
Source: SA5 (Telecom Management)
Title: Rel-6 OAM-UEM Building Block-level WID (User Equipment Management)
Document for: Approval
Agenda Item: 7.5.3

3GPP TSG-SA5 (Telecom Management)
Meeting #30, Tampere, FINLAND, 19 - 23 August 2002

S5-022246

Work Item Description

Title: User Equipment Management (UEM)

User Equipment Management (UEM) is a capability which will allow the service provider, network operator, UE manufacturer, customer care operator, subscriber and user to manage User Equipment.

1 3GPP Work Area

	Radio Access
	Core Network
X	Services
X	Terminals

2 Linked work items

- 31008 GUP
- 42002 Stage 2 Data Description Framework (DDF)
- 2062 Rel-6 SuM TS 32.140
- 42005 Rel-6 MExE enhancements: 22.057 (SA1) and 23.057 (T2)
- 1800 (U)SIM Toolkit enhancements (T3) TBC
- Rel-6 User Equipment Management (UEM) Security aspects (SA3)
- 31013 Rel-6 UE Functionality Split/IMS (SA1) TBC

➤ **If there is no WID for UE Functionality Split in Rel-6 then this bullet point should be removed**

3 Justification

The capabilities of the user equipment in 3G are becoming and will continue to become ever more sophisticated and integrated (high definition colour screens, faster processors, built in cameras, integrated media players etc.). The sophisticated capabilities of 3G User Equipment will require a flexible means to support management of the UE satisfying the end-customers, service providers, network operators and UE manufacturers' need.

The Release 5 User Equipment Feasibility Study (TR 32.802) shows that User Equipment Management (UEM) is a very worthwhile area for standardisation and it would bring a number of benefits to the users/subscribers, network operators/service providers and the UE manufacturers/suppliers. This Release 6 UEM Building Block is to build upon this work and produce the technical specifications for UEM.

4 Objective

TR 32.802 "User Equipment Management (UEM) Feasibility Study" contains some UEM capabilities. From TR 32.802 three key UEM capabilities related to the access and utilization of the 3GPP platform identified for the UEM work are (in priority order with highest priority first):

- 1) UE Configuration Query capability-that allows UE configuration information to be remotely requested and retrieved;
- 2) UE Reconfiguration capability that builds upon the UE Configuration Query capability in that it allows configuration changes to be made to the UE remotely;
- 3) Remote UE Diagnostics capability to run diagnostic applications on the user equipment to aid fault resolution.

At a minimum UEM capability (1) shall be standardised in Release 6.

In order to facilitate a timely introduction of the User Equipment Management building block work, SA5 (the primary lead) and T2 (the secondary lead) will lead the Release 6 UEM building block to produce the technical specifications. As an immediate step the existing solutions shall be studied and utilized as seen reasonable. Additionally, the intended work in application level UEM in external standardization fora is subject to further investigation to avoid multiple options.

To conduct the UEM Building block the lead groups (SA5 and T2) will coordinate the work of the respective expert groups SA1, SA3, SA5, T2, and T3 in any effective manner (e.g., through joint meetings, etc.).

5 Service Aspects

The UEM capabilities should be able to function both when a user is roaming and is not roaming. S1 will be involved on a consultancy basis to ensure the service aspects are addressed related to the access and utilization of the 3GPP platform. Requirements specifications produced by S1 GUP will be investigated for UEM related requirements.

6 MMI-Aspects

Interaction with the user may be required for example to obtain permission from the user before performing UEM interactions. T2 will be involved to ensure the UEM MMI aspects are adequately addressed.

7 Charging Aspects

Flexibility is required for the charging of the UEM capabilities. TR 32.802 contains some details on how the different UEM capabilities are expected to be charged.

8 Security Aspects

Security is crucial to UEM and S3 will be involved to ensure the UEM security aspects are adequately addressed. TR 32.802 contains some initial security considerations on the UEM capabilities.

9 Impacts

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

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

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.xxx	UEM Requirements and Architecture (Stages 1 & 2)	SA5	T2	TSG#19 (03/03)	TSG#20 (06/03)	Dates TBC with T2
2x.xxx	UEM Protocol Specification	T2		TSG#20 (06/03)	TSG#21 (09/03)	Dates TBC with T2
2x.xxx	GAP analysis	T2	SA5	TSG#19 (03/03)	TSG#20 (06/03)	Technical Report, Dates TBC with T2
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
24.241		Common Objects		TSG#20 (06/03)		To include new objects

11 Work item rapporteurs

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12 Work item leadership

SA5 (primary), T2 (secondary)

13 Supporting Companies

Vodafone Group, Sonera SmartTrust, Orange, 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**

- OAM (SA5)

15 Work Tasks under this Building Block

Building Block	Work Task	Description	Release
OAM-UEM	Produce requirements & architecture [SA5 WT]	The requirements for UEM shall be defined and a UEM architecture produced.	Release 6
OAM-UEM	Gap analysis [T2 WT]:	It is expected that much of the technology required for UEM is becoming available and a gap analysis task needs to be performed to determine where there are gaps between the available technology and that required for UEM. Substantiate SyncML DevMan to leverage the UEM capabilities.	Release 6
OAM-UEM	Protocol Specification, [T2 WT]:	A protocol for UEM interactions between the UE and the UEM server is required.	Release 6
OAM-UEM	Identification and definition of relevant objects [SA5/T2 WT]	Identify priority areas for stage3 work and define relevant objects e.g. MMS and GPRS. DDF, common objects	Release 6
OAM-UEM	UEM security [SA3 WT]	A trusted relationship is needed between the UEM client and server, the requestor as well as the UE needs to be authenticated.	Release 6
OAM-UEM	Analysis of compliance to 3GPP TS 23.227 [T2 WT]	3GPP TS 23.227 "Application and User interaction in the UE - Principles and specific requirements" contains requirements affecting UEM.	Release 6
OAM-UEM	USIM work [T3 WT] TBC	UEM includes the USIM domain and some work may be required on the USIM e.g. USIM parameter definition.	Release 6