3GPP TSG CN Plenary Meeting #16 5th - 7th June 2002. Marco Island, USA.

NP-020208

Source: CN₂

Title: Work Item Description for the Support of CAMEL by the IMS

Agenda item:

Document for: APPROVAL

3GPP TSG CN WG2 Meeting #23 Helsinki, Finland, 8^{th} April – 12^{th} April 2002

(revised N2-020319)

N2-020425

Source: **Lucent Technologies**

Title: Work Item Description for the Support of CAMEL by the IMS

Agenda item: 5.4

Document for: For Approval

This contribution provides the WID for Support of CAMEL by the IMS which was endorsed by CN2.

Work Item Description

Title: Support of CAMEL by the IMS 12000

1 3GPP Work Area

	Radio Access
X	Core Network
	Services

2 Linked work items

Related WIs are:

- 1. Provisioning of IP-based Multimedia services (1273-SA1)
- 2. Call Control and Roaming to support IMS in UMTS (1274-SA2)
- 3. Call Control and Roaming to support IMS in UMTS Stage 1 (1633-SA1)
- 4. Call Control and Roaming to support IMS in UMTS Stage 2 (Architecture and Main Flows) (1514-SA2)
- 5. SIP Call Control protocol for the IM Subsystem (2233-CN1)
- 6. IMS Signalling Flows (TS 24.228) (1998-CN1)
- 7. IMS Session Handling; stage 2 (TS 23.218) (2255-CN1)
- 8. SDM Issues for CAMEL control of IMS (14004-CN4)
- 9. CAMEL Phase 4 (1638-SA1)

3 Justification

The IM-SSF network entity is specified in UMTS Release 5 as part of an IP Multimedia Subsystem network to represent the interworking between the Call Session Control Function (CSCF) and the CAMEL Server (CSE). This work item is to be used for defining the standards related for CAMEL interworking with IMS in UMTS Release 5. The Stage 2 must be specified for CAMEL interworking with IMS and this shall be done largely by SDL procedures and description of information flows between the CAMEL-related IP Multimedia Subsystem network entities. The description of the information flows shall include the specifications for the Si interface (HSS-IM-SSF). The Si interface is defined mainly to download CAMEL Subscription Information data from the HSS to the IM-SSF. Defining the protocol for the Si interface shall be a joint effort between CN2 (Stage 2) and CN4 (Protocol Specification) working groups. In addition to the SDL procedures and information flows specifications, the CAP protocol for the IM-SSF and CSE interface must also be specified.

The main justification for this Work Item is to reuse the existing CAMEL functionality built up over previous releases and added to in Rel'5 within the new IP Multimedia Subsystem architectural framework. This would be attractive for operators with an indigenous CAMEL base utilising CAMEL features in an IMS environment.

4 Objective

The objectives of this WI are:

- To specify the stage 2 specification for CAMEL/IMS Interworking. This would include defining
 detection points and trigger criteria applicable for IP Multimedia CAMEL services, SDL
 Procedures, and descriptions of the information flows between the different CAMEL network
 entities. The output will be a new Technical Specification TS 23.278.
- To specify the protocol data structures and information flows of the Si interface. The output will be
 the Technical Specifications containing the Stage 2 and Stage 3 specification of procedures relevant
 to the Si interface

- To select a protocol, which provides the identified functionality of the Si interface to meet the requirements identified in TS 23.228 and TS 23.218.
- To specify the CAP protocol for the IM-SSF and CSE interface. The output will be a new stage 3 specification for the CAP ASN.1 descriptions and the Technical Specification TS 29.078 for any non-ASN.1 impact on the stage 3 CAP specifications.

5 Service Aspects

None.

6 MMI-Aspects

None

7 Charging Aspects

None.

8 Security Aspects

None.

9 Impacts

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

				New spe	ecifications		
Spec No.	Title		Prime rsp. WG	2ndary	Presented for information at plenary#		Comments
23.278	CAMEL Phase 4 – Stage 2 IM CN Interworking		CN2		CN#14	CN#16	Stage 2 specifying the functionalities of CAMEL Phase 4 applicable for IP Multimedia Subsystems.
29.278	CAP Support for CAMEL/IMS Interworking		CN2			CN#16	Stage 3 specifying the ASN.1 format of CAMEL operations applicable for IP Multimedia Subsystems.
			Affe	cted existi	ng specifica	ations	
Spec No.	CR	Subject			Approved	at plenary#	Comments
29.078		CAP Support for Interworking	CAMEL Phase 4/IMS		CN#16		Stage 3 CAP specification may be modified to indicate support of CAMEL Phase 4 for IP Multimedia Subsystems. Impact on the ASN.1 definitions shall be in the new TS 29.278.
29.002		MAP			CN#16		This specification may be impacted.
23.008		Support of CSIs f	or IMS		CN#16		This specification or equivalent for IMS may be impacted.
23.016		Support of CSIs for IMS			CN#16		This specification or equivalent for IMS may be impacted.
-	-	To be determined			CN#16		Other Stage 2 and Stage 3 specifications may be impacted as a result of this Work Item.
		Aff	ected ex	isting and	new IETF s	pecifications	
-	-	To be determined	d		CN#17	_	IETF specs may be impacted as a result of this Work Item
		Aff	ected ex	cisting and	l new IMS sr	pecifications	
23.218	- IMS Session Handling; IM call model specification					CN#16	This specification may be impacted as a result of this Work Item.
23.228	- IMS Stage 2 specification				CN#16	This specification may be impacted as a result of this Work Item.	

Work item raporteurs

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Work item leadership

CN2

13 Supporting Companies

Lucent, Vodafone, NTT DoCoMo, Orange France, SBC Communications, MMO2, Siemens

14 Classification of the WI (if known)

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

14b The WI is a Building Block: parent Feature - Provisioning of IP based multimedia services (1273).