

# TSG-RAN meeting #11 Palm Springs, USA, 13-16 March 2001

RP-010207

**Title:** Proposed Work Item description sheet on “Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN”  
**Document for:** Approval  
**Source:** Nokia, Hutchison 3G & Omnitel/Vodafone  
**Agenda Item** 6.11

## Work Item Description

### Title

Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN

### 1 3GPP Work Area

X	Radio Access
	Core Network
	Services

### 2 Linked work items

*Note: WIs in SA1 and SA2/ T2 may be found necessary to be created:  
SA1 to specify the requirements set by multicast and broadcast applications provided in modern and future multimedia networks.  
SA2/T2 to specify the overall network requirements and the stage 2 for multicast and broadcast applications in modern and future multimedia networks.*

### 3 Justification

In Rel-99, service continuity regarding Cell Broadcast Service was implemented, but other point-to-multipoint services or applications are not covered. The intention of this WI is to improve the radio interface to support broadcast and multicast applications with high bit rates (e.g. multimedia broadcast and multicast).

### 4 Objective

The objective of this WI is to analyse and provide the necessary changes and additions required in the current RAN specifications.

- Identification and analysis of optimized transmission capabilities of RAN to support multimedia broadcast and multicast applications including:
  - increase of message size to support multimedia messages (today’s supported size is too small, around 1200 octets)
  - introduction of audio and video streaming.
- Analysis and enhancement of the existing Iu-BC interface to support multicast applications.
- Identification of UTRAN functions needed to be standardized to support multicast applications.
- Identification and analysis of a UTRAN multicast mobility functions.

### 5 Service Aspects

Multicast service capabilities are introduced.

**6 MMI-Aspects**

*None*

**7 Charging Aspects**

It shall be possible to charge the receiver of the multicast.

**8 Security Aspects**

It shall be possible to secure multicast.

**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	X	
<b>No</b>	X				
<b>Don't know</b>					

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

<b>New specifications</b>						
Spec No.	Title	Prime resp. WG	2 <sup>nd</sup> ary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR	Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN	R2	R3, R1, R4	RAN #12	RAN #13	New Technical Report
<b>Affected existing specifications</b>						
Spec No.	CR	Subject		Approved at plenary#	Comments	
25.301						
25.302						
25.304						
25.306						
25.321						
25.322						
25.324						
25.331						
25.419						

**11 Work item rapporteurs**

Nokia (Dimitris Koulakiotis)

**12 Work item leadership**

TSG-RAN WG2

**13 Supporting Companies**

France Telecom, Hutchison3g, Mannesmann Mobilfunk , Nokia, Omnitel/Vodafone, Orange  
PCS Ltd, Siemens

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

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)