

**Work Item Description**

**Title**

**Beamforming Enhancements**

**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 improved by defining support for 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 Rel5 performance requirements and potential new measurements for UTRA FDD for efficient support of of RRM in case beamforming is used in UTRAN. The work also covers necessary corrections for Rel99/Rel4 specifications for the physical layer procedures to enable support of the beamforming operation.~~

**5 Service Aspects**

None/Text

**6 MMI-Aspects**

None/Text

**7 Charging Aspects**

None/Text

**8 Security Aspects**

None/Text

**9 Impacts**

<b>Affects:</b>	<b>USIM</b>	<b>ME</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>		X	X		
<b>No</b>	X			X	X
<b>Don't know</b>					

**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 Enhancements Concept Clarification	TSG RAN WG1	TSG RAN WG4	TSG RAN#14	TSG RAN#15	
<b>Affected existing specifications</b>						
Spec No.	CR	Subject		Approved at plenary#	Comments	
TS 25.214				TSG RAN#1615		
TS 25.133				TSG RAN#1516		
TS 25.101				TSG RAN#1516		
TS 25.433				TSG RAN#1615		
TS 34.121				TSG T#1516		
TS 25.215				TSG RAN#1615		

Note: CRs correcting Release 99 for 25.214 shall be provided for TSG RAN as soon as completed by TSG RAN WG1.

**11 Work item rapporteurs**  
Jussi Kähtävä, Nokia.

**12 Work item leadership**  
TSG-RAN WG1

**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