S5-034164

# Technical Specification Group Services and System Aspects Meeting #19, Birmingham, UK, 17-20 March 2003

Source: SA5 (Telecom Management)

Title: Revised SP-020731 Rel-6 BB (BB2) WID on Charging

Management for the IM Subsystem

**Document for:** Approval

Agenda Item: 7.5.3

**3GPP TSG-SA5 (Telecom Management)** 

Meeting #33, Phoenix, USA, 24-28 February 2003

Source: SWG-B

Title: Work Item Description: [IMS Charging] WI type: [Building Block]

**Document for:** Decision

Agenda Item: 5.2

Technical Specification Group Services and System Aspects

TSGS#18(02)0731

Meeting #18, New Orleans, USA, 9-12 December 2002

Title: Rel-6 BB (BB2) WID : Charging Management for the IM

SA5 (Telecom Management)

**Subsystem** 

Document for: Approval

Agenda Item: 7.5.3

#### **Work Item Description**

Title: Charging management for the IM Subsystem

#### 1 3GPP Work Area

	Radio Access
X	Core Network
X	Services
	Terminals

#### 2 Linked work items

As described in the parent Feature "Charging Management"

#### 3 Justification

The IP Multimedia Subsystem (IMS) has been standardised in 3GPP Release 5. Further enhancements are going to be introduced within Rel-6. Therefore, the <u>new IMS charging TS 32.260 (based on existing Rel-5 TS</u> for IMS charging, TS 32.225), needs to be upgraded and aligned with the service enhancement that are going to be specified for the IMS in Rel-6. In addition, it is necessary to analyse the impact of new services on the IMS and to enhance the IMS charging

specifications as required. Work is also envisaged within this BB in order to stabilise the existing Rel 5 IMS charging specifications.

Also required by these new IMS charging features are considerations of architectural implications, the method of defining the information model, and the resulting impacts on the existing stage 2 charging specification, i.e. TS 32.200240. Note that potential impact on the existing stage 3 bearer charging specifications, i.e. TS 32.205 250, and 32.2515 and 32.252, is covered in the BB "Bearer Charging".

#### 4 Objective

The objective of this work item is to specify enhancements for offline and online IMS charging, as mandated by the additions to the IMS core specifications and by the specification of new IMS based services, for both the stage 2 and stage 3 IMS charging specifications.

#### 5 Service Aspects

Appropriate network nodes will need to collect and forward service related charging data.

#### 6 MMI-Aspects

None

#### 7 Charging Aspects

The main principles and structure of the charging TSs is described in the parent Feature "Charging Management". It is expected that this BB will result in the generation of specific TS 32.260 and sections of TS 32.240, TS 32.297, TS 32.298 and TS 32.299. Refer to the table in section 10 for more details about the expected output under this BB.

#### 8 Security Aspects

None

9 Impacts

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

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

Note that the exact structure for the TSs described below is still under discussion.

	New spe	cifications				
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comment s
	Charging Architecture and Principles	<u>SA5</u>		12/2003	03/2004	
32.260	Diameter Accounting and Credit Control application	SA5		06/2003	09/2003	
	Billing Domain Interface Description	SA5		06/2003	03/2004	
32.298	Encoding Rules Description	<u>SA5</u>		06/2003	03/2004	
<u>32.299</u>	Charging Protocol Description based on Diameter	<u>SA5</u>		09/2003	03/2004	

		Affected existing	specifications	
Spec No.	CR	Subject	Approved at plenary#	Comments

## 11 Work item rapporteurs Rapporteur

Ariel Sharon [Asharon@Lucent.Com]

## Work item leadership

SA5

# 13 Supporting Companies

Ericsson, Lucent, Nokia, Nortel Networks, Siemens, T-Mobile, Orange, Telecom Italia, Cingular Wireless.

# 14 Classification of the WI (if known)

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

# 14b The WI is a **Building Block**: parent **Feature**

Charging Management

# 15 Work Tasks under this Building Block/Feature

Building Block	Work Task	Description	SA5 Tdoc#
IMS Charging	WT1: Evolution of IMS charging to generic applications	The effort on this Work Task comprises of activities needed to evolve the existing functionality of the Rf and Ro interfaces in TS 32.225 such that they may also be used for other charging domains and subsystems (probably all except CS). No functional enhancements to IMS charging are included in this WT.	
IMS Charging	WT2: Enhancements to IMS charging	The effort on this WT comprises of all the necessary enhancements to IMS online and offline charging, as mandated by the additions to the core IMS standards.	
IMS Charging	WT 3: Analysis of Service Charging Implications on IMS Charging	The effort in this WT involves the analysis of the potential impacts on IMS charging from the introduction of new services. Alignment with other TS describing these services may be required.	
IMS Charging	WT4: Alignment of existing Stage 2 charging Specifications	This WT comprises of all the necessary effort to align and upgrade TS 32.240 due to new IMS charging features.	

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# 3GPP TSG-SA5 (Telecom Management) Meeting #33, Phoenix, USA, 24-28 February 2003

S5-034164

Source: SWG-B

Title: Work Item Description: [IMS Charging] WI type: [Building Block]

**Document for:** Decision

Agenda Item: 5.2

## **Work Item Description**

Title: Charging management for the IM Subsystem

#### 1 3GPP Work Area

	Radio Access
X	Core Network
Х	Services
	Terminals

#### 2 Linked work items

As described in the parent Feature "Charging Management"

## 3 Justification

The IP Multimedia Subsystem (IMS) has been standardised in 3GPP Release 5. Further enhancements are going to be introduced within Rel-6. Therefore, the new IMS charging TS 32.260 (based on existing Rel-5 TS for IMS charging, TS 32.225), needs to be upgraded and aligned with the service enhancement that are going to be specified for the IMS in Rel-6. In addition, it is necessary to analyse the impact of new services on the IMS and to enhance the IMS charging specifications as required. Also required by these new IMS charging features are considerations of architectural implications, the method of defining the information model, and the resulting impacts on the stage 2 charging specification, i.e. TS 32.240. Note that potential impact on the stage 3 bearer charging specifications, i.e. TS 32.250, 32.251 and 32.252, is covered in the BB "Bearer Charging".

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None

## 7 Charging Aspects

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## 8 Security Aspects

None

9 Impacts

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

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

	New spe	cifications				
Spec No.	Title	Prime resp.	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comment s
32.240	Charging Architecture and Principles	SA5		12/2003	03/2004	
32.260	Diameter Accounting and Credit Control application	SA5		06/2003	09/2003	
32.297	Billing Domain Interface Description	SA5		06/2003	03/2004	
32.298	Encoding Rules Description	SA5		06/2003	03/2004	
32.299	Charging Protocol Description based on Diameter	SA5		09/2003	03/2004	

		Affected existing	specifications	
Spec No.	CR	Subject	Approved at plenary#	Comments

## 11 Work item Rapporteur

Ariel Sharon [Asharon@Lucent.Com]

# Work item leadership

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Charging Management

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Block			Tdoc#
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IMS Charging	WT4: Alignment of existing Stage 2 charging Specifications	This WT comprises of all the necessary effort to align and upgrade TS 32.240 due to new IMS charging features.	