

Status Report for WI to TSG HSDPA RF

Work Item Name: High Speed Downlink Packet Access (HSDPA) –RF Radio Transmission/Reception, System Performance Requirements and Conformance Testing

SOURCE: Rapporteur (Edgar Fernandes, Motorola) **TSG:** RAN **WG:** 4

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Ref. to WI sheet: 43: High Speed Downlink Packet Access (HSDPA)

Progress Report since the last TSG:

RAN WG 4 has held 1 meeting since the work item status was last presented to TSG RAN #18.

a) HSDPA status for FDD

Approximately 55 documents were presented and discussed. Main issues were

1. Fixed Reference Channel (FRC) performance with single antenna -completed
2. FRC performance with STTD - completed
3. FRC performance with closed loop. Initial performance results were discussed and simulation parameters confirmed. Pending simulation this can be closed at the next RAN4 meeting
4. Alignment of simulations results is still difficult due the nature of the Variable Reference Channel (VRC) and A-VRC test. Some progress was made in this direction by taking a step by step approach
5. Further test introduced to test the CQI definition in AWGN conditions so as to verify key aspects of the RAN1 specification. Pending simulations this can be agreed at next RAN4 meeting
6. HSCCH test agreed based on a common simulation documents. Again this can be agreed at the next meeting.

In order to progress this work a number of action points were agreed. It was proposed that if the work could not be completed for the next RAN4 meeting, any outstanding issues would be included in REL6.

List of open issues in TS25.101: (Most the issue are already work in progress)

Nos.	Description	Status
1	FRC performance requirement (Class 11,12)	Closed – CR agreed for RAN#19
2	FRC Tx diversity (open loop STTD)	Closed – CR agreed for RAN#19
3	Maximum Tx power – HS-DPCCH	Closed - 99.9% PAR issues resolved
4	FRC Tx diversity (closed loop)	Open Simulation assumption agreed. Can be closed during RAN4#27
5	FRC - verification of error free HS-SCCH	Open - Proposed to omit only the affected geometry for the Ped-A 3km/h. Ped A test would still be included, only those tests, which required more BS power than the test configuration could deliver would be omitted. Can be closed during RAN4#27
6	Maximum RX power at UE	Open Proposed CR presented for review at RAN4. Can be closed during RAN4#27
7	HS-SCCH performance (no diversity)	Open Simulation assumption agreed. Can be closed during RAN4#27
8	CQI test – AWGN test conditions	Open Simulation assumption agreed. Can be closed during RAN4#27
9	VRC performance requirements (UE Classes 1-6, 11-12)	Open. Can be closed during RAN4#27

10	Augmentative VRC (A-VRC) (UE Classes 1-6, 11-12)	Open. Can be closed during RAN4#27
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b) HSDPA status for 1,28 Mcps TDD option

List of open issues in TS25.102 for 1,28 Mcps TDD option:

Nos.	Description	Status
1	VRC performance requirement	Open. First set of minimum performance requirements at high geometry factor was agreed. Simulation results for performance at low geometry factor are pending. Can be closed during Ran4#27.
2	CQI test – AWGN test conditions	Open Simulation assumption agreed. Can be closed during RAN4#27

c) HSDPA status for 3,84 Mcps TDD option

List of open issues in TS25.102 for the 3,84 Mcps TDD option:

- None

Estimates of the level of completion (when possible):

90 %

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

TSG-RAN meeting #19 (June 2003)

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

TR 25.890 V1.3.0 (2003-02)