Source:	**SA5 (Telecom Management)**
Title:	**Updated WID Rel-6 CH-SC**
Document for:	**Approval**
Agenda Item:	**7.5.3**

3GPP TSG-SA5 (Telecom Management)   **S5-044787**
Meeting #40, Sanya, CHINA, 15 - 19 November 2004

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

Work Item Description

Title: Charging management for the service domain (CH-SC)

1   3GPP Work Area

	Radio Access
X	Core Network
X	Services
	Terminals

2   Linked work items

- (2499) Support of Presence Capability (SA1 Feature)
- (31028) Presence Service Enhancements (SA1 Feature)
- (31015) Priority Service (SA1 Feature)
- (2544) Multimedia Broadcast and Multicast Service (SA1 Feature)
- (32023) Location Services enhancements 2 (SA2 Feature)
- (1365) Support of Push Services (SA1 Feature)
- (34001) Extended Transparent End-to-End PS Streaming Service (SA4 Feature)
- (1826) MMS Enhancements (T2 Feature)
    - (35017) Charging Management for Bearer level (SA5 BB)
    - (35018) Charging Management for IM Subsystem (SA5 BB)

3   Justification

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 32.240.
Note that potential impact on the stage 3 charging specifications is covered in the BB "Bearer Level Charging" for 32.250, 32.251 and 32.252, and in the BB "IMS Charging" for 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 32.240, as appropriate and the billing domain interface, encoding rules and Diameter based protocol descriptions, 32.297, 32.298 and 32.299.
- to specify PoC charging
- to specify MBMS charging

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 32.240, 32.297, 32.298 and 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#	Comme nts
32.240	Charging Architecture and Principles	SA5		12/2003	09/2004	CH
32.270	MMS charging Description	SA5		06/2003	09/2004	CH-SC
32.271	LCS charging Description	SA5		09/2003	12/2004	CH-SC
32.272	PoC charging Description	SA5		03/2005	06/2005	CH-SC
32.273	MBMS charging	SA5		03/2005	06/2005	CH-SC
32.297	Billing Domain Interface Description	SA5		06/2003	03/2004	CH
32.298	Encoding Rules Description	SA5		06/2003	06/2005	CH
32.299	Charging Protocol Description based on Diameter	SA5		09/2003	09/2004	CH
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
n/a					No Rel-5 TS was propagated to Rel-6	

11   Work item rapporteurs
Gerald GÖRMER (gerald.goermer@siemens.com)

12   Work item leadership
SA5

13   Supporting Companies
Alcatel,Amdocs, , Ericsson, Nokia, Orange, Siemens, T-Mobile, Telecom Italia, TeliaSonera, Vodafone

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** **(CH)**

15   Work Tasks under this Building Block

SA5 approved WIDs for the following WTs can be found at: ftp://ftp.3gpp.org/tsg_sa/WG5_TM/Work_Item_sheets/

Building Block	Work Task	Description	SA5 Tdoc
Service Charging	WT1: MMS Enhancements	Generation of new 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 will contain the online and offline charging framework and the data description to MMS.	
Service Charging	WT2: LCS Enhancements	Generation of new 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 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 32.240, 32.250, 32.251, 32.297, 32.298 and 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 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 will contain the online & offline charging framework and the charging data description specific to the new service.	

Building Block	Work Task	Description	SA5 Tdoc
Service Charging	WT5(+x): 'xxx service' online charging	Generation of specific section for the new 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 will contain the online & offline charging framework and the charging data description specific to the new service.	

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X	Core Network
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  - (35017) Charging Management for Bearer level (SA5 BB)
  - (35018) Charging Management for IM Subsystem (SA5 BB)
    As described in the parent Feature "Charging Management".

3   Justification

Currently (i.e. iIn 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 32.240.

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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 32.240, 32.297, 32.298 and 32.299. . Refer to the table in section 10 for more details about the expected output under this BB.
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None
9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes				X	
No	X	X	X		
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"Others" in this BB refers to the service nodes that need to be involved in charging of the services they provide.

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32.272	PoC charging Description	SA5		03/2005~~12/2004~~	06~~3~~/2005	CH-SC
32.273	MBMS charging	SA5		03/2005	03~~6~~/2005	CH-SC
32.297	Billing Domain Interface Description	SA5		06/2003	03/2004	CH
32.298	Encoding Rules Description	SA5		06/2003	06/2005~~0912/2004~~	CH
32.299	Charging Protocol Description based on Diameter	SA5		09/2003	09/2004	CH
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Spec No.	CR	Subject		Approved at plenary#	Comments	
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12 Work item leadership
SA5
13 Supporting Companies
Alcatel, Amdocs, ~~AWS~~, Ericsson, ~~Lucent,~~ Nokia, Orange, Siemens, T-Mobile, Telecom Italia, TeliaSonera, Vodafone
14 Classification of the WI (if known)

Feature (go to 14a)
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Work Task (go to 14c)

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Service Charging	WT4(+x): 'xxx service' offline charging	Generation of specific section for the new 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 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 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 will contain the online & offline charging framework and the charging data description specific to the new service.	