

Technical Specification Group Services and System Aspects ***TSGS#12(01)0519***
Meeting #13, Beijing, China, 24-27 September 2001

Source: TSG SA WG2
Title: Proposed Work Item on Charging Implications of IMS Architecture
Agenda Item: 7.2.3
Document for: Approval

Work Item Description

Title: **Charging Implications of IMS architecture**

1 **3GPP Work Area**

	Radio Access
X	Core Network
X	Services

2 **Linked work items**

- Provisioning of IP-based multimedia services (SA)
- SIP call control for the IM CN subsystem (CN1)
- Pre-Paid/ Online Charging for IMS (SA1)
- IMS C&B architectural needs (SA5)

3 **Justification**

With the introduction of the IMS, charging relevant data are generated in several distributed network functions. An overall charging concept and architecture is necessary in order to ensure vendor inter-operability as well as to allow flexible charging scenarios.

This work item will address the charging implications of the IMS architecture.

4 **Objective**

The objective of this work item is to address the implications of the IMS architecture on the following issues:

- Possible Real-time based Post- Paid and Pre-Paid charging mechanisms for the following charging layers:
 - Transport (Bearer)
 - Application Services
 - Content
- the correlation of the charging layers.
- examples for possible charging scenarios (e.g. in the form of high level call flows)
- Definition of the Network Entities generating CDRs or Charging Events and the Network Entities receiving/storing/processing the CDRs (as far as within the scope of standardisation)
- Relationship to SA1 requirements and service impacts (e.g. QoS).
- The exchange of information between network operators relevant to support real-time charging.

The existing 3GPP CS and PS charging mechanisms shall be respected. Where necessary migration scenarios shall be identified.

5 **Service Aspects**

Yes

6 **MMI-Aspects**

MMI aspects may be identified in the TR.

7 **Charging Aspects**

Yes

8 **Security Aspects**

Charging shall be executed in a secure manner.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes				X	
No			X		
Don't know	X	X			

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
TR 23. XYZ	Charging Implications of IMS architecture	SA2	SA5	SA#14(Dec)	SA#14(Dec)	Presentation of results to SA5 at SA2#21 (co-located with SA5#24)
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
23.002		Network architecture				
23.228		IP Multimedia (IM) Subsystem - Stage 2				

11 Work item raporteurs

Alexander Milinski (Siemens AG)

12 Work item leadership

SA2

13 Supporting Companies

Alcatel, Ericsson, Lucent, Mannesmann Mobilfunk, Nokia, Nortel Networks, Siemens, Vodafone group plc

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
Provisioning of IP-based multimedia services

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