TSGR#7(00)0181

TSG RAN#7 (Radio)
13-15 March 2000
Madrid, Spain.

Agenda Item: 8.1

Source: Nokia

Title: Work Item for Rel'00: Radio link performance enhancements

Document for: Discussion and approval

Work Item Description

Title

Radio link performance enhancements

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

After completition of Release –99, possible topics have been identified that could improve the radio link performance, especially related to the power control (inner loop) and transmission diversity methods in UTRA physical layer.

In order to improve the performance it is felt necessary to continue related studies after Release –99 completition and to include possible agreed improvements during work in the coming meetings during year 2000 to Release –2000 specifications.

4 Objective

- The purposeof this work item is to to work on the radio link performance enhancements.
- The following two technologies have been identified as candidates for Release 2000 for improved radio link performance:

1. TX diversity improvements
2. DCH/DSCH power control improvements

The following time schedule is considered for TSG RAN:

Task	Planned Start	Planned Finish
Work Item Creation	3/2000	3/2000
Work Item Approval		3/2000
Drafting and discussion, updates of specifications	4/2000	9/2000
Submission to TSG RAN for approval (TSG RAN WG1, WG2 & WG3 specifications		9/2000
Submission of modifications to RAN WG4 specifications to TSG RAN for approval		12/2000
Possible remaining corrections and clarifications	09/2000	12/2000

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X	X		
No	X			X	
Don't know					

10 Expected Output and Time scale (to be updated at each plenary)

New specifications					
Spec No. Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments

Affected existing specifications			
Spec No. CR	Subject	Approved at plenary#	Comments
25.211	Physical Channels and mapping of transport channels to physical channels (FDD)	RAN #9	
25.214	Physical Layer Procedures (FDD)	RAN #9	
25.303	Interlayer procedures in connected mode	RAN #9	
25.321	MAC Protocol Specification	RAN #9	

25.331	RRC Protocol Specification	RAN #9	
25.101	UE Radio transmission and reception (FDD)	RAN #10	
25.102	UE Radio transmission and reception (TDD)	RAN #10	
25.104	BTS Radio transmission and reception (FDD)	RAN #10	
25.105	BTS Radio transmission and reception (TDD)	RAN #10	
25.423	UTRAN Iur Interface RNSAP Signalling	RAN #9	
25.433	UTRAN Iub Interface NBAP Signalling	RAN #9	

11 Work item raporteurs

To be decided in TSG RAN WG1

12 Work item leadership

TSG RAN WG1

13 Supporting Companies

InterDigital, Lucent Technologies, Motorola, Nokia, Nortel Networks, Qualcomm

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

This is a sub-building block part of the radio interface improvement bulding block.

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)