

Technical Specification Group Services and System Aspects  
Meeting #12, Stockholm, Sweden, 18-21 June 2001

**TSGS#12(01)0268**

**Source:** SA1  
**Title:** WIs for approval from SA1  
**Document for:** Approval  
**Agenda Item:** 7.1.3

---

---

**Title:** Work Item Description for Release 5: Pre-pay/real-time charging in IM subsystem [WI for Building Block]

**Source:** Ericsson

**Purpose:** SA1 : For Approval

---

This contribution proposes the Work Item Pre-pay/real-time charging in IM subsystem.

---

### **Work Item Description**

#### **Pre-pay/Real-time charging for IMS**

##### **1 3GPP Work Area**

	Radio Access
X	Core Network
X	Services

##### **2 Linked work items**

-

##### **3 Justification**

As IP Multimedia services are expected to generate considerable revenue streams for operators it is necessary to provide efficient mechanisms for charging (especially for real-time/prepaid charging) encompassing session level information from the IM subsystem.

##### **4 Objective**

As Pre-pay/real-time charging is already available in both CS and PS domain the objective of this WI is to define the charging requirements for IM subsystem to support pre-paid/real-time charging

##### **5 Service Aspects**

None

##### **6 MMI-Aspects**

None

**7 Charging Aspects**

Yes

**8 Security Aspects**

Charging data should be secured.

**9 Impacts**

<b>Affects:</b>	<b>USIM</b>	<b>ME</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>				X	
<b>No</b>	X	X	X		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 rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
<b>Affected existing specifications</b>						
Spec No.	CR	Subject		Approved at plenary#	Comments	
22.115					IP multimedia subsystem requirements	

**11 Work item raporteurs**

Ericsson

**12 Work item leadership**

TSG-SA1

**13 Supporting Companies**

Ericsson, ...

**14 Classification of the WI (for TSG-SA1)**

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

	Work Task (go to 14c)
--	-----------------------

14a The WI is a Feature: List of building blocks under this feature

Requirements for prepaid charging in IMS

14b The WI is a Building Block: parent Feature

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

**Title:** Proposed Work Item description sheet on “Enhancement of Broadcast and Introduction of Multicast”  
**Document for:** Approval  
**Source:** Broadcast MM adhoc

### Work Item Description

#### **Title**

Enhancement of Broadcast and Introduction of Multicast

#### **1 3GPP Work Area**

X	Radio Access
X	Core Network
X	Services

#### **2 Linked work items**

RAN Workitem (agreed conditional on stage 1 and stage 2 availability): Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN

Work is also needed in other SA, T, CN and GERAN working groups.

#### **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 provide SA1 requirements for Broadcast and Multicast services.

With increasing use of high bandwidth applications in third generation mobile systems, especially with a large number of users receiving the same high data rate services, efficient information distribution is essential. Thus, broadcast and multicast are promising techniques to decrease the amount of data within the whole network and use the resources more efficiently.

During the SA plenary #11, TSG RAN asked for guidance from SA regarding a proposed WI on the Enhancement of Broadcast and Introduction of Multicast Capabilities in UTRAN. It was noted that TSG SA had no Work Item on this subject, and it was agreed that the issue would be postponed until a related WI was produced in TSG SA (SA WG1).

#### **4 Objective**

The objective of this WI is to analyse the service requirements and provide the necessary changes and additions required in the current SA1 specifications.

- General description of Broadcast and Multicast
- Definition of broadcast and multicast service capabilities
- Service areas
- QoS on broadcast and multicast services
- Multimedia support, Codecs

- Charging aspects
- Security aspects
- Roaming, Service availability and continuity
- Connectivity to external networks
- Optimized routing

**5 Service Aspects**

*Broadcast and Multicast shall enable operators to distribute the same services to several users in an efficient way within their network.*

**6 MMI-Aspects**

*FFS.*

**7 Charging Aspects**

*Charging aspects have to be considered.*

**8 Security Aspects**

*Transport and content security aspects have to be covered.*

**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>					
<b>Don't know</b>	X				

**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	SA1		12	13	New Technical Report
<b>Affected existing specifications</b>						
Spec No.	CR	Subject		Approved at plenary#	Comments	

**11 Work item rapporteurs**

Hutchinson 3G UK

**12 Work item leadership**

TSG-SA WG1

**13                    Supporting Companies**

Hutchinson 3G/Omnitel/Siemens/Bamboo MediaCast/NTT DoCoMo/France  
Telecom/Mannesmann Mobilfunk/Nokia

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

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