

TSG-RAN Meeting #12
Stockholm, Sweden, 12-15 June

RP-010465

Source: Nokia
Title: Work Item Description for the Re-arrangement of Iub Transport Bearers
Document for: Approval
Agenda Item: 9.2.5

During the RAN WG3#21 meeting draft TR for the WI Traffic Termination Point Swapping was presented for approval. Proposed TR was approved as v. 0.1.0 with modifications. It was agreed to rename the WI to reflect to "the physical world".

In the revised WI description below the name of the WI Traffic Termination Point Swapping is renamed to the Re-arrangement of Iub Transport Bearers and the scope and justification of the WI are redefined to reflect the agreements received in the RAN WG3#21 meeting.

Work Item Description

Title: **Work Item Description for the Re-arrangement of Iub Transport Bearers Traffic Termination Point Swapping**

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None identified.

3 Justification

In the current NBAP specification (TS25.433) there is no mechanism to change the D-NBAP link for the given Node B Communication Context and secondly there is no mechanism to switch the existing transport bearers from one physical termination point to another. Fixing of the transport resources may cause the transport resource fragmentation problem in the implementation where the physical resources are distributed. In the worst case the transport resource fragmentation may cause the rejection of some large capacity call. To solve this problem there is a need for a new procedure allowing the Node B to initiate transport resource reallocation. This new procedure allows the use of distributed physical resources more efficiently by allowing a defragmentation of the resources and it may be used also due the O&M reasons.

~~The concept of traffic termination point is defined in TS 25.430(UTRAN Iub Interface:General Aspects and Principles). Because traffic termination point is a logical model, this shouldn't restrict the utilization of concept in real implementation. i.e. one Node B can have many traffic termination points and these can be mapped on physically separated units, respectively.~~

~~Currently once the traffic termination point was decided during the RL setup, this cannot be changed during its lifetime. However, if radio link parameters are modified dramatically, it is beneficial for Node B to change allocated traffic termination point and associated signaling link. This procedure can be used for efficient Node B resource management or O&M purpose.~~

4 Objective

The objective of this work item is to introduce a new procedure in the NBAP enabling Node B to initiate switching of the transport bearers and a Communication Control Port from one physical termination point to another.~~introduce new function in NBAP for Node B to be able to initiate traffic termination point swapping without RL releasing.~~

5 Service Aspects

None identified.

6 MMI-Aspects

None identified.

7 Charging Aspects

None identified.

8 Security Aspects

None identified.

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)

This is a Release 5 Work Item

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	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #14			

11 Work item rapporteurs

Antti Toskala, Nokia, Helsinki, Finland

12 Work item leadership

RAN 3

13 Supporting Companies

Nokia, Nortel Networks, InterDigital, Siemens

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

14b The WI is a Building Block:

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