

Status Report for WI to TSG

**Work Item Name: Performance Requirements of Receive Diversity for HSDPA**

**SOURCE: Rapporteur**

**TSG: RAN**

**WG: 4**

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**Ref. to WI sheet: RP-040731.doc, TSGRP#22 (2003)**

**Progress Report since the last TSG (for all involved WGs):**

**RAN WG4:**

Work for the 5 codes was discussed and agreed

- Performance numbers including implementation margin on FRC, FRC\_OL, FRC\_CL, HS-SCCH, CQI\_AWGN, and CQI\_Fading were presented by Ericsson, Fujitsu, Motorola, NEC, Nokia, NTT DoCoMo, Panasonic, Qualcomm, and Sony Ericsson. The results are summarized in [1, 2], and the CR on the enhanced requirements was agreed [3]. This CR does not include performance requirements for the PA3 channel which will be agreed at the next RAN4 meeting.
- First phase results (without implementation margin) on HS-SCCH with STTD and CQI tests with Tx diversity, were presented, and the CR on the performance requirements including implementation margin will be agreed in the next RAN4 meeting.

Work for the 10 codes UE were discussed and agreed

- Simulation assumptions were discussed and agreed. First phase results without implementation margin will be presented in the next RAN4 meeting #33, and CRs on second phase results with implementation margin will be agreed in the following RAN4 meeting #34.

**List of Completed elements (for complex work items):**

- Simulation results with implementation margin for category 1-6
- Test requirements/configuration

**List of open issues:**

- Margins for the test requirements in the channel PA3
- HS-SCCH with different Tx diversity modes and performance for Category 7-8 classes

**Estimates of the level of completion (when possible):**

Categories 1-6: 90%

Categories 7-8: 20% (Work planned for completion in March 05)

**WI completion date review resulting from the discussion at the working group:**

RAN#25 (September 2004) for current work plan for categories 1-6

RAN#27 (March 2005) for categories 7-8

**References to WG's internal documentation and/or TRs:**

[1] R4-040539, Report of the Ad Hoc on HSDPA UE RX diversity (Qualcomm)

[2] R4-040546, Summary of HSDPA RX diversity simulation results with implementation margin (Motorola)

[3] R4-040572, Specification of enhanced performance requirements for HSDPA based on receiver diversity (CR 364r1 to 25.101 Rel-6) (Nokia)