Technical Specification Group Services and System Aspects **TSGS#8(00)0303**
Meeting #8, Dusseldorf, Germany, 26-28 June 2000

Work Item Description

Title: MExE security

1 3GPP Work Area

	Radio Access
	Core Network
X	Services

2 Linked work items

Authentication between mobile and "Gatekeeper" Integrity protection for Mobile to "Gatekeeper" signalling Virtual Home Environment / Open Systems Architecture Security SIM Application Toolkit Security.

3 Justification

MExE is based on the concept of identifying external standards suitable for supporting services from User Equipment (UE), and bringing them into the 3GPP scope by direct reference (i.e. WAP). Recent developments in the support of a new small-footprint Java platform, and co-operation with the SDR Forum requires extension of the existing MExE specifications to update and incorporate these latest developments. Further detailed work is also required to define the support of the user profile and other areas.
From the network operator's perspective, it is essential that such developments incorporate security features to preserve the integrity of the network and protect the confidentiality and integrity of third party and end user data and applications.

4 Objective

To conduct a threat analysis for MExE and review the security features documented in 3G TS 23.057 for effectiveness in countering those threats and to agree any necessary CR's with T2, to S3 (Services and Systems Aspects - Security) and T2 (Terminals - MExE) specifications.

MExE Release 2000 targets the following areas:-

- Provision of secure download mechanism and capabilities to support Software Defined Radio (SDR) concepts
- Improved security
- Investigation of Terminal Commands (e.g. AT command support)
- Support of terminal parts of the VHE / User Profile
- Third MExE classmark
- Investigate SIM Application Toolkit / OSA / CAMEL interaction to provided advanced services

5 Service Aspects

MExE supports services via MExE executables in the UE. However, Mobile Station applications based, e.g. on MExE and/or involving e-commerce will probably not be able to be fully contained within the (U)SIM. Mechanisms probably need to be standardised to ensure that these kinds of applications can be deployed, operated, upgraded and deleted in a secure manner.

6 MMI-Aspects

MExE supports MMI enhancements via applications and browsers in line with the principles of VHE

7 Charging Aspects

MExE enables MExE executables to potentially support charging for services. MExE will liase with TSG-S5 for charging-related issues.

8 Security Aspects

This is a Security Item.

9 Impacts

Affects:	USIM	ME	AN	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
MExE	27th-29th June, Tokyo, Japan	Agreement of this WID
S3#14	August 1-4, 2000	Presentation to S3 of Release 2000 MExE
	Aug/Sept 2000	Email discussion group on threats and countermeasures
MExE	28th August-1st September, Galway, Ireland	
S3#15	September 2000	Presentation to S3 of threat and countermeasure analysis
MExE	26th-28th September, Finland	
S3#16	November, 2000	Agree implementation of any new security features for MExE Release 2000 Approval of any CR's to S3 and T2 specifications required.
MExE	27th Nobember-1st December, Tokyo, Japan	
	December 2000	Email Discussion on Final CR's
	2001	Final CR's approved at TSG level April 2001

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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				Possible expanded scope and place of use for existing security features
23.057				Possible CR,s depending on result of threat analysis

11 Work item raporteurs

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12 Work item leadership

TSG SA WG3
With T2 as secondary responsibility

13 Supporting Companies

BT
Motorola
Vodafone
Please mail me if your company is willing to support this work item.

14 Classification of the WI (if known)

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