TSG-RAN Meeting No. 21 *TSGRP-030539*
16-19 September, 2003, Frankfurt, Germany

Source: **InterDigital**

Title: **Proposed WI: "Improved access to User Equipment (UE) measurement data for Controlling Radio Network Controller (CRNC) to support Time Division Duplex (TDD) Radio Resource Management (RRM)"**

Document for: Approval

Work Item Description

Title:

Improved access to User Equipment (UE) measurement data for Controlling Radio Network Controller (CRNC) to support Time Division Duplex (TDD) Radio Resource Management (RRM)

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

The Controlling RNC (CRNC) is a critical element of the Radio Resource Management (RRM) function. In TDD the CRNC is responsible for Dynamic Channel Allocation (DCA). In order to effectively perform DCA, the CRNC needs access to measurements that characterize interference and path loss on both a cell and time slot basis.

Currently the Serving RNC (SRNC) requests and receives UE specific measurements. In the case that the SRNC and CRNC are not collocated, the CRNC will be unable to access these critical measurement data, even though they are inherently available to the network.

It is desirable for the CRNC to have access to UE related measurements such as:

- Downlink CCPCH RSCP
- UE TX power
- DL ISCP

The current Iur interface allows the SRNC to forward some UE related measurements in certain scenarios (e.g. DL ISCP data to support Downlink Power Control). However, there is no mechanism to allow the CRNC to request this information according to its own needs.

To better implement DCA, especially for multi-vendor configurations, it may be beneficial to provide the CRNC with a means to initiate the transfer of UE measurement data, rather than be limited by the scheduling dictated by the SRNC.

The study item Feasibility study for improved access to User Equipment (UE) measurement data for Controlling Radio Network Controller (CRNC) to support Time Division Duplex (TDD) Radio Resource Management (RRM) showed that there are benefits for the CRNC access to UE measurements and that there are feasible methods to provide the measurements without a significant amount of additional complexity.

4 Objective

The objective of this Work Item is to establish means of providing the CRNC with UE measurement data without adding unacceptable complexity or burden to the CRNC or SRNC.

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		
No	X	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
25.423		UTRAN Iur Interface RNSAP Signalling	RAN#23	

11 Work item raporteurs

Jim Miller, InterDigital

12 Work item leadership

TSG-RAN WG3

13 Supporting Companies

TSG-RAN WG3

14 Classification of the WI (if known)

	Feature (go to 14a)
	Building Block (go to 14b)
X	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

14c The WI is a Work Task: parent Building Block
RRM optimizations for Iur and Iub