Technical Specification Group Services and System Aspects Meeting #18, New Orleans, USA, 9-12 December 2002

TSGS#18(02)0729

Source: SA5 (Telecom Management)

Title: Rel-6 Feature WID: Charging Management

Document for: Approval

Agenda Item: 7.5.3

3GPP TSG-SA5 (Telecom Management)

Meeting #31, Atlanta/GEORGIA, USA, 7-11 October 2002

S5-024462

Source: SWG-B

Title: Work Item Description: [Charging Management]

WI type: [Feature]

Document for: Decision

Agenda Item: 5.2

Work Item Description

Title: Charging Management (Feature: CH)

1 3GPP Work Area

Χ	Radio Access				
Χ	Core Network				
Χ	Services				
	Terminals				

2 Linked work items

- (2499) Support of Presence Capability (SA1 Feature)
- (31028) Presence Service Enhancements (SA1 Feature)
- (31015) Priority Service (SA1 Feature)
- (32021) IMS Phase 2 (SA1 Feature)
- (15010) Rel 6 OSA Enhancements (SA1 Feature)
- (31012) WLAN-UMTS Inter-working (SA1 Feature)
- (2544) Multimedia Broadcast and Multicast Service (SA1 Feature)
- (32023)Location Services enhancements 2 (SA2 Feature)
- (2047) Interworking between IMS and CS networks (CN3 Feature)
- (32005) IMS Local services (SA2 Feature)
- (31022) IMS Messaging (SA1 Feature)
- (31025) IMS Group Management (SA1 Feature)
- (1365) Support of Push Services (SA1 Feature)
- (34001) Extended Transparent End-to-End PS Streaming Service (SA4 Feature)
- (1826) MMS Enhancements (T2 Feature)
- (31018) Network Sharing (SA1 Feature)
- (2520) User Equipment Management (SA5 Feature)
 - Charging Management for Bearer level (SA5 BB)
 - Charging Management for IM Subsystem (SA5 BB)
 - Charging Management for Service domain (SA5 BB)

3 Justification

The 3GPP specifications need to evolve in Rel-6 to allow Charging additions and enhancements. This comprises both the enhancements to existing services and access technologies that are further evolved in other 3GPP WGs, and the provision of charging capabilities for new Rel-6 services and access technologies.

4 Objective

The objective of this work item (Feature) is to continue to lay down the Charging Framework (stage 2 and stage 3 descriptions) for 3GPP Release 6 covering all aspects of Bearer, IMS and Service Charging as required by all other 3GPP Release 6 work items as well as enhancements to the existing framework. Harmonisation of interfaces and protocols across all domains and subsystems is sought. To better reflect the emerging network and service enhancements this work also includes a definition of the future structure of the charging TSs.

5 Service Aspects

Charging enhancements arising from Service Aspects (as defined by S1) of Rel6.

6 MMI-Aspects

None identified at this time.

7 Charging Aspects

Charging Management - 32.2xx-series

The structure of the SA5.CB charging specifications (TSs) comprises:

- 1) a set of Implementers' Guides (stage3 level descriptions) and
- 2) an "umbrella" specification (TS 32.200) that applies to all of the Implementers' Guides. TS 32.200 is a tutorial (stage2 level description) to the charging systems to which the stage3 TSs apply and describes charging principles, scenarios, architecture, and requirements.

The Implementers' Guides are specialised according to several criteria. Operating domain is one criterion, while another criterion is the differentiation between offline and online charging. Currently, Implementers' Guides exist for the CS Domain (TS 32.205), the PS domain (TS 32.215), the IMS (TS32.225), and MMS (TS 32.235). Further Implementers Guides are foreseen for the new Rel-6 services and access technologies as well as the addition of online charging, both for some existing and the new services and access technologies. The stage2 description for charging, i.e. TS 32.200, will have to be enhanced and aligned accordingly.

8 Security Aspects

None identified at this time.

9 Impacts

Affects:	USIM	ME	AN	CN	Others
Yes			X (WLAN)	Χ	
No		Χ			
Don't know					X

WLAN AN may be affected if the AAA server is considered to be part of the AN.

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.xxx	Offline charging for domains, subsystems and services	SA5		TSG#20 (06/03)	TSG#21 (09/03)	
32.yyy	Online charging for domains, subsystems and services	SA5		TSG#20 (06/03)	TSG#21 (09/03)	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
32.200			TSG#21 (09/03)	
32.205			TSG#21 (09/03)	
32.215			TSG#21 (09/03)	
32.225			TSG#21 (09/03)	
32.235			TSG#21 (09/03)	

Work item rapporteurs

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12 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)

Χ	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**

SP-020730	S5-024463	5.2	SWGB	BB WID	Rel-6 BB (BB1): Charging Management for Bearer level
SP-020731	S5-024602	5.2	SWGB	BB WID	Rel-6 BB (BB2): Charging Management for the IM Subsystem
SP-020732	S5-024597	5.2	SWGB	BB WID	Rel-6 BB (BB3): Charging Management for the Service domain

15 Work Tasks under this Building Block/Feature

See WIDs for BB1 – BB3