Tdoc RP-02-0044

Jeju Korea

Source: TSG RAN WG1 Chairman

Report from TSG RAN WG1 chairman to TSG RAN#15

Antti Toskala
TSG RAN WG1 Chairman
Nokia Networks

WG1 CR list: RP-02-0045



Executive Summary

- One Rel'99 Ad Hoc (with WG2) and two full WG1 meeting since last TSG RAN#14
- Release -99 CRs reducing rapidly, 17 CRs, of which 6 for FDD. (+CRs for deferral of some features to Rel'4/removal)
 - Measurement was biggest area of clarifications, resolved after WG1/WG2 joint session in Orlando.
- Release 4 CRs total is 1CR.
- Highest number of papers for High Speed Downlink Packet Access (HSDPA), CRs for 25201, 25.211 to 25.214 and 25,221 to 25.224 agreed.
- HSDPA was the biggest topic in TSG RAN WG1
- On Rel'99 issues TSG RAN guidance asked on the issues identified for deferral/removal during the joint meeting. Technically correct CRs reviewed by the WGs, provided with drafting company as source for TSG RAN (TSG RAN WG1 had no objections on removal of no coding option (kept for 1.28 Mcps TDD)



Release -99



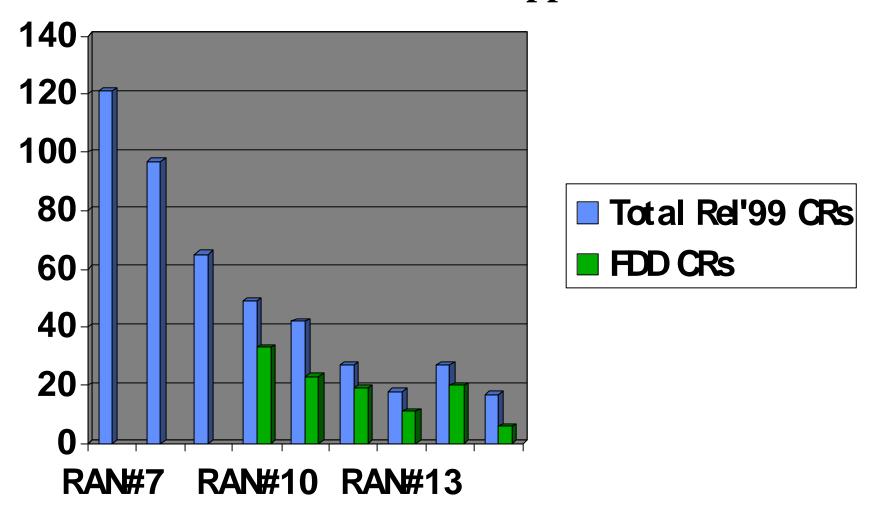
Rel'99 General

- The Rel'99 clean-up meeting with TSG RAN WG2 produced input to TSG T1 for inclusion in 34.108 on RAB parameter combinations to be used in testing
- The biggest issue was to align the measurement applicability definition with WG2.
 - Removal of non-feasible measurement cases should not cause backwards compatibility problems.
- The meeting discussed also the removal/deferral of some features as identified from the input document from operators. CRs are provided for TSG RAN for consideration, it should be noted that in WG1 there was no consensus on the removals except on the no coding option for FDD and 3.84 Mcps TDD. See separate LS in Tdoc RP-020159
- There was issue raised with TFC capability in 25.306 and CR may be raised in TSG RAN directly, see Tdoc RP-020125



WG1 CRs (Rel'99) for RAN#13

TOTAL 27 CRs for RAN#14 approval





25.211 Physical Channels and Mapping of Transport Channels to Physical Channels 25.212 Multiplexing and Channel coding 25.213 Spreading and Modulation

- 25.211 1CR
 - Clarification on the TX diversity mode operation and relation to RRC signaling.
- 25.201, 25.212, 25.213 NO CRs



25.214 Physical Layer Procedures 25.215 Measurements

25.214 2 CRs

- Clarification of closed loop Tx diversity pilot pattern definition in 25.214 (patterns as such in 25.211 are correct)
- SSDT UE power control
- Removal of qth parameter from UTRAN side (as not defined fully). For this discussion was that should there be more explicit statement of SSDT not being fully specified for UTRAN side in Rel'99 and Rel'4. Potential topic to be raised in TSG RAN meeting

• 25.215 3 CRs

- Measurement applicability
- UTRAN & UE GPS measurement definition corrections (two separate CRs)



25.221 - 25.225 Rel'99 TDD specifications

- Total of 11 CRs
- Spreading, gain factor quantisation, power control, midamble allocations, paging indicator bits etc..
- Measurement clarifications as FDD side need to be for TDD for TSG RAN #16. (Impacts 25.225)



Release 4



Release 4 (only) CRs provided on following items

- 25.214 TX diversity operation in SHO
 - Description on UE operation in an informative annex how UE can optimise performance of PDSCH with TX diversity (closed loop) in soft handover
 - WG4 asked to consider this when doing performance requirements for coming Releases.



Release 5/6 work/study items



Rel'5 WI: High Speed Downlink Packet Access (HSDPA) - Physical Layer

- Big effort done and WI completed and CRs provided for TSG RAN #15.
- Some issues noted need of verification and perhaps still a bit more detailed specification. These can be handled as corrections during Release'5 correction phase.
- TR in Tdoc RP-02-xxxx, CRs in Tdoc RP-020058
- See separate report in Tdoc RP-02-0092



Rel'5 WI: DSCH Hard Split mode enhancement

- WI completed & can be closed, CRs provided for TSG RAN approval
- TR presented for TSG RAN for approval in Tdoc RP-01-xxxx
- See separate report in Tdoc
- CRs in Tdoc RP-02-0054



Rel'6 Beamforming Enhancements

- This issue was postponed in the last WG1 meeting to be covered further 04/02 onwards as this has 06/02 milestone.
- WG3 should investigate the necessary specification changes.
- Status report in Tdoc RP-02-0128



Rel'5 WI: Improvement of Inter-frequency and Inter-system Measurements

- No new contributions, WG1 waiting for WG3 to investigate the RNC aspects (is there a problem in implementing this specific code with SF/2 concept or not) the issue and give feedback on the topic for WG1 consideration.
- Status report in Tdoc RP-02-0133



Rel'5 SI: Improvement of Inter-frequency and inter-system measurement for 1.28 Mcps TDD

- TR proposal reviewed, the scope needed to be made more generic. Work will continue in WG1 & other WGs (there are pending papers in WG1 & WG3)
- More detailed report in Tdoc RP-02-0xxx



Rel'5 WI: Support of SSDT in UTRAN

- Qth definition agreed, CRs provided for TSG RAN for approval for Rel'5, CRs in Tdoc RP-02-0056, Status report in Tdoc RP-02-xxxx
- WI can be closed, TSG RAN WG4 asked to consider the need for Node B requirements for the the coming releases.



Rel' 5/6 WI: MIMO

- Together with TX diversity studies channel model was discussed to be used with MIMO/Tx diversity simulations
- The details seem to be difficult to agree, issue put to the email discussions and to be resumed in the next meeting
- The TR progressed with requirements for MIMO work and provided for information for TSG RAN in Tdoc RP-01-xxxx. See WI Report in Tdoc RP-01-xxxx
- Joint activity planned with 3GPP/3GPP2 for TSG RAN WG1#25 in Paris for channel modeling (proposal to be made to 3GPP2 side, further progress based on feedback received)



Rel'5 Study Item: Radiolink Performance Enhancements

- TX diversity was discussed (beyond Rel'5), updates for the TR were done
- See separate report in Tdoc RP-01-xxxx, TR in Tdoc RP-02-xxxx



Release 5 1.28 Mcps TDD Progress

- 1.28 Mcps TDD node B synch
 - WI completed, CRs in Tdoc RP-02-0055
 - Status report in Tdoc RP-02-xxxx
- UE Positioning enhancement for 1.28 Mcps TDD
 - Issues to be reported by WG2
 - CRs in WG1 in Tdoc RP-02-0057



Release 5 specifications

• There is a Rel'5 CR to all WG1 specifications except 25.215, which should be obviously included in Rel'5 as well



Annex 1. Coming TSG RAN WG1 meetings

- WG1#25 9-12.4.2002 Paris, France (Host: Nortel Networks)
- WG1#26 13-16.5.2002 Kyongju ,Korea (Host: Samsung) (MON-THU)
- WG1#27 2-5.7.2002 Oulu, Finland (Host Nokia, Sonera, TAC Finland, Elisa Communications, Finnet) (NEW DATE)
- WG1#28 20-23.8.2002 TBD, North America (Host: North American Friends of 3GPP)
- WG1#29 24-27.9.2002 TBD, China (dates to be checked) (Host Samsung)
- WG1#30 12-15.11.2002 TBD

