3GPP TSG_CN Plenary Meeting #9, Oahu, Hawaii 20th – 22nd September 2000.

3GPP TSG-CN-WG1, Meeting #13 14-18 August, 2000

<u>Tdoc N1-000856</u> <u>Tdoc N1-000853</u> Tdoc N1-000843

Tdoc NP-000434

Source: TSG_N WG 1

Title: SIP Call Control protocol over Gm reference point (CSCF –

UE)

Agenda item: 7.2

Vancouver/Canada

Document for: APPROVAL

Work Item Description

Title: SIP Call Control protocol over Gm reference point (CSCF – UE)

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services

2 Linked work items

Related work items are:

- 1. Architecture for Call control and roaming to support IP-based multimedia services in UMTS. S2
- 2. Real Time QoS for packet services including VoIP. S2, N1, RAN3 etc.
- 3. Emergency call enhancements IP&PS based Emergency call enhancements. N1 etc
- 4. Roaming support within and between IP Multi-media network and CS Domain networks.S2, N4 etc
- 5. Lawful interception architecture. S3 etc

3 Justification

The work item "An architecture for Call control and roaming to support IP-based multimedia services in UMTS" describes the ongoing work in 3GPP for R00, which has been initially tasked by SA to S2 under the "all-IP option" by SA#4 (6/99). Impacts on SIP to transport QoS parameters on an intra-PLMN, as well as end-to-end.

The work item describes the ongoing work in 3GPP CN1 for R00.

4 Objective

The objective is to define a specify the Call Control protocol for the IP-based multimedia services based on the current around Session Initiated Protocol, IETF RFC2543 (SIP) with required enhancements for mobility3GPP requirements 3GPP specific modifications.

Stage 2 call flow descriptions and stage 3 protocol descriptions will be developed for signalling between the Mobile Station (UE) and the Core Network (S-CSCF) based upon the SIP Call Control Protocol .

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Editors note: The area of this work task may be expanded to cover the Mw and Mg reference points, but this is dependent on agreement with the relevant TSG's.

5 Service Aspects

New services which are to be provided by this network subsystem are currently defined by a separate work item in S1. The architectural aspects are being defined in S2.

6 MMI-Aspects

yes, as new, IP-based based call control protocol will be used in the terminal

7 Charging Aspects

yes, but no impact on CN1

8 Security Aspects

yes, security mechanisms for IP-based multimedia must be addressed.

9 Impacts

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

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

Meeting	Date	Activity
CN1#11	May 22-26, 2000	Raporteur appointed for CN1 group.
S2 & CN1	August 15-16, 2000	Joint meeting to plan work item schedule.
CN1#1 <u>3</u> 2	August 14-18, 2000	
CN#9	September 20-22, 2000	
CN1#1 <u>4</u> 3	November 20-24, 2000	
CN#10	December 6-8, 2000	

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			New spe	ecifications		
Spec No.	Title	Prime rsp. WG	2ndary	Presented for information at plenary#	Approved at plenary#	Comments
23. <u>1</u> *xx	<pre> <stage (detailed="" 2="" architectural="" based="" call="" control="" expand="" flows="" for="" ip="" multimedia="" on="" sip="" stage="" the="" to=""></stage></pre>	N1	\$2	CN#10	CN#11	Stage 2 describing the information flows between the UE and S-CSCF on the Gm reference point in relation to UMTS specific traffic cases e.g. interaction between lower layer access signalling (GPRS Session Management – SM, GPRS Mobility Management - GMM etc.) and SIP call control protocol. Impact to user plane radio resource allocation procedures, handover/SRNS relocation procedures etc. S2's stage 2 will cover the architecture and CN1will cover the detailed information flows.
24. <u>1</u> *xx	<stage 3="" for="" ip<br="" the="">Multimedia Call Control based on SIP></stage>	N1		CN#10	CN#11	Stage 3 describing the UMTS specific protocol impacts on the Gm reference point e.g. any enhancements required to SIP
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Lu comi	nent: there will be pote			ng specification		, yet to be taentinea
Spec No.	CR Subject			Approved at	plenary #	Comments
Ed comn	nent: further impacts t	o R99 s	pecificatio	ns to be ident	ified	

Work item raporteurs

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Work item leadership

N1

13 Supporting Companies

Lucent, T-Mobil, BT, Ericsson, Vodafone, Motorola, CSELT

14 Classification of the WI (if known)

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

14b The WI is a Work Task (14c).