TSG-RAN Meeting No. 18 03-06 December, 2000, New Orleans, LA, USA

Source: InterDigital

Title: Proposed SI: "Improved Access to UE Measurement Data for CRNC to support TDD RRM"

Document for: Approval

Study Item Description

Title:

Improved Access to UE Measurement Data for CRNC to support TDD RRM.

1 3GPP Work Area

Х	Radio Access
	Core Network
	Services

2 Linked study 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.

4 Objective

The objective of this Study Item is to study the need for CRNC access to UE measurements for TDD DCA and the methods to be used to allow the CRNC to receive those measurements. The CRNC may gain access to the measurements through:

- New procedures for the Iur to support transfer of UE measurement information from the SRNC to the CRNC.
- New procedures for permitting the CRNC to request measurements directly from the UE.

5	Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

10

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

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

				New sp	ecifications		
Spec No.	Title		Prime rsp. WG		Presented for information at plenary#	Approved at plenary#	Comments
TR 25.xyz	Improved Access to UE Measurement Data for CRNC to support TDD RRM		WG3		RAN#20	RAN#20	
			Affe	cted existi	ng specificatio	ns	
Spec No.	CR	Subject			Approved at	plenary#	Comments

11 Study item raporteurs

Jim Miller, InterDigital

12 Study item leadership

TSG-RAN WG3

13 Supporting Companies

InterDigital, Siemens, Samsung, CATT

14 Classification of the SI (if known)

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

14a The SI is a Feature: List of building blocks under this feature (list of Work Items identified as building blocks)

14b The SI is a Building Block: parent Feature

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