

Status Report for SI to TSG

Agenda Item: 8.11.1

Study Item Name: "Radio Link Performance Enhancements"

SOURCE: Rapporteur

TSG: RAN

E-mail address rapporteur: antti.toskala@nokia.com

Ref. to WI sheet: RAN_Work_Items.doc

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

Tx diversity for multiple antennas (TR25.869)

One text proposal on simulation results of 4Tx OL-CL diversity scheme (agreed to the TR), and a discussion paper on fast beam selection in macro diversity were addressed at RAN WG1#36 meeting.

There has been no progress on evaluation of the schemes since RAN WG1#32 meeting. As there is a general understanding that system models agreed on MIMO WI would be employed also to this SI, many experts are not focusing on TR25.869 at the moment.

HSDPA enhancements (TR25.899)

Input contributions (3) were not handled during RAN WG1#36 meeting, and will be addressed at RAN WG1#37. The TR was endorsed and raised to V0.4.0.

Power Control enhancements (for TDD) (TS25.898)

No input contributions were discussed at RAN WG1#36 meeting.

List of Completed elements (for complex work items):

Tx diversity for multiple antennas

- Description of studied schemes

HSDPA enhancements

- Description of studied schemes
- Evaluation of some described schemes

List of open issues:

Tx diversity for multiple antennas

- System simulation model.
- Evaluation of presented pilot schemes + conclusion.
- Reviewed performance results.
- Impacts to UE and UTRAN implementation.
- Impacts to physical layer operation.
- Complete "backwards compatibility to R99/R4" considerations.
- Evaluation of described schemes (comparing of different techniques).
- Conclusion

HSDPA enhancements

- Evaluation of some described schemes
- Reviewed performance results

Power Control enhancement

- Evaluation of schemes to be described in the TR

Estimates of the level of completion (when possible):**SI completion date review resulting from the discussion at the working group:**

?? This is a permanent SI, see planned completion dates for each topics below:

Tx diversity for multiple antennas

- As there is no conclusion on how the schemes in the SI TR will be evaluated, a new completion date for TR25.869 is estimated as 12/2004.

HSDPA enhancements

- As discussion on untreated input papers continues, a new completion date for TR25.899 is estimated as 06/2004.

Power control enhancement

- New completion date for TR25.989 is estimated as 09/2004.

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

[1] TR25.869 V1.2.0 "TX diversity solutions for multiple antennas", R1-030946

[2] TR25.899 V0.4.0 "HSDPA enhancements", R1-040384

[3] TR25.898 V0.1.0 "Power control enhancements", R1-030947