TSG-RAN Meeting #12 ***RP #12-010469***

Stockholm, Sweden, June 12th - 15th, 2001

Title : Revised WI sheet for WI "Enhancement on the DSCH hard split mode"

Agenda Item : 9.1.11

Source : Samsung Electronics Co., Ltd.

Document for : Approval

This contribution contains the revised WI sheet for the work item "Enhancement on the DSCH hard split mode ".

In the last TSG-RAN plenary #11, the WI sheet for the work item "Enhancement on the DSCH hard split mode " was proposed and approved [1]. But the due time of this WI was not described, because the TR number was not given at that time.

Now TR number is allocated, which is TR 25.870. Hence, we propose the following updated WI sheet including TR number and the due time.

And the section of supporting companies is changed to TSG-RAN.

REFERENCE

[1] RP-01-0205, Proposed WI “Enhancement on the DSCH hard split mode”

Attachment:

RP-010205.zip

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Work Item Description

Title

Enhancement on the DSCH hard split mode

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

none

3 Justification

1) It was identified by RAN WG's (WG1, WG2 and WG3) that in the current Rel99 specification, logical split cannot be supported over Iur during the DSCH soft handover if DSCH scheduling should be done in DRNC. Furthermore, hard split has advantage over logical split in the sense that it can be supported over Iur. However, it was also identifed that hard split has some limitation and therefore there is some need to study the enhancement for TFCI coding in the DSCH hard split mode

2) And also, it was identified by RAN WG1, that in the current Rel99 specification, TFCI2 (TFCI for DSCH) is not transmitted from all the cells in the active set when the UE is in soft handover. Furthermore, in the current specification, the power offset should be set high enough to always detect TFCI bits reliably even if UE is not in soft handover.

4 Objective

The purpose of this work item is to specify the enhancements of TFCI coding and power control in DSCH hard split mode for UTRA FDD. This work item is composed of two work tasks.

1) TFCI coding in DSCH hard split mode

Currently DSCH hard split mode can support only 5 bit long DSCH and DCH TFCIs. As a result, the number of TFCI is limited upto 32 for DCH and DSCH in DSCH hard split mode. A new TFCI coding scheme to support the variable bit length can enhance the DSCH hard split mode.

2) TFCI power control in DSCH hard split mode

Currently the reliability of TFCI cannot be guaranteed when the UE is in soft handover. As well, in the current specification, the power offset should be set high enough to always detect TFCI bits reliably even if UE is not in soft handover. New power control scheme for TFCI can enhance the DSCH hard split mode.

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
TR 25.870				RAN # 13	RAN # 14	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
25.212		Multiplexing and channel coding (FDD)	RAN #14	
25.214		Physical Layer Procedure (FDD)	RAN #14	
25.331		RRC Protocol Specification	RAN #14	

25.423		UTRAN Iur Interface RNSAP Signalling	RAN #14	
25.433		UTRAN Iub Interface NBAP Signalling	RAN #14	

11 Work item raporteurs

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12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

~~Samsung, LG, Siemens, Qualcomm Europe, CATT, ETRI, SK Telecom, Hyundai~~TSG-RAN

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 building block part of the radio interface improvement feature.

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

Work Task 1:TFCI coding in DSCH hard split mode

Work Task 2 :TFCI power control in DSCH hard split mode