TSG-RAN meeting #13   RP-010644
Beijing, China, 18 - 21 September 2001

Source: **Rapporteur**

Title: **Status report for Rel 5 work item on**
                     Base Station Classification for 1.28 Mcps TDD option

Agenda Item: **9.1.2.3**

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1   Introduction

Similar as in case of the 3.84 Mcps TDD option, two classes of base stations (BS) have been identified for the 1.28 Mcps TDD option also, Wide Area BS and Local Area BS. The requirements for the 1.28 Mcps TDD option currently contained in Release 4 of the core specifications apply to the Wide Area BS. System scenarios and preliminary requirements for the Local Area BS have been defined and are shown in TR 25.882. Further simulations and analysis are needed to complete the work in RAN WG 4. The goal is to complete this work by the RAN #14 meeting.

2   Completed Work

RAN WG 4 has held 2 meetings since the work item was approved by RAN #12 in June 2001. The followed work has been completed by RAN WG4:

- ✓ Agreed to classify base stations according to the minimum coupling loss between BS and UE.
- ✓ Defined two classes of base stations, Wide Area BS and Local Area BS.
- ✓ Defined path loss models for indoor and mixed indoor/outdoor environments.
- ✓ Defined minimum coupling loss values for Local Area scenarios.
- ✓ Agreed to propagation conditions for Local Area BS.
- ✓ Identified those core requirements in 25.105 which are effected by BS classification and derived new requirements for the following parameters:
  - Frequency stability
  - Reference sensitivity level
  - Blocking and intermodulation characteristics (further study required in case of co-location with GSM 900 and/or DCS 1800)
  - Demodulation in static and in multipath fading conditions
  - Receiver dynamic range
- ✓ Identified those core requirements in 25.123 which are effected by BS classification and derived new requirements for the following parameters:
  - RSCP
  - Timeslot ISCP
  - Received total wide band power

3 Work to be completed

- ✓ Verify ACLR and ACS requirements for Local Area BS.
- ✓ Verify blocking requirements in case of co-location with GSM 900 and/or DCS 1800.

4 Status of specifications

4.1 Parameters for classification in TS 25.105

Clause	Description	Status
4.2	Base station classes	Completed
6.3	Frequency stability	Completed
6.6.2.2	ACLR	Further study required
7.2	Reference sensitivity level	Completed
7.3	Dynamic range	Completed
7.4	ACS	Further study required
7.5.0	Blocking characteristics: Minimum requirement	Completed
7.5.1	Blocking characteristics: Co-location with GSM 900 and/or DCS 1800	Further study required
7.6	Intermodulation characteristics	Completed
8.2	Demodulation in static propagation conditions	Completed
8.3	Demodulation of DCH in multipath fading conditions	Completed

4.2 Parameters for classifications in TS 25.123

Clause	Description	Status
9.2.1.1.1	RSCP absolute accuracy requirements	Completed
9.2.1.1.2	RSCP relative accuracy requirements	Completed
9.2.1.2.1	Timeslot ISCP absolute accuracy requirements	Completed
9.2.1.3.1	Received total wide band power absolute accuracy requirements	Completed

5 Impacts on other RAN Working Groups

No impact identified.