Tdoc RP-030130

Birmingham, UK

Source: TSG RAN WG1 Chairman

Report from TSG RAN WG1 chairman to TSG RAN#19

Antti Toskala
TSG RAN WG1 Chairman
Nokia Networks
WG1 CR list: RP-030131



Executive Summary

- Two full WG1 meetings since last TSG RAN#18 Also joint Ad Hoc on MIMO channel modelling with 3GPP2 01/03 (in connection with WG1#30 meeting)
- New TSG RAN WG1 Officials Elected
- Release -99 CRs 1 for FDD, 0 for TDD
- Release 4 CRs total is 0 for FDD, 2 for TDD
- Release 5 CRs total 8 for FDD, 12 for TDD
- Approx. 70% the meeting time used for Rel'6.



Release -99



New Officials for WG1

- WG1 Chairman:
 Dirk Gerstenberger (Ericsson)
- WG1 Vice-chairmen:
 Masafumi Usuda (NTT DoCoMo)
 Juho Lee (Samsung)



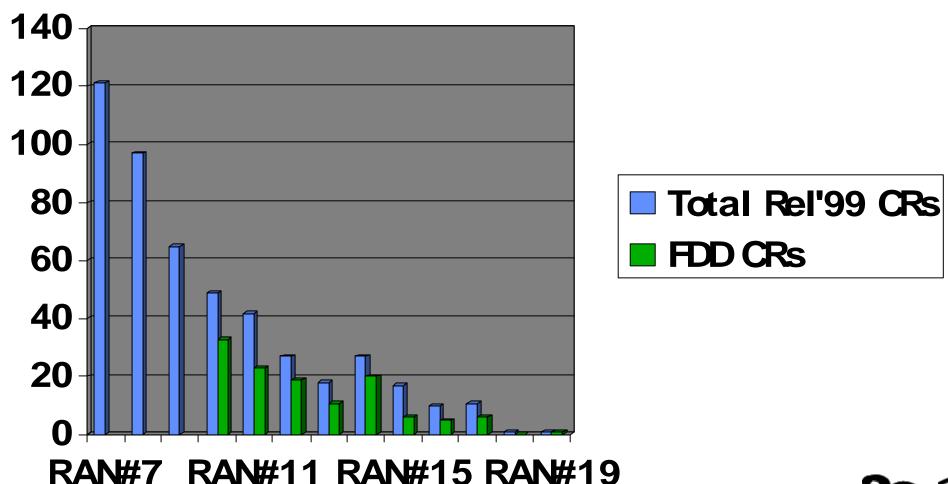
Rel'99 General

- For Release'99 1 CR, +1 one in email discussion (not agreed).
- The issues were:
 - Example in the Annex for TX diversity had error in the equation for the verification example
 - The issue for email discussion Node B SIR measurement definition with multiple antennas and or radio links. This is done as a company proposal for TSG RAN and Release is to be decided in TSG RAN as there were different views whether this is clarification (Rel'5) or correction (Rel'99).



WG1 CRs (Rel'99) for RAN#19

TOTAL 1 Rel'99 CRs for RAN#19 approval, 1 for FDD





Release 4



Rel-4: CRs provided on following items

- TDD
 - 1.28 Mcps TDD power control
 - Midamble shifts



Release 5 CRs



Rel-5: CRs

General

- HSDPA Related: 7 for FDD, 10 for TDD
- Others 3 CRs, 1 for FDD TX diversity clarification, 2 TDD TPC
- FDD HSDPA
 - CQI index ordering
 - CQI and TX diversity relationship
 - HSDPA power measurement
 - HS-PDSCH bit scrambling correction
 - SSDT and HSDPA relationship
 - + figure/notation corrections
 - + TX diversity & HS-SCCH to be address in WG1#32



Rel-5: (cont.)

- TDD HSDPA
 - HS-SCCH timing
 - CQI timing
 - HSDPA link adaptation
 - HS-SICH quality measurement
 - Timing requirements
 - Smaller corrections
 - Unresolved: HS-SICH field coding to be discussed in WG1#32
- Other issues
 - Clarification of RX path definition to be discussed in WG1#32
 - TPC command combining in SHO (with TPC mode 2) to be discussed in WG1#32



Release 6 activity



Rel-6 Activity

- Biggest topic was Enhanced uplink DCH (by number of inputs & number of companies contributing) around 30 papers per meeting treated, some left for coming meetings. Report RP-030158
- FCS (intra-Node B FCS) no discussions, status report proposes closing of SI
- Beamforming enhancements no discussions (RP-030088), WG1 part seems ready
- Radio link performance enhancements, status report in RP-030089, covered
 - TX diversity discussed (all papers)
 - HSDPA enhancements (not all papers covered)
 - Power control enhancements (not all papers covered)
- OFDM discussed (all papers) (RP-030051)
- 1.28 Mcps TDD inter-system HO discussed (all papers) (RP-030014)
- Analysis of higher chip rates for UTRAN evolution (TDD) discussed (all papers) (RP-030094) + TR for information in RP-030095.
- MIMO channel modeling status reviewed (on-going with 3GPP2) + TR for info
- Improvement of inter-frequency and inter-system measurements, status in RP-030151
- TEI6. Issues postponed to next WG1 (there is one proposed CR pending)



Rel-6 Activity (cont.)

Issues coming from other WGs

- MBMS was presented. See MBMS status report (under WG2)
- UE capability & MBMS. The requirement for parallel reception of MBMS & paging was discussed in terms of UE capability impact. If S-CCPCH is used for MBMS content, then different alternatives where identified regarding UE capability impact. The requirement in stage 2 was felt to be unclear.
 - A) UE receives two S-CCPCH is parallel
 - B) UE receives one S-CCPCH and changes as function of the paging indicator to decode a frame (or a TTI) from another S-CCPCH to check if paging was transmitted (simultaneous PICH & S-CCPCH reception)
 - C) UE receives one S-CCPCH and periodically stops S-CCPCH reception to read the paging indicator channel (only 1 channel at the time received)
- Also the discussion was held on the TTI length on S-CCPCH with MBMS, the exact decision regarding which transport channel to use for MBMS was understood still as being open in TSG RAN WG2. Having clear QoS requirements were felt to be helpful for the discussion, as currently requirements are missing.
- Enhancements to OTDOA positioning discussed in WG1#30, from last WG1 meeting topic postponed to WG1#32, see separate status report.

Issues coming from discussions for the attention of other WGs/TSG RAN

- WG1 discussed the proper way of handling the inputs to 34.108 or 25.993
 - The decided approach: Input to be done a week prior WG1 meeting, then parameters can be agreed in the same meeting (from WG1 parameters point of view)



Annex 1. TSG RAN WG1 meetings 2003

- WG1#30 7-10. 1 2003 San Diego, US (Host: Qualcomm)
 - Includes Joint Spatial Channel Modeling (SCM) Ad Hoc with 3GPP2
- WG1#31 18-21. 2. 2003 (Tokyo, Japan) (Host: NTT DoCoMo)
- WG1#32 19-23.5.2003 (Paris, France) (Host:European Friends of 3GPP)
- WG1#33 25-29.8.2003 (New York, USA) (Host: North American Frieds of 3GPP)
- WG1#34 6-10.10.2003 (Seoul, Korea, (Host: Samsung)
- WG1#35 17-21.11.2003 (Lisbon, Portugal, (Host: European Friends of 3GPP)



Annex 2: Updated WG1 Email Ad Hocs Codes

- AH61 = Interfrequency and intersystem measurements (e.g. compressed mode)
- AH62 = MIMO and TX diversity
- AH63 = Beamforming
- AH64 = Enhanced Uplink DCH
- AH65 = OFDM
- AH66 = Higher Chip rate TDD
- **AH99** = **Release** -99 issues
- AH40 = Release 4 issues
- AH50 = Release 5 issues (HSDPA etc.)
- AH60 = Other Release 6 issues included inputs for TR 25.993.