be rounding error in the interpretation of the puncturing rate in the second rate matching. We need to be sure that UE and Node B has same interpretation if we choose this scheme.

Chairman commented that this scheme seemed to be a bit complicated because UE can only get parameters after it has calculated puncturing ratio. He said Panasonic's 3 bits proposal seemed to be more straightforward and at this point of time we had better adopt simpler approach.

There took place some discussion on which scheme we should take at this point. Philips and Ericsson supported Siemens' 2 bit approach saying that rounding problem can be solved. Nortel and Motorola supported Panasonic's 3 bit approach asking what the advantage is of gaining 1 bit putting more constraints, spending more time to fix the detail.

Finally chairman concluded at this point of time we would take Panasonic 3 bit approach.

Samsung requested clarification on the bit distribution unit saying that Samsung could not agree with the dual interleaver without the decision on bit distribution unit.

Chairman answered that we would come back to the bit distribution issue later.

(*24) Mr. Amitava Ghosh (Motorola) presented this paper.

This paper summarised the offline discussion results and presented the way forward on HS-SCCH issue.

The proposed scheme has the following features:

1. The UE monitors all the four HS-SCCH's.
2. HS-SCCH is power efficient since there is no CRC bits in the first part which results in improved throughput.
3. HS-SCCH is power efficient since no HI bit is required which improves overall throughput.
4. There is no need for different power offsets for the first and 2nd part, which improves throughput.
5. A UE specific scrambling sequence is used to uniquely identify the first part.
6. The 2 slot timing advance for the HS-SCCH can be maintained.

This proposal was agreed without any objections.

Chairman asked Mr. Amitava Ghosh to update TR along with this proposal and prepare the text for the CR.

Fine tuning of the scheme can be considered but we would not put any "FFS" in the CR.

The similar approach would be applied on TDD mode as well.

We will not send LS on this issue. Chairman invited people to inform their colleagues.

Having had this proposal approved, all the HI related papers that had not yet reviewed were considered as "noted".

/*** Day 4 started at 09:14 ***/

(*25) Following 3 papers are related to a sort of bit distribution and reviewed in succession in order to make conclusion on this bit distribution issue. There had been one paper pending since Day3. (**R1-02-0443**, Siemens)

R1-02-0248 was presented by Samsung.

This paper had already been presented on Day3. (See No.142).

There was no explicit concrete proposal proposed in this paper.

Ericsson commented that gain seemed to be 0.1 or 0.2 dB still only for relatively rare 16-QAM and there would be complexity increase with respect to the interleaver.

R1-02-0286 was presented by Mr. Amitava Ghosh (Motorola).

This paper had been already reviewed Day3.

Nokia and Nortel supported Siemens proposal in R1-02-0443.

R1-02-0289 was presented by Mr. Amitava Ghosh (Motorola)

This paper contained text proposal for two-stage Rate Matching Scheme for HS-DSCH

After having reviewed these 3 papers, Chairman suggested that one single text proposal be prepared based on

R1-02-0443 (Siemens) and **R1-02-0289** (Motorola) in offline by the interested companies.

This text proposal would be drafted in **R1-02-0444**. Eventually this paper was reviewed in the Day 4 evening. (See No.160)

(*26) LGE presented this paper.

Several proposals on CQI coding method had been presented so far. This paper presented a comparison of those various papers with respect to BER performance, unequal error protection and system throughput. This paper suggested to use the system throughput as one of the criteria in order to select optimum CQI coding scheme. It was shown that the performance differences of the different proposal are very small. It was also shown that Samsung's proposal and Ericsson's proposal on CQI coding method are equivalent.

Samsung commented that they consider that Samsung proposal is the best proposal. They said that Samsung did have some doubts on the simulation results presented in this paper.

Philips supported this paper.

(*27) Mr. Jaeyoel Kim (Samsung) presented this paper. No comments were raised.

(*28) Mr. Katsutoshi Itoh (Sony) presented this paper.

This paper investigated the performance of 2 proposed CQI coding scheme, one is Philips' UEP and the other is Samsung's EP scheme in terms of several aspects. This paper said that although UEP has some benefits under severe channel impairment it is not easy to conclude that UEP is better than EP if we take into account the implementation complexity.

Chairman asked the 3rd parties view on which coding scheme we should take because the performance difference seemed to be very small. → Siemens, Panasonic and Sony preferred UEP (Philips proposal)

Since the text proposal of Philips proposal was provided in **R1-02-0354**, it was reviewed in succession.

(*29) Mr. Tim Mouldsley (Philips) presented this paper.

Samsung raised a concern not for this text proposal but for UEP scheme itself saying there is a problem however there was no support for this concern from the floor. Chairman concluded that this text proposal was approved.

(*30) Samsung presented this paper.

Mr. Katsutoshi Itoh (Sony) remarked that if we are allowed to sacrifice the throughput with the same amount of this scheme we can get similar improvement in the uplink interference with conventional method with lower power.

Philips remarked that this scheme would be interesting extension for the future improvement.

Chairman agreed with this comment and stated that this can be considered as a possible future extension.

Samsung made some clarifications on their proposal and suggested that their proposal be adopted at this stage.

Chairman commented that this scheme would imply new work on Node B implementation. And since there was no support from other company Chairman rejected this suggestion from Samsung saying that this can be a candidate for improvement in the future releases.

(*31) Lucent presented this paper.

This paper showed that the existing fixed rate CQI scheme can result in high margins to ensure 1% FER on the HS-SCCH which implies a significant degradation in system performance. The variable rate CQI scheme proposed in **R1-01-1037** (Lucent) alleviates this problem by increasing the CQI rate during HS-DSCH activity. This paper proposed that scheme presented in R1-01-1037 be adopted in TR 25.858. Text proposal for TR 25.858 was also attached.

There were some comments regarding the timing issue.

Mr. Tim Mouldsley (Philips) remarked that the proposed text would be fine for the TR because it describes the basic idea however we would need something a little more precise for the CR explaining exactly when this reporting cycle is to be changed, etc. Based on those comments chairman suggested that the proponent provide the text proposal for the CR for the next meeting which describes exact information and clarifies the comments received. We will decide if we need to inform

other WG on this issue after having a look at that text proposal in RAN WG1#25. The text proposal would not go into the TR at this point. It will be covered also in the next meeting.

/*** Day 4 coffee break 11:05-11:44 ***/

(*32) Following 2 papers were discussing the same topic on I/Q mapping of HS-DPCCH and reviewed in succession.

R1-02-0432 was presented by Mitsubishi.

This paper suggested following mapping rule of HS-DPCCH.

- Q-branch if the number of existing DPDCHs is odd.

- I-branch if the number of existing DPDCHs is even.

R1-02-0372 was presented by Mr. Serge Willenegger (Qualcomm)

This paper suggested the following mapping for the HS-DPCCH:

- Q-branch with channelisation code c256,64 when no TFC is the TFCS imply the transmission of more than one DPDCH channelisation code

- I-branch with channelisation code c256,i, (one of $i=\{0...3\}$) otherwise.

Both papers were in line with the case where there is only one DPDCH because they were suggesting mapping DPCCH on the Q-branch.

For the multi-code case some linkage between DPCCH branch and configuration of the dedicated channel.

Conclusion : Single code case : HS-DPCCH is to be mapped on Q-branch with channelisation code c256,64.

Multi-code case will be investigated later.

(*33) Ms. Anu Virtanen (Nokia) presented this paper.

This CR was the outcome of the offline discussion held on CQI procedure issue on Day3.

After some discussion it was suggested that the empty table of CQI definition be removed. In addition some rewordings were suggested. Eventually this CR was revised in **R1-02-0480** and approved on Day5 (See No.170)

(*34) Mr. Serge Willenegger (Qualcomm) presented this paper.

This paper contained a text proposal and higher layer signalling requirements for the HS-DPCCH power control and transmission procedure. This was based on the conclusion on the discussion held Day2. (See No.108)

There were a couple of comments raised saying that the amount of repetition should not be same for Ack/Nack and CQI.

Mr. Serge Willenegger explained that was the original Qualcomm proposal. He changed it to the current one in the course of discussion with Ericsson and Nokia.

Samsung requested not to close the discussion on this issue. Samsung pointed out that there would be a problem with this repetition scheme in case of inaccurate channel estimation.

Chairman answered that we should try to have simple solution as much as possible. He said we should not put some kind of "hook" in our specification.

/*** Day 4 lunch break 13:00 – 14:08 ***/

(*35) Mr. Nandu Gopalakrishnan (Lucent) presented this paper.

This paper contained a counter proposal against simple Ack/Nack repetition scheme proposed by Qualcomm and Ericsson. It proposed to add new HS-DPCCH frame format (2.N) to the current working assumption for pilots + TPC procedure on the HS-DPCCH. This paper contained text proposals for TS 25.211, 25.212, 25.213 and 25.214

A long discussion took place between A (Nortel, Ericsson, Nokia) v.s. B (Motorola, Lucent, Samsung).

A insisted that we should adopt simple repetition scheme in order to reduce the peak power problem.

B insisted that simple repetition would have a problem in case of poor channel estimation. B also said that we should not adopt any proposal without having firm evidence of performance.

Finally chairman proposed to have short break for offline discussion.

The discussion on this paper resumed on Day 4 evening together with following **R1-02-0478**. In the evening discussion it was concluded that there should be 2 parameters for repetition. One is for Ack/Nack and the other is for CQI.

/*** Day 4 short break 19:12 – 19:52 ***/

After the short break, Chairman summarised the conclusion of offline discussion on the screen as follows.

Proposed way forward : CRs to reflect the ACK/NACK repetition (by 2 or 3). (This set by RRC in a semi-static way)

Discussion on the pilots + TPC procedure on the HS-DPCCH to resume in RAN WG1#25.

Interested companies are invited to simulate the proposed concept in **R1-02-0478**. Also better drafted CR based on R1-02-0478 suggested to be made available on the reflector before RAN WG1#25. CR for this issue would be made based on **R1-02-0373**.

Chairman stated that the RAN WG1 decisions on not only this topic but ones that need higher layer signalling (RAN WG2 signalling) in general would be informed to RAN WG2 by our colleagues so that they can produce necessary CRs. (We would not issue a LS for this purpose.)

(*36) Mr. Ralf Wiedmann (Siemens) presented this paper.

This was the text proposal for the TR made based on the discussion on Day 4. (See No.148)

There were a couple of comments made.

- We will have to be ready to describe *Bit Distribution Unit* more consistent manner with 25.212 so that there would not be no misunderstandings.
- In the last sentence, the phrase "It may be noted" is not necessary because it would give the impression something like informative.
- The term "*Bit Distribution*" should be replaced with "Bit collection" for consistency.

with above comments this text proposal was approved. Chairman invited the editor of TS 25.212 CR to reflect these comments when drafting CR.

(*37) Following 3 documents were dealing the topic of UE specific CRC and reviewed in succession.

R1-02-0482 was presented by Mr. Peter Chambers (Siemens).

This paper contained a text proposal for the UE specific scrambling of the coded slot 1 of the HS-SCCH transmission. This text proposal was agreed to be included in the CR for TS 25.212.

R1-02-0416 was presented by Mr. Nandu Gopalakrishnan (Lucent).

In this paper, a scheme of direct modulo two addition of normally generated CRC with the UE ID was proposed.

Samsung raised a concern and requested to present their proposal on the CRC in **R1-02-390**. But due to lack of the time chairman suggested that we would resume the discussion on Day 5.

R1-02-0490 was presented by Mr. Amitava Ghosh (Motorola).

This paper contained a text proposal for the TR on section 8.1.1 and 8.1.2 including the modification of UE specific CRC.

There were comments from Philips.

- Revert Command should be mentioned somewhere in the TR.
- The description of constraints on successive transmissions using same control channel in order to improve the reliability should not be deleted.

Chairman agreed to this comments and suggested Mr. Amitava Ghosh (Editor of the TR) to reflect these comments.

/*** Day 4 closed at 21:11 ***/

(*38) Siemens presented this paper.

This paper presented a text proposal for the TDD sections of TR 25.858 based on contributions at RAN WG1 #24.

This was approved with no comments. Chairman suggested the editor of the TR (Mr. Amitava Ghosh, Motorola) to provide the revision of the TR including this text and distribute it on RAN WG1 e-mail reflector the week next.

The revised TR will be submitted to RAN#15 for approval.

CRs on HSDPA

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
165	5	013	-	25.201	R1-02-0437	Specification of HS-DSCH for Release 5 in 25.201	B	Motorola Ericsson	Approved	(*1) Day 5 09:24-09:28
166	5	146	-	25.211	R1-02-0470	Draft CR for Specification of HS-DSCH in 25.211 (Release 5)	B	Motorola Ericsson	Approved	(*2) Day 5 09:28-09:30
167	5	251	-	25.214	R1-02-0404	Introduction of power control aspects for HSDPA feature in TS25.214	B	Nortel	Approved	(*3) Day 5 09:35-09:45
168	5	049	-	25.213	R1-02-0504	The inclusion of HSDPA into 25.213	B	Panasonic	To be revised	(*4) Day 5 09:54-10:10
169	5	126	-	25.212	R1-02-0491	Changes to source coding and multiplexing for HS-DSCH	B	Siemens	To be revised	(*5) Day 5 11:59-12:38
170	5	237	2	25.214	R1-02-0480	Introduction of HSDPA feature to TS25.214	B	Nokia	Approved	(*6) Day 5 12:38-12:56
171	5	049	-	25.213	R1-02-0515	The inclusion of HSDPA into 25.213	B	Panasonic	Approved	(*7) Day 5 13:52-13:56
172	5	126	1	25.212	R1-02-0492	Changes to 25.212 for HSDPA work item	B	Siemens	Approved	(*8) Day 5 14:00-14:03
173	5	076	1	25.221	R1-02-0507	CR to include HSDPA in TS25.221	B	Siemens	Approved	(*9) Day 5 14:13-14:18
174	5	066	1	25.222	R1-02-0508	Inclusion of HSDPA in 25.222	B	CATT/CWTS Siemens IPWireless	Approved	(*10) Day 5 14:19-14:24
175	5	026	1	25.223	R1-02-0509	CR to include HSDPA in TS25.223	B	Samsung	Approved	(*11) Day 5 14:25-14:27
176	5	081	1	25.224	R1-02-0502	Power control and procedures for HSDPA	B	InterDigital	Approved	(*12) Day 5 14:27-14:36
177	-	-	-	-	R1-02-0511	Report on Drafting Session for Release 5 CRs		IPWireless	Noted	(*13) Day 5 14:37-14:39

- (*1) Mr. Jean-Aicard Fabien (Motorola) presented this CR.
This was identical to **R1-02-0205** except one point that this T-doc was having CR number 13 being put in the CR coversheet. R1-02-0205 had already been approved on Day 1. (See No. 98)
Approved with no comments.
- (*2) Mr. Jean-Aicard Fabien (Motorola) presented this CR.
This was the revision of **R1-02-0206** which had been reviewed on Day1. (See No. 89)
Approved with no comments. (CR title to be corrected, though)
- (*3) Ms. Sarah Boumendil (Nortel) presented this CR.
This was the revision of **R1-02-0333** which had been reviewed on Day1. (See No. 92)
Topic on scaling factor quantisation would be discussed in RAN WG1#25.
Some elaboration would be needed for the description about power control
- (*4) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.
This was the revision of **R1-02-0134** which had been reviewed on Day1. (See N. 91)
There was a comment that the decision of I/Q mapping of HS-DPCCH had not been correctly reflected.
(See No. 155, 156)
→ To be revised. (Table 1 is to be corrected, Table 1a is to be deleted.)
Revisions of revisions were pointed out.
Some rewordings were suggested with respect to section 5.1.
16 QAM "power scaling" to be covered in RAN WG1#25
etc.
The revision was to be made in **R1-02-0515**. This was approved in the afternoon session. (See No. 171)
- (*5) Mr. Peter Chambers (Siemens) presented this CR.
This was the revision of **R1-02-0250** which had been reviewed on Day1. (See No. 90)
Several comments were made and this draft was to be revised. The revision was made in **R1-02-0492**. This was approved in the afternoon session. (See No. 172)
- (*6) Ms. Anu Virtanen (Nokia) presented this CR.
This was the revision of **R1-02-0473** which had been reviewed on Day 4. (See No. 157)
There were a number of comments but in the end chairman suggested approve this CR at this point saying that the details could be elaborated in the next meeting.
- (*7) Mr. Hidetoshi Suzuki (Panasonic) presented this CR. This was the revision of **R1-02-0504**.
It was pointed out that HS-DPCCH was mapped to wrong branch in Figure 1. So this needed to be revised.
This CR was agreed in principle. Since the proponent had not distributed R1-02-0515 at the time of presentation the revision which corrects the figure would be provided in the same T-doc number **R1-02-0515**.
- (*8) Mr. Peter Chambers (Siemens) presented this CR. This was the revision of **R1-02-0491**. (See No. 169)
This CR was approved with no comments.
- (*9) Mr. Marcus Purat (Siemens) presented this CR.
This was the revision of **R1-02-0294** which had been reviewed on Day1. (See No. 94)
This CR was approved with no comments.
- (*10) Mr. Marcus Purat (Siemens) presented this CR.
This was the revision of **R1-02-0213** which had been reviewed on Day1. (See No. 95)
This CR was approved with no comments.
- (*11) Mr. Marcus Purat (Siemens) presented this CR.
This was the revision of **R1-02-0239** which had been reviewed on Day1. (See No. 96)
- (*12) Mr. Marcus Purat (Siemens) presented this CR.
This was the revision of **R1-02-0219** which had been reviewed on Day1. (See No. 97)
It was pointed out that the discussion and conclusion on the issue of CQI made on the FDD mode had not been reflected in this TDD mode, although there was no need for TDD to be in line with FDD.
Mr. Marcus Purat answered that the current text was made based on the working assumption and not necessarily reflected the decisions made in this meeting. He said it would be corrected in the next revision to be in line with FDD, if FDD applied the SIR instead of the TFRC recommendation.
Chairman suggested to approve this version of the CR at this point and do necessary corrections in the next meeting.
This was CR approved. (*13) Mr. Martin Beale (IPWireless) presented this paper.
Interested companies attended a drafting session for release 5 CRs to the TDD specifications on the evening of Day4.
This meeting was unminuted. It was clear that while drafting Rel-5 CRs, it would be necessary to include details that had not been previously discussed or agreed upon within RAN WG1. This paper listed specific areas of the draft Rel-5 TDD CRs that have not been previously agreed upon within RAN WG1.
Chairman commented that this paper would be a good guidance for people to review those TDD CRs in the coming meetings. He concluded this paper is to be checked in coming meetings and necessary corrections are to be proposed.

7. Rel'5 work items besides HSDPA

7.1 Enhancement on the DSCH hard split mode

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
178	34	R1-02-0358	Further considerations on TFCI power control in hard split mode	LGE	Approved	(*1) <small>Day 2 23:47-23:52</small>
179	34	R1-02-0466	Revision of TR 25.870 to version 1.3.1	Samsung	Approved	(*2) <small>Day 5 08:32-08:37</small>

(*1) LGE presented this paper. This paper discussed about the LS we received from RAN WG3 in **R1-02-0211** (R3-020285) which we had skipped the reviewal on Day1. In this paper, the questions raised in the RAN WG3 LS and draft answers for those questions raised in the LS were provided.

This paper was approved with one editorial correction. Chairman suggested LGE to prepare one page short paper for RAN WG3 without simulation results by Day3 morning. Eventually this short paper was drafted in **R1-02-0456** and this was submitted to RAN WG3 with source name as LGE on Day3.

(*2) Mr. Jaeyoel Kim (Samsung) presented this TR.

Approved with no comments. Now the version became v.1.4.0 and this would be included in **R1-02-0512**.

This would be submitted to RAN #15 as version v2.0.0 for approval for v5.0.0.

Samsung stated that all the relevant CRs in RAN WG2 would be agreed during this week and in line with RAN WG1 CRs.

7.1.1 CRs on Hard split mode

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
180	5	123	4	25.212	R1-02-0465	Inclusion of flexible hard split mode TFCI operation	B	Samsung	Approved	(*1) <small>Day 5 08:38-08:41</small>
181	5	250	-	25.214	R1-02-0360	Description of SSDT operation for TFCI power control in hard split mode	B	LGE	To be revised	(*2) <small>Day 5 08:41-08:51</small>
182	5	250	1	25.214	R1-02-0513	Description of SSDT operation for TFCI power control in hard split mode	B	LGE	Approved	(*2) <small>Day 5 14:58-15:03</small>

(*1) Mr. Jaeyoel Kim (Samsung) presented this CR.

Approved with no comments.

(*2) LGE presented this CR.

It was pointed out that "DCH" should be "DPDCH" in the following sentence.

"UTRAN may use the SSDT operation as specified in section 5.2.2 to determine what power offset to use for TFCI in hard split mode with respect to the associated downlink DCH."

There was also one editorial comment for the second modification.

Whether the ranges of power offset ratios are based on the R99 hard split mode or this flexible hard mode split in RAN WG3 ?

→ It should be flexible hard split mode. To be checked later with RAN WG3.

This was revised in **R1-02-0513** and approved in the afternoon session. (See below)

(*3) LGE presented this CR. This was the revision of **R1-02-0360**.

This CR was approved with no comments.

The rapporteur of this WI should provide the status report on RAN WG1 e-mail reflector the week next with the revised TR. TR would be submitted to RAN#15 for approval. Samsung stated that RAN WG2 and RAN WG3 related descriptions would be included in the TR.

7.2 MIMO

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
183	36	R1-02-0246	Scenarios and requirements for MIMO evaluation	Telia AB	Noted	(*1) <small>Day 3 16:12-16:30</small>
184	36	R1-02-0486	** DOCUMENT MISSING **	Lucent	Agreed	(*2) <small>Day 4 16:35-16:54</small>

(*1) Mr. Rickard Ljung (Telia AB) presented this paper.

In this paper an operator perspective and ideas on the MIMO utilization scenarios was presented. The main conclusions were that MIMO should not only be optimised for indoor scenarios/propagation environments, but also for longer-range applications that cannot be supported by other techniques. Hence, what MIMO must provide is a support for significantly higher capacity and reliability, providing medium to high data rate services with high mobility.

Text proposal for TR 25.876 was attached to this paper.

Mr. Josef J. Blanz (Qualcomm) remarked about the following proposed text that although we should not mandate to have higher number of UE antennas, at the same time we should not restrict to do the analysis only for up to 2 UE antennas.

He said that the systems need to be robust enough to be operated in the mixture UEs that might have different number of antennas but we cannot limit it for different applications like lap-tops or PDAs. There is no benefit if we limit it up to 2 UE antennas from the beginning.

Text proposal : *"Priority shall be given to systems with 2 UE antennas."*

Lucent supported the remark from Qualcomm. Nokia supported Telia's proposal.

Due to the lack of time, no conclusion was made on this issue.

/*** Day3 closed at 16:30 ***/

(*2) Mr. Howard Huang (Lucent) presented this paper.

This paper contains the updated MIMO TR and updated requirements based on the comments from Telia in **R1-02-0246** which had been presented on Day3. Mr. Howard Huang held offline discussion among interested parties and this update reflects that discussion.

No comments were made for the requirements update.

The revision number of the TR was to be raised to v1.1.0 and to be provided for RAN#15 for information.

Joint session for the channel modelling issue with 3GPP2 will be held in RAN WG1#25 (Day2 and/or Day3).

Chairman will provide TR v.1.1.0 (in **R1-02-0494**)+ meeting invitation to 3GPP2 corresponding group and ask feedback for the suggested arrangement.

7.3 SSDT enhancement

7.3.1 Discussion paper

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
185	-	R1-02-0374	Discussion on Qth parameter in SSDT for R5	NEC	Approved	(*1) Day 2 23:53-23:59

(*1) Since this paper had been available since RAN WG1#23 in Espoo, Chairman asked floor if we could approved the contents of this paper without having it presented. (partly because it was almost midnight and we did not have enough time.) There was no comments raised and so the contents of this paper was approved. Chairman suggested the proponent to provide one short LS to inform the approved contents to RAN WG3. Eventually this LS was drafted in **R1-02-0453** and approved in **R1-02-0457** on Day3 morning. (See No. 197)

There was a question asking why there is no curves plotted for middle length ID codes in figure1 and figure2. NEC answered that there was no special reason but we can guess using the results of long and short code since those curves curves are so close to each other.

/*** Day5 started at 08:20 ***/

7.3.2 CRs

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
186	5	234	-	25.214	R1-02-0179	Definition of Qth threshold parameter in SSDT	C	NEC Fujitsu	To be revised	(*1) Day 5 08:25-08:31
187	5	234	1	25.214	R1-02-0500	Definition of Qth threshold parameter in SSDT	C	NEC Fujitsu	Approved	(*44) Day 5 14:57

(*1) Mr. Sunil Vadgama (Fujitsu) presented this CR.

There was one comment suggesting some rewording of the proposed text. So this was to be revised.

The revision was made in **R1-02-0500** and approved in the afternoon session.

(*2) This was the revision of **R1-02-0179**. Approved with one clarification.

NEC is responsible for the status report.

(Status report should be sent RAN WG1, RAN, RAN WG3 e-mail reflector)

7.4 Node B sync for 1.28Mcps TDD

7.4.1 Ad Hoc Report / Discussion paper

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
188	31	R1-02-0477	Minutes of Node B synch of 1.28 Mcps TDD AH	Samsung	Noted	(*1) <small>Day 5 08:52-09:04</small>
189	31	R1-02-0506	Some analysis on Decentralized Control for Node B synchronization in 1.28 Mcps TDD	Samsung	Noted	(*3) <small>Day 5 15:10-15:20</small>

(*1) Mr. Hyeon Woo Lee (Samsung) presented this paper.

The actual Ad hoc took place Day3 13:50 – 16:20.

Following 6 papers were covered in the AH.

R1-02-0235 Distributed approach for NodeB sync for 1.28 Mcps TDD (Mitsubishi, Siemens)

R1-02-0240 A study on Extended sequence for Node B sync in 1.28Mcps TDD option (Samsung)

R1-02-0302 Analysis of the cross-correlation properties of the proposed new extended sequences for 1.28 Mcps TDD NodeB Synchronisation (Siemens)

R1-02-0241 Simulation and Analysis for Node B Sync in 1.28 Mcps TDD Option (Samsung)

R1-02-0281 Rel5 CRs for WI NodeB synchronisation 1.28 Mcps TDD (Siemens)

R1-02-0464 Rel5 CRs for WI NodeB synchronisation 1.28 Mcps TDD (Samsung)

There were some discussion on centralised or decentralized approach but chairman suggested that we should not focus on centralised/decentralised approach here because we cannot make the decision on this issue. Rather we should focus on the issue of extended sequences.

Samsung commented that they have a paper on this topic (**R1-02-0506**) though it had not yet distributed to everyone.

Chairman postponed the decision a bit later and suggested to have a look at the actual CRs.

(*2) Samsung presented this paper.

This paper addressed the possible problems of Node B synchronisation with decentralised control. This paper concluded that we need to investigate the solutions for those possible problems.

This paper was reviewed in conjunction with the approval of the CR in **R1-02-0474** (See No.190,191) because Samsung insisted that they would not agree on the approval of those CRs without having this paper presented and checking the views of other companies.

There took place some discussion but there was no supporting comments for the Samsung's proposal. Rather there were several strong objections against Samsung proposal were made.

Having this situation Chairman concluded that we should approve the CR in R1-02-0474. Samsung agreed with this conclusion.

7.4.1 CRs on Node B synchronisation for 1.28Mcps TDD

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
190	5	082	1	25.224	R1-02-0474	Introduction of "Node B synchronization for 1.28 Mcps TDD"	B	Siemens	Approved	(*1) <small>Day 5 09:05-09:14</small>
191	5	041	1	25.225	R1-02-0474	Introduction of "Node B synchronization for 1.28 Mcps TDD"	B	Siemens	Approved	(*1) <small>Day 5 09:05-09:14</small>

(*1) Mr. Marcus Purat (Siemens) presented this paper.

There was one comment saying that the text proposed here is rather descriptive than specific. It should be more specific on what the Node B really should do.

Chairman suggested the wording could be refined in the next round.

Samsung commented that before making the decision on these CRs their **R1-02-0506** needs to be reviewed.

Chairman accepted this comment and invited people to have a look at R1-02-0506.

These CRs were revised at 12:59. Chairman asked the floor whether people did support Samsung's scheme or not.

There was one company (ETRI) supporting Samsung's scheme.

/*** Day 5 lunch break 01:05-01:50 ***/

But finally these CRs were approved.

Finally these CRs were revisited at 12:59 and approved. (Day 5 15:20)

(R1-02-0475 which contains Samsung sequence was not reviewed.

Mr. Marcus Purat stated that there had been no necessity identified to update the TR on Node B synchronization for 1.28Mcps TDD. This TR would be submitted to RAN#15 for approval.

7.5 Improvement of Inter- frequency and inter-system measurement for 1.28Mcps TDD

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
192	-	R1-02-0468	Revised draft TR 25.888 on Improvement of Inter-frequency and inter-system measurement for 1.28Mcps TDD	Samsung	Noted	(*1) Day5 10:17-10:34

(*1) Mr. Li Xiaoqiang (Samsung) presented this TR.

Ms. Evelyne Le Strat (Nortel) commented almost identical remark that had been made for this TR in RAN WG1#23.

Mr. Marcus Purat (Siemens) shared the view with Nortel.

Chairman remarked

Comments made in the last meeting have not been exactly reflected in this version.

TR structure and scope are firstly approved. Problems need to be identified before the solutions are given.

Editor should provide the clean version of the TR that has the structure and scope only in the first place. Text should be provided in separate papers and approved before being implemented into the TR.

Chairman concluded that the editor to make clean update (with no results or methods) on the RAN WG1 e-mail reflector and then text proposal to be discussed against that for proposed methods and results, complexity etc.

The clean version will be produced in **R1-02-0516**.

7.6 UE positioning enhancements for 1.28 Mcps TDD

No.	R	CR	rev	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
193	5	080	-	25.224	R1-02-0214	Introduction of "UE Positioning Enhancements for 1.28 Mcps TDD"	B	Siemens	Approved	No (*1) Comments Day5 15:08-15:08
194	5	043	-	25.225	R1-02-0214	Introduction of "UE Positioning Enhancements for 1.28 Mcps TDD"	B	Siemens	Approved	No (*1) Comments Day5 15:08-15:08

(*1) Mr. Marcus Purat (Siemens) informed that these CRs had been reviewed in **R1-02-0002** and agreed in principle in RAN WG1#23 in Espoo. (T-doc number was updated and official CR numbers were given in this version, though)

These CRs were approved with no presentation, no comments.

7.7 Tx diversity

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
195	36	R1-02-0461	Text proposal for TS25.869	Samsung	To be reivesed	(*1) Day5 15:22-15:44

(*1) Samsung presented this TR.

After some discussion it was concluded that section 7, 8, 9 be removed except section headings for RAN submission because those texts had not been approved by RAN WG1. The revision will be provided to RAN #15 for information with version number as v1.0.0. Discussions on the content of sections 7, 8, 9 are to continue in the next meeting.

Rapporteur (Nokia) will provide the status report on RAN WG1 e-mail reflector the week next.

The revision of this TR would be made in **R1-02-0518**.

R1-02-0275, 271, 272, 433 are to be discussed in RAN WG1#25.

7.9 Beamforming Postponed to RAN WG1#25.

8. Approval of the liaison statements as output from WG1

No.	Discussed Tdoc	Source	To/Cc	Title	Approved Tdoc	Notes
196	R1-02-0394	Siemens	To: R3	Reply to LS on support of flexible signalling approach for Node B synchronization for 1.28 Mcps TDD	revised in R1-02-0460	(*1) Day2 23:29-23:43
197	R1-02-0453	NEC	R3 Cc: R4	LS on definition of Qth parameter for SSDT	R1-02-0457	(*2) Day3 09:13-09:17
198	R1-02-0439	Ericsson	R3 Cc: R2	LS on answers on HSDPA open issues from RAN WG3	R1-02-0439	(*3) Day3 09:19-09:28
199	R1-02-0460	Siemens	R3	Reply to LS on support of flexible signalling approach for Node B synchronization for 1.28 Mcps TDD	R1-02-0462	(*4) Day3 12:05-12:08
200	R1-02-0469	Vodafone	R4	Response to Liaison Statement R4-020519 on HSDPA Open Issues	R1-02-0479	(*5) Day4 12:13-12:43
201	R1-02-0485	Qualcomm	T1-RF Cc: R4, R2	Response to LS on deletion of power control algorithm 2 from R99 (T1R020060)	R1-02-0485	(*6) Day4 17:56-17:57
202	R1-02-0423	Ericsson	N3 Cc : S1, S4, T1, R2, R4	Response LS on "Procedure for specifying UMTS QoS Parameters per Application"	R1-02-0423	(*7) Day5 10:13-10:14
203	R2-02-0552	RAN WG2 RAN WG1	RAN	LS on special submission of CRs for feature deferral or removal	R1-02-0517	(*8) Day5 11:26-11:34

(*1) Mr. Marcus Purat (Siemens) presented this LS.

This was the answer LS for RAN WG3 regarding their LS **R1-02-0210**(R3-020271) which we had skipped reviewal on Day1. Mr. Marcus Purat explained that since this draft answer contains original questions from RAN WG3 there was no need to have a look at the original LS.

Samsung raised 2 concerns

- It is still not clear what concrete algorithm for the flexible signalling approach is.
- We should have more explanation in the answer for error handling issue.

Although Mr. Marcus Purat responded Samsung, Samsung did not seem to be satisfied with that response. Due to the lack of time Chairman concluded to postpone the approval of this LS. Eventually the revision was provided in **R1-02-0460**. (See No. 199)

(*2) Ms. Nahoko Takano (NEC) presented this paper.

This LS was made based on the discussion held on Day2 midnight. (See No.185)

There was a question raised by Lucent about the range of Qth parameter and asking if SIR be defined in chip level or bit level. Chairman suggested sending this LS to RAN WG3 and the issue on the range should be checked offline.

(*3) Mr. Stefan Parkvall (Ericsson) presented this LS on the screen.

This was the answer to **R1-02-0438 HSDPA Open Issues for RAN WG3** which was reviewed and discussed on Day1 (See No. 99, 100)

~~There was one comment that it seemed to be forgotten to mention that the descriptions are for FDD:~~

~~There was no other comments raised and t~~This LS was approved with one above modification. As R1-02-0439 had not been distributed, Chairman suggested using same T-doc number for the approved version.

(*4) Mr. Marcus Purat (Siemens) presented this LS. This was the revision of **R1-02-0394**. (See No. 196)

Revision was done on the 2 points where Samsung had raised comments on Day 2 night session. Approved with no comments.

(*5) Mr. Yannick Le Pezennec (Vodafone group) presented this LS.

This was the outcome of the offline discussion held among the interested parties.

This draft was approved with one modification on the item b) of RAN WG1 agreement.

(*6) Mr. Serge Willenegger (Qualcomm) presented this LS.

This was the answer LS to **R1-02-0446** (T1R020060r1) which we had received from T1-RF on Day2. (See No. 11)

This LS was informing that after a joint review with RAN WG2 of the T1 issues associated with the removal of power control algorithm 2, RAN WG1 and RAN WG2 decided that power algorithm 2 shall be kept as part of R99.

(The LS from T1-RF was reviewed in the RAN WG1-RAN WG2 joint session held on Day2 evening.)

(*7) Mr. Dirk Gerstenberger (Ericsson) presented this LS.

This was the answer to **R1-02-0227**(N3-020119) from CN. (See No. 5)

This LS was informing to CN3 that RAN WG1 acknowledges the procedure outlined in the LS from CN3 and would define L1 parameters for new RABs based on input from SA WG1 or SA WG4.

(*8) Chairman presented this LS which was drafted by RAN WG2.

This was approved with a couple of corrections.

9. Discussion with RAN WG2 on in-sync/out-of-sync indication.

(Day 5 11:36-11:57)

Mr. Thomas Balon (Nokia) introduced the problem regarding the handling of in-sync/out-of-sync in RRC.
It seemed that L1 procedure of in-sync/out-of-sync had not been well understood by RAN WG2.
RRC is counting in-sync/out-of-sync indications which are sent by L1 (in effect averaging the indications.)
On frame by frame basis L1 would send in-sync, out-of-sync and nothing. What do all these indications mean, especially what does it mean by "nothing". What should RRC do with the averaging counter when it receives "nothing" from L1?
Should RRC reset the counter ? or keep on counting ?
RRC has 2 different counter for "in-sync" (bigger range) and "out-of-sync" (smaller range 1, 50, 100,...).
What should be the range of those counters from layer 1 perspective ? Chairman suggested that for the out-of-sync it should be 1,2,4,8....
These ranges should be the same for TDD as well.
In conclusion, RAN WG2 would submit CRs on this issue to RAN#15. Offline checking would be done before RAN#15 on e-mail discussion basis in prior to RAN #15. There would not be any CR in RAN WG1 on this issue.
The relevant RAN WG2 CR was CR25.331-1330 in **R2-02-0350**.

10. Closing

Chairman thanked hosting company (Motorola) for providing excellent arrangements and facilities for the meeting and its hospitality.

Next meeting is TSG RAN WG1 #25 and will be held in Paris, France 9-12 (Tuesday – Friday), April, 2002.

MEETING CLOSED at 15:50 February 22

11. TSG RAN WG1 meeting schedule in year 2000 -2002(Tentative)

Meeting	Year	Month	Date	Location	Hosts
RAN WG1 #10	2000	January	18-21	Beijing, China	Nokia
RAN WG1 #11	2000	February	29 – March 3	San Diego, CA, U.S.A	TTP1
RAN #7	2000	March	13-15	Madrid, Spain	
RAN WG1 #12	2000	April	10-13	Seoul, Korea	TTA
RAN WG1 #13	2000	May	22-25	Tokyo, Japan	NTT DoCoMo
RAN #8	2000	June	21-23	Dusseldorf, Germany	
RAN WG1 #14	2000	July	4-7	Oulu, Finland	Nokia
RAN WG1 #15	2000	August	22-25	Berlin, Germany	Siemens
RAN #9	2000	September	20-22	Hawaii, U.S.A.	North American Friends of 3GPP
RAN WG1 #16	2000	October	10-13	Pusan, Korea	Samsung, LGIC
RAN WG1 #17	2000	November	21-24	Stockholm, Sweden	Eriksen
RAN #10	2000	December	6-8	Bangkok, Thailand	Umsys
RAN WG1 #18	2001	January	15-18	Boston, U.S.A	North American Friends of 3GPP
RAN WG1 #19	2001	February	27 – March 2	Las Vegas, U.S.A.	Motorola
RAN #11	2001	March	13-16	Palm Springs, CA U.S.A.	North American Friends of 3GPP
HSDPA Ad Hoc	2001	April	5-6	Sophia Antipolis with R2	ETSI
RAN WG1 #20	2001	May	21-23 (5days)	Pusan, Korea with R2.3	Samsung
RAN #12	2001	June	12-15	Stockholm, Sweden	Eriksen
Rel-5 Ad Hoc	2001	June	26-28	Espoo, Finland	Nokia
RAN WG1 #21	2001	August	27-31 (5days)	Turin, Italy	TiLab
RAN #13	2001	September	18-21	Beijing, China	Lucent, CWTS
HSDPA Ad Hoc	2001	November	5-7	Sophia Antipolis, France	ETSI
RAN WG1 #22	2001	November	19-23 (5days)	Jeju, Korea	Samsung
RAN #14	2001	December	11-14	Kyoto, Japan	ARIB, TTC
RAN WG1 #23	2002	January	8-11	Espoo, Finland	Nokia
WG WG2 R99 AH	2002	February	5-6	Sophia Antipolis, France	ETSI
RAN WG1 #24	2002	February	18-22	Orlando, Florida, U.S.A.	Motorola
RAN #15	2002	March	5-8	Jeju, Korea	TTA
RAN WG1 #25	2002	April	9-12	Paris, France	Nortel Networks
RAN WG1 #26	2002	May	13-16	Gyeongju, Korea	Samsung
RAN #16	2002	June	4-7	Marco Island, FL, U.S.A	Motorola
RAN WG1 #27	2002	July	2-5	Oulu, Finland	Nokia
RAN WG1 #28	2002	August	20-23	North America	North American Friends of 3GPP
RAN #17	2002	September	3-6	Biarritz, France	Alcatel
RAN WG1 #29	2002	October	8-11	China	Samsung
RAN #18	2002	December	3-6	New Orleans, LA, USA	North American Friends of 3GPP

Ad Hoc References

AH31 = 1.28 Mcps TDD UE positioning & Node B synch
AH32 = HSDPA General
AH33 = HSDPA UE capability
AH34 = DSCH hard split mode
AH35 = Interfrequency and intersystem measurements (e.g. compressed mode)
AH36 = MIMO and TX diversity issues, including channel models
AH37 = Improved cell FACH state
AH38 = Beamforming
AH39 = USTS
AH40 = Release 4 issues
AH99 = Release -99 issues

Annex A. The minutes of Joint session with RAN WG2 (Day2 evening)
(Extract from RAN WG2 meeting report R2-020605)

Joint meeting with WG1 on R'99 and HSDPA (Orlando)

These are notes of the joint meeting between WG1 and WG2 held during the meeting in Orlando on 19 February 2002.

Measurements (R'99)

- GPS timing of cell frames:
 - CELL_FACH, serving cell (new or previous current). Intra-frequency and remove inter-frequency.
 - CELL_DCH: any cell from the active set.
- SFN-CFN OTD and OTD to GSM cell and UTRAN carrier RSSI => removed from CELL_FACH.
- UP: FFS.

Simultaneous reception SCCPCH/DCH and DRAC support (R'99)

R1-020252

This was a question from Intel referring to the following sentence in TS 25.331 subclause 14.8:

"A UE that supports the simultaneous reception of one SCCPCH and one DPCH shall support the DRAC procedure".

It was proposed to remove this sentence, because it was felt strange to refer to a higher layer procedure and this was not done for any other higher layer procedure. At least for future occasions it was cleaner not to mix Layer 1 and higher layer procedures. It was possible for a UE that "cheated" not to implement DRAC anyway while supporting CBS (the network had no way of checking it). Renaming the UE capability was a possible solution for this case, since support of CBS was a UE-only thing that the network did not need to be told about anyway, and the UE capability was only used for DRAC.

Decision: It was agreed to rename this UE capability.

LS from TSG-T WG1 (R'99)

R2-020423 (T1R020060r1, copy TSG-RAN WG2) LS on Deletion of power control algorithm 2 from R'99 (TSG-T WG1/RF)

Denis Fauconnier (Chairman) presented this LS.

Discussion: The proposal to delete power control algorithm 2 had been mainly to speed up testing, so if it was actually troublesome for TSG-T WG1 to delete this, it was better not to delete it.

Decision: The LS was noted. WG1 would provide a response to TSG-T WG1.

Maximum number of TFC in TFCS (R'99)

R1-020170

This CR raised three points on which clarifications were provided to WG1.

- On point 1): For the UE capability parameter "Maximum number of TFC in the TFCS", the uncertainty was whether this capability meant only L1 level capability or whether the RRC level capability was also covered as the parameter was given in connection with L1 parameters. The decision from the discussion was to clarify in 25.306 that RRC level capability is also covered with the parameter.
- On point 2) it was confirmed that the TFC was counted as sum of each TFC in the CCTrCH. Some clarification was needed in 25.306.
- On point 3) the proposal was acceptable (in general; the exact wording needed to be reviewed). This meant also that the same TFC on two different codes would thus be counted as two TFCs and by consequence that more TFCs were needed than originally had been thought. This would also be clarified in 25.306. For further study was that the value of the maximum number of TFCs seemed to have been chosen too small in the current specifications.

HSDPA

R2-020353 UE Data Rate Control in HSDPA (Panasonic)

This document had been covered in the WG2 meeting. Denis Fauconnier (Chairman) provided a summary for WG1 delegates.

<no Tdoc> List of open issues in WG3

This list had been discussed separately in WG1 and WG2. It was checked that the WGs were in line.

Decision: It was decided that the RRC specification would indicate that in case of reconfiguration influences in ARQ memory partitioning the UE may flush the buffers.

R2-020427 UE capability section in TS 25.306 (TSG-RAN WG1 Chairman)

Antti Toskala (Chairman) presented this document (originally **R1-020450**).

Decision: These WG1 results would be incorporated into 25.306 and 25.331.

R2-020319 Principles of UE capability classes for HSDPA (Siemens)

This document did not need to be treated, based on the discussion on R2-020427.

R2-020320 Parameter value ranges for HSDPA UE capability classes (Siemens)

This document did not need to be treated, based on the discussion on R2-020427.

R2-020366 TBSs & H-ARQ processes in TDD (InterDigital)

Steve Terry (InterDigital) presented this document.

Discussion: It was commented that the rationale was not TDD-specific. It had been decided in the past not to go for a solution like this with simultaneous transmissions, because it was more complex for the UE. There were also aspects of whether this could be supported from HI point of view in WG1. From HARQ point of view it would probably work. There was a preference to keep TDD and FDD the same as close as possible.

Decision: The document was noted.

R1-020451 (Higher layer support for quality indicator feedback scheme)

Katsutoshi Itoh (Sony) presented this document.

Discussion: The original document was R1-020411. It was clarified that radio bearer reconfiguration on HS-DSCH was needed.

Decision: The document was noted. This had been taken into account in the existing CR for RRC already.

Annex B. List of CRs agreed in TSG RAN WG1 #24 meeting (Orlando, FL, U.S.A.)

1. Release 99 CRs + Associated Release 4 CRs

1.1 TS 25.211

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.211	138	1	R1-02-0424	Clarification of different diversity modes used in the same active set	R99	F	TEI	Panasonic	3.9.0	3.10.0	35
2	25.211	139	1	R1-02-0424	Clarification of different diversity modes used in the same active set	Rel-4	A	TEI	Panasonic	4.3.0	4.4.0	36

1.2 TS 25.214

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.214	226	-	R1-02-0305	Clarification on DPCCH dedicated pilot bits with closed loop mode 1	R99	F	TEI	NEC	3.9.0	3.10.0	33
2	25.214	227	-	R1-02-0305	Clarification on DPCCH dedicated pilot bits with closed loop mode 1	Rel-4	A	TEI	NEC	4.3.0	4.4.0	34
3	25.214	230	1	R1-02-0487	Qth threshold parameter in SSDT	R99	F	TEI	NEC, Fujitsu	3.9.0	3.10.0	82
4	25.214	231	1	R1-02-0487	Qth threshold parameter in SSDT	Rel-4	A	TEI	NEC, Fujitsu	4.3.0	4.4.0	83
5	25.214	239	1	R1-02-0488	TPC procedure in UE when SSDT is activated	R99	F	TEI	Nokia	3.9.0	3.10.0	84
6	25.214	240	1	R1-02-0488	TPC procedure in UE when SSDT is activated	Rel-4	A	TEI	Nokia	4.3.0	4.4.0	85

1.3 TS 25.215

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.215	113	1	R1-020455	Clarification of UE measurements applicability	R99	F	TEI	Nortel, Nokia	3.9.0	3.10.0	22
2	25.215	114	1	R1-020455	Clarification of UE measurements Applicability	Rel-4	A	TEI	Nortel, Nokia	4.3.0	4.4.0	23
3	25.215	115	-	R1-020448	Correction to the definition of UTRAN GPS timing of cell frames for UE positioning	R99	F	TEI	Nortel	3.9.0	3.10.0	18
4	25.215	116	-	R1-020448	Correction to the definitions of UTRAN GPS timing of cell frames for UE positioning	Rel-4	A	TEI	Nortel	4.3.0	4.4.0	19
5	25.215	117	-	R1-020454	Correction to the definition of UE GPS timing of cell frames for UE positioning	R99	F	TEI	Nortel	3.9.0	3.10.0	20
6	25.215	118	-	R1-020454	Correction to the definition of UE GPS timing of cell frames for UE positioning	Rel-4	A	TEI	Nortel	4.3.0	4.4.0	21

1.4 TS 25.221

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.221	070	2	R1-02-0337	Clarification of spreading for UL physical channels	R99	F	TEI	IPWireless	3.9.0	3.10.0	53
2	25.221	071	2	R1-02-0337	Clarification of spreading for UL physical channels	Rel-4	A	TEI	IPWireless	4.3.0	4.4.0	54
3	25.221	072	1	R1-02-0336	Common midamble allocation for beacon time slot	R99	F	TEI	IPWireless	3.9.0	3.10.0	55
4	25.221	073	1	R1-02-0336	Common midamble allocation for beacon time slot	Rel-4	A	TEI	IPWireless	4.3.0	4.4.0	56
5	25.221	074	3	R1-02-0442	Correction to a transmission of paging indicators bits	R99	F	TEI	InterDigital	3.9.0	3.10.0	51
6	25.221	075	3	R1-02-0442	Correction to a transmission of paging indicators bits	Rel-4	A	TEI	InterDigital	4.3.0	4.4.0	52

1.5 TS 25.222

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.222	062	1	R1-02-0338	Correction to addition of padding zeros to PICH in TDD	R99	F	TEI	IPWireless	3.7.0	3.8.0	59
2	25.222	063	1	R1-02-0338	Correction to addition of padding zeros to PICH in TDD	Rel-4	A	TEI	IPWireless	4.2.0	4.3.0	60
3	25.222	064	3	R1-02-0282	Clarification of the requirement for the determination of the rate matching parameters and editorial corrections to 25.222	R99	F	TEI	InterDigital	3.7.0	3.8.0	57
4	25.222	065	3	R1-02-0282	Clarification of the requirement for the determination of the rate matching parameters and editorial corrections to 25.222	Rel-4	A	TEI	InterDigital	4.2.0	4.3.0	58

1.6 TS 25.223

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.223	024	1	R1-02-0340	Removal of quantisation of b_j gain factor when calculated from a reference TFC	R99	F	TEI	IPWireless	3.7.0	3.8.0	63
2	25.223	025	1	R1-02-0340	Removal of quantisation of b_j gain factor when calculated from a reference TFC	Rel-4	A	TEI	IPWireless	4.3.0	4.4.0	64
3	25.223	027	-	R1-02-0341	Channelisation code-specific multiplier operation under autonomous SF change	R99	F	TEI	IPWireless	3.7.0	3.8.0	65
4	25.223	028	-	R1-02-0341	Channelisation code-specific multiplier operation under autonomous SF change	Rel-4	A	TEI	IPWireless	4.3.0	4.4.0	66
5	25.223	029	-	R1-02-0342	Alignment of $\gamma(i)$ gains of 25.223 with SIR target of WG2 25.331	R99	F	TEI	IPWireless, Siemens	3.7.0	3.8.0	67
6	25.223	030	-	R1-02-0342	Alignment of $\gamma(i)$ gains of 25.223 with SIR target of WG2 25.331	Rel-4	A	TEI	IPWireless, Siemens	4.3.0	4.4.0	69

1.7 TS 25.224

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.224	078	1	R1-02-0343	Removal of quantisation of bj gain factor when calculated from a reference TFC	R99	F	TEI	IPWireless	3.9.0	3.10.0	69
2	25.224	079	1	R1-02-0343	Removal of quantisation of bj gain factor when calculated from a reference TFC	Rel-4	A	TEI	IPWireless	4.3.0	4.4.0	70
3	25.224	083	1	R1-02-0501	TDD MAC layer subchannel assignment	R99	F	TEI	InterDigital	3.9.0	3.10.0	86
4	25.224	084	1	R1-02-0501	TDD MAC layer subchannel assignment	Rel-4	A	TEI	InterDigital	4.3.0	4.4.0	87
5	25.224	085	-	R1-02-0344	Transmit diversity on PICH	R99	F	TEI	IPWireless, Siemens	3.9.0	3.10.0	71
6	25.224	086	-	R1-02-0344	Transmit diversity on PICH	Rel-4	A	TEI	IPWireless, Siemens	4.3.0	4.4.0	72

2. Release 4 CRs

2.1 TS 25.214

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.214	236	1	R1-02-0489	Clarification of closed loop transmit diversity during soft handover	Rel-4	F	TEI4	Motorola, Samsung	4.3.0	4.4.0	81

3. Release 5 CRs

3.1 High Speed Downlink Packet Access -- Physical Layer

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.201	013	-	R1-02-0437	Specification of HS-DSCH for Release 5 in 25.201	Rel-5	B	HSDPA-Phys	Motorola, Ericsson	4.1.0	5.0.0	165
2	25.211	146	-	R1-02-0470	Specification of HS-DSCH for Release 5 in 25.211	Rel-5	B	HSDPA-Phys	Motorola, Ericsson	4.3.0	5.0.0	166
3	25.212	126	1	R1-02-0492	Changes to 25.212 for HSDPA work item	Rel-5	B	HSDPA-Phys	Siemens	4.3.0	5.0.0	172
4	25.213	049	-	R1-02-0515	The inclusion of HSDPA into 25.213	Rel-5	B	HSDPA-Phys	Panasonic	4.2.0	5.0.0	171
5	25.214	237	2	R1-02-0480	Introduction of HSDPA feature to TS25.214	Rel-5	B	HSDPA-Phys	Nokia	4.3.0	5.0.0	170
6	25.214	251	-	R1-020404	Introduction of power control aspects for HSDPA feature in TS25.214	Rel-5	B	HSDPA-Phys	Nortel	4.3.0	5.0.0	167
7	25.221	076	1	R1-02-0507	CR to include HSDPA in TS25.221	Rel-5	B	HSDPA-Phys	Siemens	4.3.0	5.0.0	173
8	25.222	066	2	R1-02-0508	Inclusion of HSDPA in 25.222	Rel-5	B	HSDPA-Phys	CATT, Siemens IPWireless	4.2.0	5.0.0	174
9	25.223	026	1	R1-02-0509	CR to include HSDPA in TS25.223	Rel-5	B	HSDPA-Phys	Samsung	4.3.0	5.0.0	175
10	25.224	081	1	R1-02-0502	Power control and procedures for HSDPA	Rel-5	B	HSDPA-Phys	InterDigital	4.3.0	5.0.0	176

3.2 Node B Synchronisation for 1.28 Mcps TDD

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.224	082	1	R1-02-0474	Introduction of "Node B synchronization for 1.28 Mcps TDD"	Rel-5	B	RANimp-NBSLCR	Siemens	4.3.0	5.0.0	190
2	25.225	041	1	R1-02-0474	Introduction of "Node B synchronization for 1.28 Mcps TDD"	Rel-5	B	RANimp-NBSLCR	Siemens	4.3.0	5.0.0	191

3.3 Enhancement on the DSCH hard split mode

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.212	123	4	R1-02-0465	Inclusion of flexible hard split mode TFCI operation	Rel-5	B	RinImp-DSCHhsp	Samsung	4.3.0	5.0.0	180
2	25.214	250	1	R1-02-0513	Description of SSDT operation for TFCI power control in hard split mode	Rel-5	B	RInImp-DSCHhsp	LGE	4.3.0	5.0.0	182

3.4 UE positioning enhancements for 1.28 Mcps TDD

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.224	080	-	R1-02-0214	Introduction of "UE Positioning Enhancements for 1.28 Mcps TDD"	Rel-5	B	LCS-128Pos	Siemens	4.3.0	5.0.0	193
2	25.225	043	-	R1-02-0214	Introduction of "UE Positioning Enhancements for 1.28 Mcps TDD"	Rel-5	B	LCS-128Pos	Siemens	4.3.0	5.0.0	194

3.5 Support of Site Selection Diversity Transmission in UTRAN

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.214	234	1	R1-02-0500	Definition of Qth threshold parameter in SSDT	Rel-5	C	RANimp-SSDT	NEC, Fujitsu	4.3.0	5.0.0	187

4. Special CRs for features deferral or removal

4.1 CRs Agreed by RAN WG1 (To be provided to RAN#15 by the secretary)

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.201	009	1	R1-02-0495	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	R99	F	TEI	Siemens	3.2.0	3.3.0	76
2	25.201	010	-	R1-02-0495	Removal of channel coding option "no coding" for FDD and 3.84 Mcps TDD	Rel-4	A	TEI	Siemens	4.1.0	4.2.0	77
3	25.212	127	1	R1-02-0308	Removal of channel coding option "no coding" for FDD	R99	F	TEI	Siemens	3.8.0	3.9.0	40
4	25.212	128	1	R1-02-0308	Removal of channel coding option "no coding" for FDD	Rel-4	A	TEI	Siemens	4.3.0	4.4.0	41
5	25.215	110	-	R1-02-0306	Removal of channel coding option "no coding" for FDD	R99	F	TEI	Siemens	3.9.0	3.10.0	42
6	25.215	111	-	R1-02-0306	Removal of channel coding option "no coding" for FDD	Rel-4	A	TEI	Siemens	4.3.0	4.4.0	43
7	25.222	067	1	R1-02-0309	Removal of channel coding option "no coding" for 3.84 Mcps TDD	R99	F	TEI	Siemens	3.7.0	3.8.0	44
8	25.222	068	1	R1-02-0309	Removal of channel coding option "no coding" for 3.84 Mcps TDD	Rel-4	A	TEI	Siemens	4.2.0	4.3.0	45
9	25.225	044	-	R1-02-0307	Removal of channel coding option "no coding" 3.84 Mcps TDD	R99	F	TEI	Siemens	3.9.0	3.10.0	46
10	25.225	045	-	R1-02-0307	Removal of channel coding option "no coding" for 3.84 Mcps TDD	Rel-4	A	TEI	Siemens	4.3.0	4.4.0	47

4.2 CRs not agreed by RAN WG1

(Technical contents were checked by RAN WG1. These CRs are to be submitted directly to RAN#15 by each proponent company.)

No.	Spec	CR	Rev	R1 T-doc	Subject	Release	Cat	Workitem	Source	Ver. old	Ver. new	Ref
1	25.211	142	-	R1-02-0304	Deferring of mandatory UE support of SSDT to Rel-4	R99	F	TEI	Nortel	3.9.0	3.10.0	48
2	25.211	145	1	R1-02-0496	Deferring of closed loop mode 2 transmit diversity from R99	R99	F	TEI	Nokia	3.9.0	3.10.0	78
3	25.214	238	-	R1-02-0303	Deferring of mandatory UE support of SSDT to Rel-4	R99	F	TEI	Nortel	3.9.0	3.10.0	49
4	25.214	243	1	R1-02-0497	Deferring of closed loop mode 2 transmit diversity from R99	R99	F	TEI	Nokia	3.9.0	3.10.0	79
5	25.214	249	1	R1-02-0498	Deferral of DPC_MODE=1 of downlink power control	R99	F	TEI	Panasonic	3.9.0	3.10.0	80

Annex C. The Participants List

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