TSG-RAN meeting #11   RP-010256
Palm Springs, CA, US, March 2001

Title: Status report for TDD Base Station Classification

Source: Rapporteur

Agenda Item 6.1.1.2

Document for: Information

1   Introduction

Two classes of base stations have been identified, local area and wide area. The core requirements in Rel99 apply to the wide area BS. System scenarios and preliminary requirements for the local area BS have been defined, and are shown in TR 25.952. Further simulations and analysis are needed to complete the work in WG4. The goal is to complete this work by the RAN #12 meeting.

2   Completed Work

3GPP RAN 4 has held 4 working group meetings since the work item was approved in June 2000. The following work has been completed:

✓ Agreed to classify basestations according to the minimum coupling loss between BS and UE.
✓ Defined two classes of basestations, wide area and local area.
✓ Defined path loss models for indoor and mixed indoor/outdoor environments.
✓ Defined minimum coupling loss values for local area basestation.
✓ Agreed to propagation conditions for local area basestation.
✓ Identified core specifications in 25.105 effected by BS classification and derived new requirements for the local area BS.

3   Work to be completed

✓ Verify receiver blocking and intermodulation requirements for local area BS.
✓ Verify ACLR and ACS requirements for local area BS.
✓ Update 25.142 conformance test specification.

4   Status of specifications

4.1   Parameters for classification in TS 25.105

Clause	Description	Status
4.2	Base station classes	Completed.
6.3.1	Frequency stability	Completed.
6.6.2.2.1	ACLR minimum requirement	Preliminary requirement
6.6.2.2.2	ACLR in case of operation in proximity to TDD BS or FDD BS operating on adjacent frequency	Preliminary requirement
6.6.2.2.3	ACLR in case of co-siting with TDD BS or FDD BS operating on adjacent frequency	Preliminary requirement
7.2.1	Reference Sensitivity Level	Completed.
7.4.1	ACS	Preliminary requirement

7.5	Blocking Characteristics	Preliminary requirement
7.6	Intermodulation Characteristics	Preliminary requirement
8.3.2.1	Performance requirement for multipath fading case 2	Completed
8.3.3.1	Performance requirement for multipath fading case 3	Completed

4.2   Parameters for classifications in TS 25.123

Clause	Description	Status
9.2.1.1.1	RSCP absolute accuracy	Completed
9.2.1.1.2	RSCP relative accuracy	Completed
9.2.1.1.3	RSCP range/mapping	Completed
9.2.1.2.1	ISCP Intra frequency absolute accuracy	Completed
9.2.1.2.2	ISCP range/mapping	Completed
9.2.1.3.1	Received total wide band power intra frequency absolute accuracy	Completed
9.2.1.3.2	Received total wide band power range/mapping	Completed
A.9.2.1	Test parameters for UTRAN Rx measurements	Completed

5   Impacts on other RAN Working Groups

No impact identified.