

## Status Report for WI to TSG

**Work Item Name: MIMO processing for HSDPA**

**SOURCE: Rapporteur**

**TSG: RAN**

**WG: 1**

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**Ref. to WI sheet: RAN\_Work\_Items.doc**

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

**RAN WG1:**

A 3GPP-3GPP2 Spatial Channel Model AdHoc Group (SCM AHG) has been formed with the purpose of harmonization of spatial channel modeling assumptions between the 3GPP2 SCM AdHoc group (reporting to 3GPP2-TSG-C WG3) and the 3GPP MIMO AdHoc group (reporting to 3GPP-TSG-RAN WG1). The main objectives of this group are to define a common set of physical parameters (e.g. power delay profiles, angle spreads) and system evaluation methodology for MIMO systems.

The first joint SCM AHG meeting took place in Paris, France, April 10-11, 2002, co-located with the 3GPP-TSG-RAN WG1 #25 meeting. The next physical meeting has been tentatively scheduled to coincide with the 3GPP-TSG-RAN WG1 #28 meeting in Seattle, USA in August 2002. Conference call meetings are scheduled to take place approximately once every month. One conference call meeting took place on May 3, 2002 and the next is scheduled for June 5.

It was agreed that the SCM-AHG must provide a status report on the physical parameters and the system evaluation methodology by the August meeting in Seattle. It is expected that the status report will contain the final agreements on the physical parameters and the system evaluation methodology items. Currently, multiple topics are being addressed in parallel, and progress has been made in specifying a common spatial channel model.

Because of the SCM AHG work, the MIMO TR 25.876 [1] has not been updated since the previous TSG-RAN #15 meeting.

**RAN WG2:**

The WI has not been treated yet.

**RAN WG3:**

The WI has not been treated yet.

**RAN WG4:**

The WI has not been treated yet.

**List of completed elements:**

- Requirements

**List of open issues:**

- Link level channel model
- System level channel model (to be harmonized with 3GPP2)
- Evaluation of MIMO proposals
- Impacts to UE and UTRAN implementation.
- Impacts to physical layer operation.
- Conclusion

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

30%

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

03/2003 (TSG-RAN#19)

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

[1] RP-020240, "Multiple-Input Multiple-Output Antenna Processing for HSDPA", TR 25.876 v1.1.0