

---

**Source:** SA5 (Telecom Management)  
**Title:** Revised SP-020732 Rel-6 BB (BB3) WID on Charging Management for the Service domain  
**Document for:** Approval  
**Agenda Item:** 7.5.3

---

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

S5-034163

**Source:** SWG-B  
**Title:** Work Item Description: [Service Charging] WI type: [Building Block]  
**Document for:** Decision  
**Agenda Item:** 5.2

---

~~Technical Specification Group Services and System Aspects Meeting #18, New Orleans, USA, 9-12 December 2002~~ **TSGS#18(02)0732**

---

~~**Source:** SA5 (Telecom Management)  
**Title:** Rel-6 BB (BB3) WID : Charging Management for the Service domain  
**Document for:** Approval  
**Agenda Item:** 7.5.3~~

---

### Work Item Description

---

**Title:** Charging management for the service domain

**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

Currently (i.e. in 3GPP release 5), only the charging functionality for MMS is defined. As more services, such as the ESS and Presence Service, are standardised in 3GPP, and existing services are being enhanced, it is necessary to provide a mechanism for operators to charge for these advanced services based on information gathered in the service nodes that are involved in the delivery of the service. Also required by these new service 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 32.240.

Note that potential impact on the ~~existing~~ stage 3 charging specifications is covered in the BB “Bearer Level Charging” for TS 32.25005, [TS 32.251](#) and [32.25245](#), and in the BB “IMS Charging” for TS 32.26025.

#### 4 Objective

The objectives of this work item are:

- to specify service charging functionality for all new release 6 services for both offline and online charging;
- to specify LCS charging based on the LCS nodes (not the CN nodes);
- to specify online charging functionality for MMS ;
- to upgrade and/or align the ~~existing~~ stage 2 charging ~~specification, i.e. TS~~[specification TS 32.2400](#), as appropriate [and the billing domain interface, encoding rules and Diameter based protocol descriptions, TS 32.297, TS 32.298 and TS 32.299.](#)

#### 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 32.27x and sections of TS 32.240, TS 32.297, TS 32.298 and TS 32.299](#), ~~changes to the existing TS 32.200. In addition, several new Implementers’ Guides (stage3 descriptions) will be provided for offline and online charging for the new Rel 6 services, as well as online charging for services where currently only offline charging is standardised.~~ Refer to the table [in section 10 below](#) for more details about the expected output under this BB.

#### 8 Security Aspects

None

#### 9 Impacts

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

“Others” in this BB refers to the service nodes that need to be involved in charging of the services they provide.

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.236	MMS online charging	SA5		TSG#20 (06/03)	TSG#21 (09/03)	
32.237	LCS offline charging	SA5		TSG#20 (06/03)	TSG#21 (09/03)	
32.238	LCS online charging	SA5		TSG#20 (06/03)	TSG#21 (09/03)	
32.xxx	xxx service charging	SA5		TSG#20 (06/03)	TSG#21 (09/03)	
32.240	Charging Architecture and Principles	SA5		12/2003	03/2004	
32.270	MMS charging Description	SA5		06/2003	03/2004	
32.271	LCS charging Description	SA5		12/2003	03/2004	
32.27x	xxx service charging Description	SA5		12/2003	03/2004	
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	
32.200		Charging Principles	TSG#21 (09/03)			
32.235		MMS Charging	TSG#21 (09/03)			

#### 11 Work item rapporteurs

Gerald GÖRMER (gerald.goermer@siemens.com)

#### 12 Work item leadership

SA5

#### 13 Supporting Companies

[Alcatel](#), [Amdocs](#), [AWS](#), [Ericsson](#), [Lucent](#), [Nokia](#), [Orange](#), [Siemens](#), [T-Mobile](#), [Telecom Italia](#), [TeliaSonera](#)

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

	Feature (go to 14a)
	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#
Service Charging	WT1: MMS Enhancements	Generation of new TS 32.236-270 for MMS online charging, where Online Charging is expected to be based on the Ro interface that was specified for IMS in Rel-5. This TS will contain mainly the online and offline charging framework and the data description to MMS, and the charging protocol specification.	
Service Charging	WT2: LCS Enhancements	Generation of new TS 32.237-271 for LCS offline charging in the LCS service nodes, where Online Charging is expected to be based on the Ro interface and, Offline Charging, is expected to be based on the 'Rf' interface, both defined that was specified for IMS Charging in Rel-5. This TS will contain mainly the online and offline charging framework and the data description to LCS, CDR descriptions, charging protocol, and file-based interface to the billing domain.	
Service Charging	WT3: Alignment of existing charging specifications	This WT comprises all necessary alignments and upgrades of existing to the charging specifications TS 32.200-240, TS 32.205-250, TS 32.215-251, TS 32.297, TS 32.298 and TS 32.225-299, due to the emergence of new or modified services. Also included is the addition of functional enhancements to the above TSs'.	

Building Block	Work Task	Description	SA5 Tdoc#
Service Charging	WT4(+x): 'xxx service' offline charging	Generation of <a href="#">specific section for the</a> new TS 32.xxx for 'xxx service' <del>offline</del> Charging, <a href="#">where Offline Charging is</a> expected to be based on the Rf interface that was specified for IMS in Rel-5. <del>This TS will contain mainly the CDR descriptions, charging protocol, and file based interface to the billing domain.</del> <a href="#">This TS will contain the online &amp; offline charging framework and the charging data description specific to the new service.</a>	
Service Charging	WT5(+x): 'xxx service' online charging	Generation of <a href="#">specific section for the</a> new TS 32.xxx for 'xxx service' <del>online</del> Charging, where Online Charging is expected to be based on the Ro interface that was specified for IMS in Rel-5. <del>This TS will contain mainly the online charging data description and the charging protocol specification.</del> <a href="#">This TS will contain the online &amp; offline charging framework and the charging data description specific to the new service.</a>	

---

**Source:** SA5 (Telecom Management)  
**Title:** Revised SP-020732 Rel-6 BB (BB3) WID on Charging Management for the Service domain  
**Document for:** Approval  
**Agenda Item:** 7.5.3

---

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

S5-034163

**Source:** SWG-B  
**Title:** Work Item Description: [Service Charging] WI type: [Building Block]  
**Document for:** Decision  
**Agenda Item:** 5.2

---

### Work Item Description

---

**Title:** Charging management for the service domain

**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

Currently (i.e. in 3GPP release 5), only the charging functionality for MMS is defined. As more services, such as the ESS and Presence Service, are standardised in 3GPP, and existing services are being enhanced, it is necessary to provide a mechanism for operators to charge for these advanced services based on information gathered in the service nodes that are involved in the delivery of the service. Also required by these new service charging features are considerations of architectural implications, the method of defining the information model, and the resulting impacts on the stage 2 charging specification TS 32.240.

Note that potential impact on the stage 3 charging specifications is covered in the BB "Bearer Level Charging" for TS 32.250, TS 32.251 and 32.252, and in the BB "IMS Charging" for TS 32.260.

**4** Objective

The objectives of this work item are:

- to specify service charging functionality for all new release 6 services for both offline and online charging;
- to specify LCS charging based on the LCS nodes (not the CN nodes);
- to specify online charging functionality for MMS ;
- to upgrade and/or align the stage 2 charging specification TS 32.240, as appropriate and the billing domain interface, encoding rules and Diameter based protocol descriptions, TS 32.297, TS 32.298 and TS 32.299.

**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 32.27x 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				X	
No	X	X	X		
Don't know					X

“Others” in this BB refers to the service nodes that need to be involved in charging of the services they provide.

**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
32.240	Charging Architecture and Principles	SA5		12/2003	03/2004	
32.270	MMS charging Description	SA5		06/2003	03/2004	
32.271	LCS charging Description	SA5		12/2003	03/2004	
32.27x	xxx service charging Description	SA5		12/2003	03/2004	
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 rapporteurs**

Gerald GÖRMER (gerald.goermer@siemens.com)

**12 Work item leadership**

SA5

**13 Supporting Companies**

Alcatel, Amdocs, AWS, Ericsson, Lucent, Nokia, Orange, Siemens, T-Mobile, Telecom Italia, TeliaSonera

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

	Feature (go to 14a)
	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#
Service Charging	WT1: MMS Enhancements	Generation of new TS 32.270 for MMS Charging, where Online Charging is expected to be based on the Ro interface that was specified for IMS in Rel-5. This TS will contain the online and offline charging framework and the data description to MMS.	
Service Charging	WT2: LCS Enhancements	Generation of new TS 32.271 for LCS charging in the LCS service nodes, where Online Charging is expected to be based on the Ro interface and, Offline Charging, is expected to be based on the 'Rf' interface, both defined for IMS Charging in Rel-5. This TS will contain the online and offline charging framework and the data description to LCS.	
Service Charging	WT3: Alignment of existing charging specifications	This WT comprises all necessary alignments to the charging specifications TS 32.240, TS 32.250, TS 32.251, TS 32.297, TS 32.298 and TS 32.299, due to the emergence of new or modified services. Also included is the addition of functional enhancements to the above TSs'.	
Service Charging	WT4(+x): 'xxx service' offline charging	Generation of specific section for the new TS 32.xxx for 'xxx service' Charging, where Offline Charging is expected to be based on the Rf interface that was specified for IMS in Rel-5. This TS will contain the online & offline charging framework and the charging data description specific to the new service.	
Service Charging	WT5(+x): 'xxx service' online charging	Generation of specific section for the new TS 32.xxx for 'xxx service' Charging, where Online Charging is expected to be based on the Ro interface that was specified for IMS in Rel-5. This TS will contain the online & offline charging framework and the charging data description specific to the new service.	