Status Report for WI to TSG

Work Item Name: MIMO Physical Layer

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:
Since the last RAN plenary meeting, the 3GPP-3GPP2 Spatial Channel Model AdHoc Group (SCM AHG) has finalized and approved the SCM text. The document includes detailed descriptions of channel models for link and system-level simulations. This document was presented and accepted by RAN1 [1] at RAN1#32. Corrections will still be accepted over the SCM reflector, and the document will be updated periodically to reflect these changes; however, major changes will be allowed only under RAN1 change control.

Due to the SCM AHG work, the MIMO TR 25.876 [3] has not been updated for a while. Now that the SCM has completed its work, MIMO discussions have restarted at the most recent RAN1 meeting (RAN1#32) with several companies making contributions on the following topics:
- Text proposals for changing the structure of the TR,
- MIMO system proposals for FDD and TDD, and
- System and Link simulation results

All of the presented contributions were noted during the meeting and interested companies were encouraged to contribute further into the MIMO work item for future meetings.

List of completed elements:
- Requirements
- Link level channel model
- System level channel model

List of open issues:
- System level simulation methodology
- Evaluation of MIMO proposals
- Impacts to UE and UTRAN implementation.
- Impacts to physical layer operation.
- Conclusion

Estimates of the level of completion (when possible):
35%

WI completion date review resulting from the discussion at the working group:
03/2004 (TSG-RAN#23)

References to WG's internal documentation and/or TRs:
[1] R1-030509, "TR 25.996: Spatial Channel Model for Multiple-Input Multiple Output Simulations v1.0.0," 19th-23rd May, Paris, France.
[3] RP-020240, "TR 25.876: Multiple-Input Multiple-Output Antenna Processing for HSDPA"