

Work Item Description

Title: MExE Security Analysis Activity

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services
X	Terminals

2 Linked work items

- ?? Access Security for IP-based Services
- ?? Virtual Home Environment Security
- ?? Open Systems Architecture Security
- ?? SIM Application Toolkit Security
- ?? OAM&P (Operations, Administration, Maintenance & Provisioning) Enhancements – User Equipment Management

3 Justification

The work in T2 on 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. In particular MExE enables the access to content and services from operators', manufacturers' and third parties' servers, and from the Internet.

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 TS 23.057 for effectiveness in countering those threats.

The methodology adopted will carry out a Security Analysis of the MExE Release 4 & 5 specifications. The work covered by this WID is expected to:-

- ?? Perform a security analysis for the different releases of MExE and the associated classmarks.
- ?? Identify issues in terms of security concepts and mechanisms for MExE
- ?? Identify potential threats, weaknesses and security shortfalls
- ?? Create policy as countermeasures for identifiable weaknesses
- ?? To map policies to the requirements within the specification

The output of this exercise will be used as a basis to potentially agree any necessary CRs to S1's 22.057 (Mobile Execution Environment) specification and T2's 23.057 (Mobile Execution Environment)

specification, and to S3's ~~21.133 (Security Threats and Requirements)-TR 33.900 (3G Security)~~ and 23.102 (Services and Systems Aspects - Security).

5 Service Aspects

MExE supports services via MExE executables in the MExE device. Investigate that applications (e.g. e-commerce, m-commerce) 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. Investigate possible security aspects to the MMI.

7 Charging Aspects

The MExE specification enables MExE executables to potentially support charging for services. T2 MExE will liaise with TSG-S5 for charging-related issues. Investigate possible security aspects of charging.

8 Security Aspects

This is a Security Item.

9 Impacts

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

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

Meeting	Date	Activity
T2 MExE	13 th Feb 2001 Beverley Hills	First security working group to define Terms of Reference, create a project plan, determine the scope and structure of the TR to be created by the group, commence discussion of initial input documents.
S3#17	1 st March, Göteborg, Sweden	Presentation of T2 MExE R5 activity to SA3
<u>T2#15</u>	<u>29 November 2001, Cancun, Mexico</u>	<u>Elected a new rapporteur.</u>
Additional activities to be defined by T2 MExE and updated appropriately.		
	Completion by <u>June 2002</u> final date for Release 5	

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TR???.?? ?	Technical Report for general availability	T2	SA3, SA5	TSG T#16		
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
33.102		Security Architecture		TSG T#16	Possible expanded scope and place of use for existing security features	
21.133 33.900		Security Threats and Requirements 3G Security		TSG T#16	Possibly expand to cover this WID's results	
23.057		Mobile Execution Environment		TSG T#16	Possible CRs depending on result of threat analysis	

11 Work item rapporteurs

[Ernest Woodward \(Intel\)](#), ~~[Andrew Myers \(BT\)](#)~~

12 Work item leadership

T2

13 Supporting Companies

[Ericsson](#), [HP](#), [Intel](#), [Motorola](#), [Telia](#), ~~[BT](#)~~, ~~[Ericsson](#)~~, ~~[Motorola](#)~~, ~~[Siemens Mobile Phones](#)~~,
~~[Vodafone](#)~~

14 Classification of the WI (if known)

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