

Status Report for MIMIO WI to TSG-RAN

Work Item Name: MIMO processing for HSDPA

SOURCE: Howard Huang, Lucent TSG: RAN WG: 1

E-mail address rapporteur: hchuang@lucent.com

Ref. to WI sheet: RAN_Work_Items.doc

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

RAN WG1:

Link level channel model. The specification of the link level channel model is complete with the exception of a couple parameters. The link level channel model is to be used in link level simulations for calibration purposes, meaning they will be used to compare the performance results from different implementations of a given algorithm. Link level simulations will not be used to compare performance of different algorithms.

System level simulations have been identified as the basis for comparing different MIMO algorithms and proposals. A generic methodology and channel model have been identified.

MIMO requirements in the MIMO technical report [1] have been updated to include environments and applications for which MIMO should be optimized. These requirements will for the basis of harmonization discussions with 3GPP2 colleagues.

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

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

09/2002 (TSG-RAN#17)

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

[1] RP-02-xxxx, "Multiple-Input Multiple-Output Antenna Processing for HSDPA", TR 25.876 v1.1.0