
Source:	SA5
Title:	Work Item Description for New Rel5 Feature on "User Equipment (UE) Management"
Document for:	Approval
Agenda Item:	7.5.3

New Feature: User Equipment (UE) Management (Rel5)

- UE Management is a collection of functions and applications, which allow Operators/Service Providers to remotely manage UE.

The deployment of higher bandwidth GPRS and 3G coincides with emerging, internet driven content provisioning, transport and presentation technologies. Furthermore, the capabilities of UE become more sophisticated and integrated (high-definition colour screen, faster processor, built-in camera, integrated media-player etc.)

These sophisticated capabilities will require a flexible management infrastructure supporting end-customers, service providers, network operators and manufacturers.

UE Management could be used by the network operator and manufacturer to extend service and network management, fault isolation and resolution to the remote UE.

- TSG Approval Target: 06/02 (TSG#16)

Attachment: Work Item Description on "UE Management"
(S5-010318-WID-UEM-Feature_rev1.doc)

Title: Proposal for WID on **User Equipment (UE) Management (Feature)**
Source: SA5
Agenda item: **AR**
Document for: Decision (SA5 agreement for submission to SA for approval)

Work Item Description

Title: User Equipment (UE) Management

UE Management is a collection of functions and applications, which allows the Operator/Service Provider to remotely manage User Equipment.

1 3GPP Work Area

	Radio Access
	Core Network
X	Services (SA1, SA5, SA3)
X	Terminal (T2, T3)

2 Linked work items

- MExE enhancements: 22.057 (SA1) and 23.057 (T2)
- (U)SIM Toolkit enhancements (T3)
- Security issues (SA3) (To be identified)
- Charging and OAM&P (SA5 Feature)

3 Justification

The deployment of higher bandwidth GPRS and 3G coincides with emerging, internet driven content provisioning, transport and presentation technologies. Furthermore, the capabilities of the user equipment 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.).

These sophisticated capabilities will require a flexible management infrastructure supporting end customers, service providers, network operators and manufacturers.

UE Management could be used by the network operator and manufacturer to extend service and network management, fault isolation and resolution to the remote User Equipment.

Network Operators/Service Providers Benefits

Service Providers will be a major beneficiary of this project. The ability to manage the customers' equipment will deliver the following benefits:

- The ability to upgrade customers' equipment to add new functionality and to fix problems without the costly need to recall the equipment to a service facility.
- Remotely diagnose problems and therefore reduce the need for equipment replacement
- Assist the customer in understanding how to use their terminals
- Extract performance information in order to gain an understanding of the quality of service that a customer is experiencing at the service access point.

Manufacturers' Benefits

- Network Equipment Providers will benefit from:
- Problem analysis at source and problem correction.
- Improved understanding of the customer environment and customer behaviour
- Faster time to market for new terminal devices with lower financial risks
- The ability to deploy new functionality on existing devices.
- Future proof.

4 Objective

Management Functions and Applications

For Release 5 UE management will provide the user and network/service operator with the ability to:

- Terminal Status Query
- Terminal Diagnostics
- Terminal Configuration

In the future other functions that will be considered are:

- Terminal Patch Download
- Terminal Image Download

5 Service Aspects

The User Equipment Management capabilities will ultimately support Service Providers , End Customers, Network Operators, Manufacturers.

6 MMI-Aspects

Potentially , to be co-ordinated with Terminal groups

7 Charging Aspects

Potentially, to be investigated within SA5

8 Security Aspects

To be co-ordinated with SA3

9 Impacts

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

New specifications						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
32.xyz		SA5		TSG#14 (12/01)	TSG#16 (06/02)	Release 5
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
32.101				TSG#16 (06/02)	Release 5	
32.102				TSG#16 (06/02)	Release 5	
MExE, SyncML USIM Security		To be identified by TSG-T To be identified by T3 To be identified by SA3				

11 **Work item rapporteurs**

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12 **Work item leadership**

SA5

13 **Supporting Companies**

Vodafone Group, Motorola, VoiceStream, Telia, France Telecom, BT, Mannesmann MobilFunk, Sonera, Bouygues Telecom, Hutchison 3G, Samsung Electronics.

14 **Classification of the WI (if known)**

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

14a The WI is a **Feature**: List of **Building Blocks** under this **Feature**

- **OAM-AR** Principles, high level Requirements and Architecture – (SA5) (WT: UE Management Framework)
- **MExE** (To be identified by T2)
- **Security** (To be identified by SA3)
- **USIM** (To be identified by T3)
- **Management Protocol aspects** (To be identified by SA5)