# 3GPP TSG-T (Terminals) Meeting #11 Palm Springs, USA, 14 - 16 March, 2001

Tdoc TP-010072

**Source:** SA5 Chairman

Title: Draft WID for User Equipment Management for TSG-T information

**Document for:** Information

In its last meeting in Versailles, France on 26 Feb – 2 March, SA5 achieved a major progress in the feasibility study of the *User Equipment Management* (previously sometime called as "*Terminal Management*"), and decided to propose a new 3GPP work item on this feature. This work will require significant amount of work from TSG-T groups. For this reason, SA5 from the Versailles meeting liaised to T2 and T3 the draft WID of this feature in order to secure the inputs of the responsible T groups before the WI proposal is submitted to the June 2001 (#12) TSGs meeting.

In the capacity of SA5 Chairman, I present this contribution (containing the draft WID and the SA5 liaison statement to T2 and T3) the #11 TSG-T plenary in order to enhance the T delegates' familiarity with this feature and to facilitate their understanding when detailed technical aspects of this work item proposal are discussed in the relevant working groups of TSG-T during the next TSGs meeting cycle.

# 3GPP TSG-SA5 (Telecom Management) Meeting #18, Versailles, France, 26<sup>th</sup> February – 2<sup>nd</sup> March 2001

SA5#16(00)0114 Tdoc S5A010069

Category: Liaison

From: SA5

**To:** T2

CC: T3, SA3, SA1

Title: LS in reply to LS on MExE and User Equipment Management

(T2000756)

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SA5 would like to thank T2 for the liaison entitled "LS on MExE and User Equipment Management" (T2000756, Shin Yokohama, Japan, Nov 27<sup>th</sup> –1<sup>st</sup> December 2000).

We are attaching to this liaison a draft Work item proposal for User Equipment Management for review by all affected groups. It is our intention to have this work item submitted for approval to TSG#12 (June 2001).

We would therefore invite active involvement (comments, attendance, joint meetings, etc. as appropriate) from all affected groups by May 21<sup>st</sup> in order to complete this work item proposal. Our calendar of meetings is attached for information.

SA5 is planning to provide a presentation to T2 MExE on User Equipment Management (as previously committed) and is currently in the process of identifying the logistics of achieving this by the T2 meeting end of March 2001.

For information to all groups we are attaching to this liaison the latest Vodafone contribution on User Equipment Management submitted to SA5 this week.

SA5 looks forward to continued co-operation with all groups on this important new management feature.

## **3GPP TSG-SA5 (Telecom Management)**

SA5#15(01)0118 Tdoc S5<mark>A</mark>010072

Title: Proposal for WID on User Equipment (UE) Management (Feature)

Source: SAS Agenda item: AR

**Document for:** Information, Decision (SA5 agreement for submission to SA for approval)

## **Work Item Description**

#### Title: User Equipment (UE) Management

User Equipment (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
Х	Services (SA5, SA3)
Х	Terminal (T2, T3)

#### 2 Linked work items

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

OAM&P (Operations, Administration, Maintenance & Provisioning) Enhancements (S5 Feature)

#### 3 Justification

The deployment of higher bandwidth GPRS and 3G networks 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.).

With this in mind, it is sensible to compare the 3G mobile internet world with the current personal computer & fixed landline internet model. A PC has and will have in the foreseeable future a significant advantage over a limited capability mobile device in terms of processing power, capability and flexibility. Nevertheless, the mobile device will be highly portable and optimised for the wireless environment unlike the PC. The baseline applications loaded into the user equipment may not fulfil all the needs of the user and hence they may require additional applications to be downloaded to the user equipment. It is a requirement for user equipment manufacturers to provide this facility (however limited it may be) to enable users to download applications to the mobile device.

The application download facility could be used by the network operator and manufacturer to extend service and network management, fault isolation and resolution to the remote user equipment. This capability provides the basis for many of the ideas discussed in this document.

#### **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.

#### **Vendors 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**

User equipment management will provide the user and network/service operator with the ability to:

- Identify and potentially resolve faults, which may be causing the user equipment to operate in an unspecified manner or to cease operating altogether
- Monitor the performance of the user equipment
- Maintain the quality of service demanded by the user
- To constantly optimise the operation of any one or group of devices if required
- Provide the user equipment with upgraded and enhanced functionality as and when it becomes available.

5	Service Aspects
	Initially to be co-ordinated with subscription management WI within SA5
6	MMI-Aspects
	Yes, 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	Х		X	
No			X		
Don't know					

### 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#	Appro at pler		Comments
32.xyz			SA5		TSG#14 (12/01)	TSG#15 (03/0	)2)	Release 5
	Affected existing specifications							
Spec No.	CR		Subject		Approved	at plenary#		Comments
32.101					TSG#15 (03/0)	2)	Release 5	
32.102					TSG#15 (03/0)	2)	Release 5	
MExE USIM Security		To be identified by To be identified by To be identified by	T3					

Work item rapporteurs

John Mudge, Vodafone Group.

12 Work item leadership

SA<sub>5</sub>

13 Supporting Companies

Vodafone Group, Motorola, VoiceStream, Telia, France Telecom, BT, Mannesmann MobilFunk, Sonera.

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

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

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 S3)
- **USIM** (To be identified by T3)
- Management Protocol aspects (To be identified by S5)

# 15 Work Tasks under this Building Block