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 progressing smoothly as per agreed RAN4 work plan

- First phase results (without 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].
- 2nd phase (with implementation margin) and closure of the current work plan can be achieved at next RAN4 meeting. Approval of the CRs are expected at next RAN plenary

Two new requirements were discussed and agreed

- a) Proposed new test to cover HS-SCCH with different Tx diversity modes. For this scenario the simulation assumptions were agreed. Simulation results without implementation margin are expected to be presented in the next RAN WG4 meeting.
- b) Performance requirements for category 7-8 classes were agreed based on an additional work plan:

∠ Simulation assumptions: Aug 04

∠ With implementation/closure : Feb 05

Need for the signalling of the Rx diversity capability was discussed [2]. It was agreed that this proposal brings an interesting subject, and it would be studied further.

List of Completed elements (for complex work items):

- Simulation parameters and assumptions for category 1-6
- Simulation results without implementation margin for category 1-6

List of open issues:

- Test requirement/configuration
- Margins for the test requirements
- 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: 60%

Categories 7-8: 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] R4-040360, HSDPA Rx Diversity Simulation Results, Motorola *et al.*[2] R4-040286, UE capability of Receive Diversity of HSDPA, Panasonic