

**RAN Plenary Meeting #12**

***RP-010699***

**Stockholm, Sweden, June 12<sup>th</sup> – 15<sup>th</sup>, 2001**

**Agenda Item: 9.10**

**Source: Nokia**

**Title: Proposed WI, Beamforming**

**Document for: Decision**

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## **1 Introduction**

Working groups RAN1, RAN2 and RAN4 have discussed based on the action points from TSG RAN#12 the use of beamforming, especially in the case with dedicated pilots. Also other issues, such as new UTRAN measurements have been proposed and are under consideration. This revised WI sheet covers all the activity expected to be done for the beamforming, including both UE and UTRAN side enhancements.

The attached WI is proposed to be approved.

## 2 Proposed WI, Beamforming

### Work Item Description

#### Title

Beamforming

#### 1 3GPP Work Area

X	Radio Access
	Core Network
	Services

#### 2 Linked work items

None

#### 3 Justification

Beamforming with dedicated pilot symbols or with S-CPICH has potential to improve system capacity. Also UTRAN RRM could be improvement my defining support for such measurements that take into account the possible use of beamforming with S-CPICH or with dedicated pilots only.

#### 4 Objective

This work item should define the physical layer procedure clarifications, performance requirements and potential new measurements for efficient support of beamforming in UTRAN.

#### 5 Service Aspects

None/Text

#### 6 MMI-Aspects

None/Text

#### 7 Charging Aspects

None/Text

#### 8 Security Aspects

None/Text

**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 resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
New TR	Beamforming Concept Clarification	TSG RAN WG4	TSG RAN WG1	TSG RAN#14	TSG RAN#15	
Affected existing specifications						
Spec No.	CR	Subject			Approved at plenary#	Comments
TS 25.214					TSG RAN#16	
TS 25.133					TSG RAN#16	
TS 25.101					TSG RAN#16	
TS 25.433					TSG RAN#16	
TS 34.121					TSG T#16	
TS 25.215					TSG RAN#16	

**11 Work item raporteurs**

Jussi Numminen, Nokia.

**12 Work item leadership**

TSG-RAN WG4

**13 Supporting Companies**

Nokia, Motorola, Panasonic, Qualcomm

**14 Classification of the WI (if known)**

	Feature (go to 14a)
	Building Block (go to 14b)
X	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

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

UTRAN Improvement Feature