

## Status Report for SI to TSG

### **Study Item Name: Radio Link Performance Enhancements**

**SOURCE:** Rapporteur

**TSG:** RAN

**WG:** 1

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**Ref. to WI sheet:** <for RAN this should be: RAN\_Work\_Items.doc>

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

#### **RAN WG1:**

RAN WG1 leads this SI. The SI is to be repeated for every Release. Since the beamforming measurements were moved to a separate WI, now the issue being covered under the SI is the TX diversity discussion.

The main discussion on TX diversity has been the 4-antenna schemes and necessary modifications such as pilot structures for the 4 antenna case. The latest version on the TR is in Tdoc R1-01-1347, not provided for TSG RAN at this point in time, but expected to be available for TSG RAN 03/2002. In the last WG1 meeting further simulation results on one of the possible schemes was added to the TR and separate Ad Hoc addressed those as well the pilot structures. The text on the pilot structures is to be updated in the next WG1 meeting.

#### **RAN WG2:**

The SI has not been treated yet.

#### **RAN WG3:**

The SI has not been treated yet.

#### **RAN WG4:**

The SI has not been treated yet.

### **List of Completed elements (for complex work items):**

### **List of open issues:**

Relative merits & complexity of different methods  
Pilot structures for 4 antenna case to be clarified in the TR

### **Estimates of the level of completion (when possible):**

New TX diversity schemes are not targeted for Rel'5 specifications

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

03/2002 (TSG-RAN#15)

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

- [1] R1-01-1347, "Technical Report on TX diversity",
- [2] R1-01-1322, "Report from TX diversity/MIMO Ad Hoc"