

Status Report for SI to TSG

Agenda Item: 8.11.1

Study Item Name: "Radio Link Performance Enhancements "

SOURCE: Rapporteur

TSG: RAN

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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)

Discussion continued on the evaluation methodology for the proposals in the TR, and one text proposal on link level simulation assumptions was agreed to the TR. Another contribution added an antenna verification algorithm for A-STTD with multiple antennas.

HSDPA enhancements (TR25.899)

Four text proposals on three different schemes were agreed to the TR25.899.

- CQI averaging & evaluation of CQI averaging
- Fractional DPCCH
- NACK-based CQI feedback

Text proposals on two other CQI reporting schemes (ODM, NAK-ODM) were left for the proponents to agree on in which format to present for approval (merged one alone or in addition to both schemes separately). A text proposal for CQI enhancement in compressed mode was not added to the TR yet as the need for the enhancement depends on the outcome of discussion on CQI & compressed mode still taking place in Rel'5 context.

Power Control enhancements (for TDD) (TS25.989)

The TR structure proposal originally presented at RAN WG1#31 meeting was contributed again to RAN WG1#32 meeting unchanged. No full agreement on the wording on performance evaluation section was reached. However, RAN WG1 did agree that the structure for the TR should be decided before RAN WG1#33 meeting in August as no progress has now taken place during the previous two meetings.

List of Completed elements (for complex work items):

Tx diversity for multiple antennas

- Description of studied schemes

HSDPA enhancements

- Description of studied 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 described schemes

Power Control enhancement

- TR structure (performance evaluation section)
- Evaluation of schemes to be described in the TR

Estimates of the level of completion (when possible):

Tx diversity for multiple antennas

- Basic techniques are introduced.

HSDPA enhancements

- Basic techniques are introduced.

Power control enhancement

- TR structure has not been fully agreed on yet.

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

Tx diversity for multiple antennas

- Completion date for TR25.869 remains as 09/2003.

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

[1] TR25.899 V0.2.0 “HSDPA enhancements”, R1-030634