TSG-RAN Meeting #23 RP-040130
Phoenix, Arizona, USA, 10 - 13 March 2004

Agenda Item: **8.12**
Source: **IPWireless**
Title: **Proposed Work Item on Optimisation of Channelisation Code Utilisation for TDD**
Document for: **Approval**

Code utilisation is an important element for the uplink and downlink efficiency of UTRA-TDD cells. Several features require a UE specific code for a dedicated channel, such as HSDPA which requires an associated DPCH, IMS with infrequent RTCP packets and full headers which have to be sent with low delay.

HSDPA transmissions also require channelisation codes and so efficient code utilisation of dedicated channels also improves HSDPA performance.

For TDD code resources are limited on both uplink and downlink. Efficient utilisation and careful management of both downlink and uplink code resources is desirable.

The proposed work item follows.

Optimisation of channelisation code utilisation for TDD

Work Item Description

Title: Optimisation of channelisation code utilisation

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

3 Justification

Code utilisation is an important element for the uplink and downlink efficiency of UTRA-TDD cells. Several features require a UE specific code for a dedicated channel, such as HSDPA which requires an associated DPCH, IMS with infrequent RTCP packets and full headers which have to be sent with low delay.

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For TDD code resources are limited on both uplink and downlink. Efficient utilisation and careful management of both downlink and uplink code resources is desirable.

4 Objective

The objective of this work item is to introduce improvements which allow a better utilisation of codes for dedicated channels. This applies to the downlink and uplink for TDD.

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	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 endorsement at plenary#	Approved at plenary#	Comments
TR		R1	R2, R3		RAN#25	
Affected existing specifications						
Spec No.	CR	Subject			Approved at plenary#	Comments
TBD					RAN#26	

11 Work item raporteurs

Nicholas Anderson (IPWireless)

12 Work item leadership

TSG-RAN WG1

13 Supporting Companies

IPWireless, InterDigital, Softbank, Alcatel

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: parent Feature
RAB support enhancements
(one Work Item identified as a feature)

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

(one Work Item identified as a building block)
This WI has not finished yet. See RAN_Work_Items.