

**3GPP TSG SA WG3 Security — S3#18**

**S3-010283**

**21-24 May, 2001**

**Phoenix, USA**

### Work Item Description

**Title: Access security for IP-based services**

#### **1 3GPP Work Area**

	Radio Access
X	Core Network
	Services

#### **2 Linked work items**

1. There are related work items in S3: “User plane protection in access network”, “Core Network Solution” and “Lawful Interception in the R’2000 architecture”
2. There is a related work item in S2: “An architecture for Call control and roaming to support IP-based multimedia services in UMTS”

#### **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).

TSG-S3 has prime responsibility for all security-related specification work in 3GPP including the new all-IP architecture and secure access to IM-services.

#### **4 Objective**

The objective with this WI is to solve the security aspects that are related to secure access for the new IP Multimedia services, IM services in R00. The IM services will include different applications like voice, video and data. The trustrelations and the security services between the end-user, the IM-domain, the PS-domain and the CS-domain shall be defined. Also the mechanisms for registration/authentication of a roaming/non-roaming end-user making registration to the IM-domain using SIP will be treated in this WI. This shall include the definition of the needed encryption and integrity mechanisms for protection of the control plane and the user plane. The evolution and/or reuse of the existing R99 architecture for authentication and key agreement shall be considered.

#### **5 Service Aspects**

*yes, the end-user shall be able to access the services located at the home IM-domain wherever the end-user may roam to. It shall also be possible to use different access technology to connect the “IP multimedia CN Subsystem” e.g. xDSL, wireline and Wireless LAN etc.*

**6 MMI-Aspects**

*yes, visibility and configurability. Issues like visibility of offered security level and user interaction shall be studied.*

**7 Charging Aspects**

*none identified*

**8 Security Aspects**

*yes, this WI issues security features*

**9 Impacts**

<b>Affects:</b>	<b>USIM</b>	<b>ME</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>		X		X	
<b>No</b>			X		X
<b>Don't know</b>	X				

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

<b>Meeting</b>	<b>Date</b>	<b>Activity</b>
S3#13	May 23-26, 2000	Presentation by S2 to S3 of well-defined and understandable system architecture concepts and principles
S3/CN WGs Joint ad-hoc	June 14-15, 2000	Requirements capture
S3#14	August 1-4, 2000	Security feature specification
S3#15	September 12-14, 2000	Feasibility study, including definition of Work Tasks and completion of the plan for this Building Block
S3#16	November, 2000	First draft
S3#17	February/March, 2001	Definition of the security architecture
S3#17bis	April, 2001	Definition of the security architecture
S3#18	May, 2001	Agree on architectural principles
S3#19	July, 2001	Integration of security architecture
S3#20	October, 2001	Integration of security architecture
SA#14	December, 2001	TS 33.203 Stage 2 presented to SA for information
S3#21	TBA	Concept presented to CN, RAN, T and GERAN.
SA#15	March, 2002	TS 33.203 Stage 2 presented to SA for approval
SA#16	June, 2002	IMS Stage 3 specifications for approval

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
33.102					Include IP-based services?	
21.333					Include IP-based services?	

**11 Work item rapporteurs**

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**12 Work item leadership**

S3

**13 Supporting Companies**

Ericsson, Nokia, Motorola, Siemens, Lucent, Nortel Networks, AT&T Wireless

**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”