

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)

One contribution on 4Tx Diversity Scheme for Sub-Arrays was discussed at RAN WG1#34 meeting. One contribution on simulation results of 4Tx OL-CL diversity scheme was discussed at RAN WG135 meeting.

HSDPA enhancements (TR25.899)

Inputs (total of 9) on PRE/POST scheme for HS-DPCCH, CQI reporting enhancements, Fractional DCH, and HSDPA operation without and associated DPCH in TDD were discussed at RAN WG1#34 meeting. Nine input contributions were handled at RAN WG1#35 meeting. They concerned CQI reporting enhancements, Fractional DCH, and HSDPA operation without and associated DPCH in TDD.

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

One input contribution was addressed at RAN WG1#34 meeting on Capacity and coverage for UTRA TDD with R99/R4-based DL Inner-Loop Power-Control. No input contributions were discussed at RAN WG1#35 meeting.

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

- 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

- Completion date for TR25.869 remains as 03/2004.

HSDPA enhancements

- Completion date for TR25.899 remains as 03/2004.

Power control enhancement

- Completion date for TR25.989 remains as 03/2004.

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 V0.3.0 "HSDPA enhancements", R1-031383

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