3GPP TSG RAN **Tdoc RAN 615/99**
13 - 15 December 1999
Nice, France

Source : **RAN WG4 Chairman**

Title : **Status report for RAN WG4**

1 Introduction

This document contains the status report of 3GPP TSG RAN WG4 at RAN#6.

The progress has been good since RAN#5, with a completion of most of the outstanding items. Aspects that were recently solved include

- 24 dBm power class 3 terminals
- UE performance requirements
- BTS performance requirements
- Power control issues
- Initial setting of RRM measurement accuracy's
- Cell selection/reselection

The following contains the status for each report or specification from RAN WG4

Spec	Title	Ver	No CRs	After RAN ver
25.101	UE Radio transmission and reception (FDD)	3.0.0	17	3.1.0
25.102	UE Radio transmission and reception (TDD)	3.0.0	13	3.1.0
25.104	BTS Radio transmission and reception (FDD)	3.0.0	20	3.1.0
25.105	BTS Radio transmission and reception (TDD)	3.0.0	17	3.1.0
25.123	Support of RF parameters in Radio Resource Management	2.3.0		3.0.0
25.133	Support of RF parameters in Radio Resource Management	2.3.0		3.0.0
25.141	Basestation conformance testing (FDD)	2.1.3		3.0.0
25.142	Basestation conformance testing (TDD)	2.2.0		3.0.0
25.113	Basestation EMC	2.0.1		3.0.0
25.941	Document Structure	3.0.0	1	3.1.0

25.942	RF System scenarios	2.1.1		2.1.1
25.943	Deployment scenarios	0.1.0		0.1.0

2 25.101

2.1 Status of the document

Document is stable, however a few items are still open.

- Performance requirement for PCIH, FACH, Blind Rate Detection (BRD), Compressed mode, soft handover, inner, outer loop power control and SSDT. These simulations are ongoing with WG4 and depending on WG4 contributions should be completed by 1st quarter 00.

- New proposal for compressed mode using puncturing has not been discussed in WG4 and if information is only available in late Jan 00 will make it difficult to complete the above key simulations, if this is needed in addition to the compressed mode via spreading factor reduction which is on the correct plan

- Specification requirements for Peak Code Domain error.

- Specification requirements for terminal class 1 (33) and class 2 (27) dBm are included in the specifications, however the performance requirements for these terminals have not be completely specified. This is not seen as a critical issue and the two main power classes which are class 3 (24 dBm) and class 4 (21 dBm) have been completed. This will be probably be covered for release 00 if required.

2.2 Change Requests presented for approval by category

2.2.1 Editorial

The following CRs are in RP-99771:

TSG_DOC	SPEC	CR	RE	3G_P	SUBJECT
R4-99855	25.101	005		R99	UE DL performance requirements
R4-99935	25.101	012		R99	Editorial changes to 25.101v3.0.0

2.2.2 Corrections/Modifications

The following CRs are in RP-99772:

TSG_DOC	SPEC	CR	RE	3G_P	SUBJECT
R4-99752	25.101	003		R99	Modifications for Receiver Characteristics
R4-99756	25.101	004		R99	Corrections to Tx Diversity testing assumptions
R4-99847	25.101	001	2	R99	Correction of UE Measurement Channels Rev.2
R4-99857	25.101	006		R99	Corrections to Annex C Down link Physical Channels
R4-99860	25.101	007		R99	Proposal for ACLR/ACS specifications for class 3
R4-99929	25.101	009		R99	Clarification of Uplink inner loop power control requirements
R4-99932	25.101	011		R99	Power setting of DPCH
R4-99937	25.101	014		R99	Update of ITU Region 2 Specific Specifications and proposed universal channel numbering
R4-99966	25.101	015		R99	Performance requirements for demodulation of DCH in Site Selection
R4-99977	25.101	016		R99	Change of propagation conditions
R4-99992	25.101	017		R99	CR for minimum requirements for UE power class 1 and 2 in 25.101
R4-99998	25.101	018		R99	Downlink Inner loop power control

2.3 Addition of features

The following CRs are in RP-99773:

TSG_DOC	SPEC	CR	RE	3G_P	SUBJECT
R4-99896	25.101	008		R99	Addition of propagation condition to inner and outer loop PC tests in
R4-99931	25.101	010		R99	Modifications to demodulation test parameters and requirements in inter-cell soft handover
R4-99A02	25.101	019		R99	Performance requirements in downlink compressed mode

3 25.102

3.1 Status of the document

Document is stable. A few performance requirement numbers are missing, similar to the FDD UE specification.

3.2 Change Requests presented for approval by category

3.2.1 Editorial

The following CRs are in RP-99774:

TSG_DOC	SPEC	CR	REV	3G_P	SUBJECT
R4-99753	25.102	004		R99	Open item list in Annex D of 25.102v3.0.0
R4-99948	25.102	008		R99	Editorial changes to 25.102v3.0.0

3.2.2 Corrections/Modifications

The following CRs are in RP-99775:

TSG_DOC	SPEC	CR	REV	3G_P	SUBJECT
R4-99694	25.102	001		R99	Corrections to 25.102 version 3.0.0
R4-99773	25.102	003		R99	Receiver spurious emissions for UE TDD
R4-99866	25.102	005		R99	Change of propagation conditions recommendations
R4-99897	25.102	007		R99	Corrections to 25.102 v.3.0.0
R4-99957	25.102	010		R99	TDD uplink power control requirements
R4-99960	25.102	011		R99	Update of ITU Region 2 Specific Specifications and proposed universal channel numbering
R4-99A04	25.102	013		R99	UE power classes
R4-99A12	25.102	014		R99	Update of UE RF capabilities

3.2.3 Addition of features

The following CRs are in RP-99776:

TSG_DOC	SPEC	CR	REV	3G_P	SUBJECT	CA
R4-99889	25.102	006		R99	Performance Requirements	B
R4-99956	25.102	009		R99	Peak Code Domain Error	B
R4-99969	25.102	012		R99	Transmit Template, should to shall	B

4 25.104

4.1 Status of the document

Document is stable, however there are a few open items

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- Protection outside a licensee's frequency block (to be removed?)
- Receiver performance with frequency error
- Performance requirement for dynamic moving and birth/death channels

4.2 Change Requests presented for approval by category

4.2.1 Editorial

The following CRs are in RP-99777:

TSG_DOC	SPEC	CR	REV	3G_PH	SUBJECT	C
R4-99776	25.104	002		R99	Base Station Modulation Code Domain Power	D
R4-99813	25.104	004		R99	Removal of Open Item List	D

4.2.2 Corrections/Modifications

The following CRs are in RP-99778:

TSG_DOC	SPEC	CR	REV	3G_PH	SUBJECT	C
R4-99651	25.104	001		R99	Correction to Annex B.4 Birth-Death propagation conditions	F
R4-99784	25.104	003		R99	Measurement channels for uplink	F
R4-99815	25.104	005		R99	Clarification of ACLR requirement	F
R4-99819	25.104	006		R99	New Spurious Emission requirement for Category B	F
R4-99827	25.104	007		R99	Base Station Primary CPICH power accuracy	F
R4-99858	25.104	008		R99	Correction of Receiver sensitivity	F
R4-99947	25.104	010		R99	Correction of BS output power definition	F
R4-99949	25.104	011		R99	Clarification of power control requirements in TS 25.104	F
R4-99950	25.104	012		R99	Corrections for BS FDD Blocking Characteristics	F
R4-99967	25.104	013		R99	Output power accuracies in extreme conditions	F
R4-99970	25.104	014		R99	Clarification of Antenna Diversity receiver requirements	F
R4-99972	25.104	015		R99	Spurious Emission in 25.104	F
R4-99977	25.104	016		R99	Change of propagation conditions	F
R4-99979	25.104	017		R99	Clarification of the EVM requirement	F
R4-99996	25.104	018		R99	Introduction of requirement values in section 8	F
R4-99997	25.104	019		R99	Update of ITU Region 2 Specific Specifications and proposed universal channel numbering.	C
R4-99A09	25.104	020		R99	Corrections for BS FDD RX spurious emission	F
R4-99000	25.104	021		R99	BS Spurious Emission Requirements for Co-Existence UTRA-	B

4.2.3 Addition of features

None

5 25.105

5.1 Status of the document

Document is stable, however a few open items similar to the FDD BTS specification.

5.2 Change Requests presented for approval by category

5.2.1 Editorial

The following CRs are in RP-99779:

TSG_DOC	SPEC	CR	RE	3G_P	SUBJECT
R4-99754	25.105	006		R99	Open item list in Annex D of 25.105 v3.0.0

5.2.2 Corrections/Modifications

The following CRs are in RP-99780:

TSG_DOC	SPEC	CR	RE	3G_P	SUBJECT
R4-99695	25.105	001		R99	Corrections to 25.105 version 3.0.0
R4-99763	25.105	004		R99	Receiver spurious emissions for BS TDD
R4-99764	25.105	005		R99	Power control in UTRA TDD
R4-99864	25.105	002	2	R99	TDD Base station power accuracy of PCCPCH (remove [ ])
R4-99866	25.105	007		R99	Change of propagation conditions recommendations
R4-99884	25.105	008		R99	Timing Advance Requirements
R4-99892	25.105	011		R99	Corrections for BS TDD Blocking Characteristics
R4-99898	25.105	012		R99	Corrections to 25.105 v.3.0.0 (change ME to BTS)
R4-99944	25.105	013		R99	Synchronization Requirement
R4-99961	25.105	014		R99	Update of ITU Region 2 Specific Specifications and proposed universa channel numbering
R4-99971	25.105	015		R99	Clarification of Antenna Diversity receiver requirements
R4-99973	25.105	016		R99	Spurious Emission in 25.105
R4-99980	25.105	017		R99	ACLR

5.2.3 Addition of features

The following CRs are in RP-99781:

TSG_DOC	SPEC	CR	RE	3G_P	SUBJECT
R4-99887	25.105	009		R99	Transmit Template
R4-99891	25.105	010		R99	Performance Requirements
R4-99A01	25.105	018		R99	BS TDD Spurious Emission Requirements for co-Existence UTRA-FDD

6 25.941

6.1 Status of the document

Document is stable and complete.

6.2 Change Requests presented for approval by category

6.2.1 Editorial

None

6.2.2 Corrections/Modifications

The following CRs are in RP-99782:

TSG_DOC	SPEC	CR	RE	3G_PHA	SUBJECT
R4-99994	25.941	001		R99	CR for 25.941

6.2.3 Addition of features

None

7 25.113

The document is presented for approval. Cover sheet is RP-99723. Document is RP-99724.

Request to approve at V3.0.0

8 25.123

The document is presented for approval. Cover sheet is RP-99725. Document is RP-99726.

Request to approve at V3.0.0

9 25.133

The document is presented for approval. Cover sheet is RP-99767. Document is RP-99768.

Request to approve at V3.0.0

10 25.141

The document is presented for approval. Cover sheet is RP-99727. Document is RP-99728.

Request to approve at V3.0.0

11 25.142

The document is presented for approval. Cover sheet is RP-99729. Document is RP-99730.

Request to approve at V3.0.0

12 25.942

The document is presented for information, this in an internal report. Document is RP-99732.

13 25.943

The document is presented for information it is for release 00. Document is RP-99770.

14 Release 99 submission forms

None.

15 Miscellaneous

RAN WG4 is not aware of a number of new items being proposed in RAN WG1, and 2. It is therefore impossible at this stage to consider the effect of these on our timeplan due to additional performance requirements that may be needed in the future.

16 Concluding remarks

RAN WG4 has achieved considerable progress in our work over the last year, and all companies and delegates must be acknowledged for their hard work and fruitful collaboration. Most of the documents that had to be completed by December 99 are presented for approval to RAN #6. Although some features are not yet completed, I am fairly confident that this will be achieved rapidly, since many difficult problems are behind us, and we have solved in particular most of the items which had an impact on other groups.

17 Items for release 00

Technical corrections
Repeaters
TDD Base Station Classification
Deployment Scenarios

18 RAN WG4 meetings in 2000

Year	Meeting	Dates	Location	Country	Host
2000	WG4 #10	18 - 21 January	San Jose	USA	Cadence
	WG4 #11	29 Feb - 03 March	Los Vegas	USA	T1P1
	RAN #7	13 - 15 March	Madrid	Spain	Telefónica Moviles
	WG4 #12	23 - 26 May	Turku	Finland	Nokia
	RAN #8	19 - 21 June	Düsseldorf	Germany	Mannesmann
	WG4 #13	12 - 15 September	Milan	Italy	Omnitel
	RAN #9	25 - 27 September	tbd	tbd	Unisys/ARIB
	WG4 #14	27 - 30 Nov			
	RAN #10	11 - 13 December	tbd	USA	T1