Agenda Item: 8.2.1.2

**Source:** Rapporteur (Nortel Networks)

Title: Revised WI description sheet on Optimisation of DL channelization

code utilisation

**Document for:** Approval

During RAN1#37, RAN1 discussed the revision of the work item description and agreed on the following text.

# Optimisation of downlink channelisation code utilisation

# **Work Item Description**

Title: Optimisation of downlink channelisation code utilisation

### 1 3GPP Work Area

X	Radio Access
	Core Network
	Services

### 2 Linked work items

#### 3 Justification

Code utilization in downlink is an important element for the efficiency of downlink in FDD UTRA cells. With the existing physical layer design, several features require a UE specific downlink code for a dedicated channel, such as HSDPA, which requires an associated DPCH, compressed mode by SF reduction, IMS with infrequent RTCP packets and full headers which have to be sent with low delay. This may result in a sub-optimum utilisation of the downlink channelisation code tree.

Introducing some means to use more efficiently codes for dedicated channels will give operators more flexibility in terms of radio resource management.

### 4 Objective

The objective of this work item is to introduce improvements to UTRA FDD downlink which allow a better utilization of downlink codes for dedicated channels.

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					

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

New specifications								
Spec No.	Title			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	

# Work item raporteurs

Sarah Boumendil (Nortel Networks)

# Work item leadership

TSG-RAN WG1

## 13 Supporting Companies

Nortel Networks, Vodafone, Ericsson, Qualcomm

# 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.