

**Source:** T2 Secretary  
**Title:** TSG-T2 Progress Report  
**Agenda item:** 6.2.1  
**Document for:** Information

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## **Progress Report**

### **TSG-T2 "Mobile Terminal Services and Capabilities"**

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#### **1 Meetings held**

T2 had one plenary meeting since TSG-T#8. The meeting was held August 28<sup>th</sup> to September 1<sup>st</sup> in Galway, Ireland hosted by Lociga. More than 100 delegates attended the meeting.

SWG1 (MExE) had a meeting 27-29 June 2000 in Yokohama, Japan hosted by NTT DoCoMo.

SWG3 (Messaging) had an MMS ad hoc meeting on 7-9 August. It was hosted by Nokia in Beaconsfield, UK.

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#### **2 T2 Organisation**

T2 chairman:	Kevin HOLLEY (BT)
T2 vice-chairmen:	Peter NEUMANN (Siemens) Toshihiro SHIMIZU (Matsushita)
T2 secretary:	Friedhelm RODERMUND (ETSI MCC)
T2 SWG chairmen:	
SWG1 Mobile Execution Environment (MExE):	Mark CATALDO (Motorola)
SWG2 UE Capabilities and Interfaces:	Kazuya HASHIMOTO (NEC)
SWG3 Messaging:	Ian HARRIS (Vodafone - Airtouch)

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#### **3 Results**

T2 had completed the outstanding R99 issues at TSG-T#8. The work is focussing on R00 and on the maintenance of the older releases.

1 R98, 10 R99, and 11 R00 change requests are presented to TSG-T#9 for approval.

Please find below a summary of the results of each SWG.

### 3.1 SWG1 Mobile Execution Environment

*SWG1 Mobile Execution Environment has the responsibility for developing, approving and maintaining specifications for a terminal execution environment using wireless, fixed, and cordless access.*

#### **Work Item: MExE**

The MExE group is continuing their work for MExE Release 2000 on the basis of the work item sheet approved at TSG-T#8. Currently the work progress is on schedule. A large part of the work is focussing on the introduction of a third MExE classmark for a new small-footprint Java platform. Another important area is the co-operation with the SDR Forum which requires extension of the existing MExE specifications to update and incorporate the latest developments. An SDR Forum proposal identifies which parts of SDR are covered by MExE technology, and they proposed extending MExE to support the downloading of core software. Investigations have been started if the Common Language Infrastructure (CLI) proposed by Microsoft could be a possible enhancement for MExE. Further detailed work is also ongoing to define the support of the user profile and in other areas.

An intensive debate took place on the WAP support of MExE classmarks 2 and 3. It was agreed that CM3 does not include WAP support. The support of multiple classmarks by one terminal was agreed in principle.

Several CRs on TS 23.057 MExE R00 were created. These R00 CRs are intended to be presented as a packet at the next T2 meeting in November.

Three corrective CRs to TS 23.057 MExE R99 are presented for approval to TSG-T.

T2 proposes to withdraw GSM 10.57 "MExE Project scheduling and open issues" from publication. This document has served the purpose of driving the development of the first MExE release R98 and is not needed anymore.

Two SWG1 ad hoc meetings are scheduled (see meeting calendar for details) before the next T2 meeting.

### 3.2 SWG2 UE Interfaces and Capabilities

*SWG2 Terminal Interfaces is responsible for the development of specifications relating to terminal interfaces, terminal system aspects, terminal functionality allocation within subsystems, synchronisation of devices with internal and external datastores, development of AT commands for control of devices, terminal capability requirements, terminal regulatory aspects (except EMC and RF) and for multi-mode terminal aspects.*

Currently, T2 has a debate on proprietary features. Many operators expressed concerns about the incompatibilities which are caused by proprietary features of mobile manufacturers. No conclusion on how to solve the problem was reached so far. It was agreed to try progressing further on this issue as much as possible by the next T2. NOKIA proposed an Interoperability Exception Handling which will be explored further. If T2 reaches agreement on a position in the next meeting, this might be sent to GSMA asking them to take some action. If progress by the next T2 is very small, it will be considered stopping discussing this issue further.

TP-000125 is an LS to SA and SA1 giving T2's view on how to further treat the concerns on applications on external devices.

#### **Work Item: Synchronisation**

T2 had a presentation from the SyncML initiative proposing that 3GPP adopts the SyncML method of wide area synchronisation. T2 was concerned about development of a roadmap to allow smooth migration from today's Wide Area Sync. T2 therefore asked the PCG to approve liaising with the SyncML initiative to investigate possible enhancements to the existing data synchronisation solution (TS 27.103).

TS 27.103 CR 001r1 is on the introduction of PUSH and TARGET. A similar CR was already agreed at T#8 but it appeared afterwards that it was based on a wrong version.

#### **Work Item: vObjects and other constructs for use in data synchronization**

No input was received at the last T2 meeting.

#### **Work Item: AT commands**

T2 concluded that the extension rules of TS 27.007 should allow new parameters to be included in existing commands and responses as this appears to be in accordance with V.25 ter where reference is made to manufacturer specific extensions. A CR to 27.007 is presented ensuring that TE software implementations must take account of extra parameters. During development of the Release 99 AT commands it has become apparent that TE software needs to take into account the potential addition of parameters into AT commands. The added text clarifies the requirements on TE software implementations. Without this change there is a risk that TE software applications will cease to work when the specification is upgraded in future releases.

Six CRs to TS 27.007 related to ASCI (Advanced Speech Call Items) are presented for approval.

Two CRs to TS 27.007 on AT command corrections are presented for approval.

#### **Work Item: Terminal Local Model**

A little progress was made on the draft TS 23.227 "Terminal Local Model". This TS defines a reference model for the ME, and explains the interactions between the different peripherals (e.g. infrared, bluetooth, USIM, radio interface, MMI etc.). Presentation of this specification for information is delayed by one meeting. TSG-T is asked to note that companies need to provide resources to further this work.

On the matter of priority of ME resources for WAP and SIM toolkit applications, T2 send their proposal in an LS including a CR to 22.101 to SA, S1 and T3.

#### **Work Item: UE capabilities**

Two CRs to TR 21.904 reflecting document structure changes in core specifications are presented for approval.

## **3.3 SWG3 Messaging**

*SWG3 Messaging has the responsibility for defining UMTS-specific messaging applications to allow non-real time multimedia messaging, a Short Message Service, and Cell Broadcast Services.*

#### **Work Item: MMS**

Gunnar SCHMIDT (SIEMENS) resigned from the SWG3 MMS group. T2 thanked him for his excellent work and for making sure to get a good grounding for MMS.

Progress was achieved on the MMS send service over reference point MM1. The service behaviour of MMS is under further elaboration. Regarding the intended addition of streaming to MMS, more discussion is needed to consider carefully what the scope of streaming in MMS is. First ideas on charging issues in MMS were discussed and a separate telephone conference took place on this subject. The UMS issue is to be discussed at next ad hoc in more detail in order to define to what extent UMS is within scope of MMS. T2 is liaising with the WAP Forum's MMS to ensure that there is convergence of work being done by the WAP forum. It is intended that the ongoing MMS work will contribute all changes to a "living draft CR" to 23.140 and after it becomes stable this document will be submitted as one CR to 23.140.

CR 001 to TS 23.140 R00 is presented for approval. For the sake of interoperability of MMS between terminals and MMS network equipment of different manufacturers, GSMA SERG requested the definition of a minimum set of mandatory media formats for MMS. Concerns were expressed that mandating media format within a specification might have bad consequences when manufacturers try making licensing agreements.

One SWG3 MMS ad hoc meeting is scheduled (see meeting calendar for details) before the next T2 meeting.

#### **Work Item: SMS**

The standardisation of SMPP as the de-fault SMSC access protocol was proposed. T2 concluded that it seems too late for this.

A CR to TR 23.039 clarifying the SC to SME protocol reference information is presented for approval.

T2 asks T to agree on withdrawing GSM 03.39 "Digital Cellular Telecommunications System (Phase 2) Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs)" because it is out of date. TR 23.039 still exists showing the references to the different manufacture's protocols.

Four R00 CRs to TS 23.040 are presented for approval.

A request to include the identification of telephone numbers in quotes within 03.40 / 03.41 was already discussed at an MoU SERG Meeting in 1992 and is implemented by many mobile manufactures, but so far not part of SMS/CBS specification. A CR was postponed to next meeting.

#### **Work Item: CBS**

TSG T2 sent a LS to GSMA SERG asking them to consider some changes to the rules described in SE15 regarding allocation of Cell Broadcast message ID's. The reserved message ID range for allocation by SERG should be 1 to 99 (currently 1 to 199). All other message ID's 100 to 999 should be available for formal registration by SERG. Network operators and CBS information providers should be free to use any message ID outside of reserved ranges but the use of a message ID which has not been registered carries an element of risk of future contention.

CR A061 to GSM 03.41 and CR 005 to TS 23.041 are on defining assisted GPS Broadcast Identifiers. The CRs are correcting a misalignment between the recently completed GSM 04.35 (Broadcast Network Assistance for Enhanced Observed Time Difference (E-OTD) and Global Positioning System (GPS) Positioning Methods) and 03.41/23.041. In case there is a problem with backwards compatibility problems two numbers would have to be assigned. T2 does not believe in backward compatibility issues because probably no implementation exists. If there are any concerns from anyone then these should be highlighted as soon as possible.

#### **Work Item: Advanced Cell Broadcast**

T2 decided to raise the lack of input regarding the feature "Advanced cell broadcast" to T and SA to ask if this work item should be kept or deleted.

#### **Work Item: Global Text Telephony**

No input was received at the last T2 meeting.

## **4 Electronic Working**

T2 had very good experience at their last meeting with a wireless LAN running in addition to the wired LAN. There were 3 access points with 5 transceiver cards, 4 Lucent and 1 Nokia. 3 of these transceivers were running on the same channel (10, each one was in a different room). This appeared to cause no great interference problem. About 30 people managed to use the wireless LAN successfully and they were quite satisfied about the additional comfort, which includes moving from one room to another without losing existing connections (file transfer, chat etc.). During installation of the wireless LAN cards, a few delegates had problems e.g. missing Windows files or the companies' security policy not allowing changing their network settings. The following wireless network cards (compatible to IEEE 802.11 Standard on Wireless LANs Revision B) have been used successfully at T2#10:

- Lucent WaveLAN
- Nokia C110
- ELSA Airlancer MC2
- Buffalo Airconnect WLI-PCM-L11

When purchasing wireless LAN cards, delegates should take care that at least channels 10 and 11 are supported.

## 5 Status of deliverables under T2 responsibility

Number	Title	Version
03.38	Alphabets and Language Specific Information for GSM	4.0.1 5.6.1 6.0.1 7.2.0
03.39	Digital Cellular Telecommunications System (Phase 2) Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs)	4.0.0 5.0.0 6.0.0 7.0.0
03.40	Technical Realization of the Short Message Service (SMS)	4.d.0 5.8.1 6.1.0 7.4.0
03.41	Technical Realization of Cell Broadcast Service(CBS)	4.b.0 5.9.1 6.1.0 7.3.0
03.42	SMS Compression	5.2.0 6.0.0 7.1.1
03.57	Mobile Station Application Execution Environment (MExE); Functional description; Stage 2	7.2.0
07.05	Use of Data Terminal Equipment - Data Circuit Terminating Equipment (DTE-DCE) Interface for Short Message Services (SMS) and Cell Broadcast Services (CBS)	4.8.1 5.5.0 6.0.0 7.0.1
07.07	Digital cellular telecommunications System (Phase 2) AT Command set for GSM Mobile Equipment (ME)	4.4.1 5.9.1 6.4.0 7.5.0
07.10	Terminal Equipment to Mobile Station (TE-MS) multiplexer protocol	6.4.0 7.1.0
21.810	Multi-mode UE issues - Ongoing work and identified additional work	3.0.0
21.904	UE Capability Requirements (UCR)	3.1.0
21.910	Multi-mode UE issues - Categories, principles and procedures	3.0.0
22.945	Study of provision of fax service in GSM and UMTS	3.0.0
23.038	Alphabets & Language	3.3.0 4.0.0
23.039	Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs)	3.1.0
23.040	Technical realization of Short Message Service	3.5.0 4.0.0
23.041	Technical Realization of Cell Broadcast Service	3.2.0
23.042	Compression algorithm for SMS	3.1.0
23.057	Mobile Station Application Execution Environment (MExE)	3.2.0
23.140	Multimedia Messaging Service (MMS)	3.0.1
23.227	Terminal local model	0.1.0
27.005	Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	3.1.0
27.007	AT command set for 3G User Equipment (UE)	3.5.0
27.010	Terminal Equipment to User Equipment (TE-UE) multiplexer protocol User Equipment (UE)	3.3.0
27.103	Wide Area Network Synchronisation	3.0.0
27.226	Global Text telephony;Terminal aspects	0.0.0
27.901	Report on Terminal Interfaces - An Overview	3.0.0
27.903	Discussion of Synchronisation Standards	3.0.0
34.907	Report on electrical safety requirements and regulations	3.0.0
34.925	Specific Absorption Rate (SAR) requirements and regulations in different regions	3.0.0

## 6 TSG-T2 Meeting Calendar

Meeting	Date	Location	Host
T2 SWG1	26 – 28 Sep 2000	Wokatti, Finland	Nokia
T2 SWG3 MMS	10 - 12 October	Sophia Antipolis	ETSI
T2 SWG1	24 – 26 Oct 2000	Chicago, US	Motorola
T2#11	27 Nov - 1 Dec 2000	Shin-Yokohama, Japan	Panasonic
T2#12	12 - 16 Feb 2001	US	T1
T2#13	14 – 18 May 2001	Korea	Samsung
T2#14	3 - 7 Sep 2001	no host	no host
T2#15	12 – 16 Nov 2001	no host	no host

## 7 List of Tdocs submitted to TSG-T#9

Tdoc	Agenda item	Title	Source
TP-000140	6.2.1	T2 progress report	T2 secretary
TP-000141	6.2.1	T2 progress report (presentation slides)	T2 chairman
TP-000142	6.2.3	R98 Change Requests <b>for approval</b>	T2
TP-000143	6.2.3	R99 Change Requests <b>for approval</b>	T2
TP-000144	6.2.3	R00 Change Requests <b>for approval</b>	T2
TP-000125	4.2	LS to SA, SA1 cc T on applications on external devices	T2

## 8 Change Requests submitted to TSG-T#9

### 8.1 R98 Change Requests

The R98 change requests can be found in **TP-000142**.

Spec	CR	Rev	Phase	Subject	Cat	Vers Curr	Vers New	T2 Tdocs	Workitem
03.41	A061		R98	Defining Assisted GPS Broadcast Identifiers	F	7.3.0	7.4.0	T2-000552	TEI

### 8.2 R99 Change Requests

The R99 change requests can be found in **TP-000143**.

Spec	CR	Rev	Rel	Subject	Cat	Vers Curr	Vers-New	T2 Tdoc	Workitem
21.904	006		R99	Reflection of document structure changes in core specifications and correction of editorial mistakes in the annexes	F	3.1.0	3.2.0	T2-000437	UCR
21.904	007		R99	Reflection of document structure changes in core specifications and correction of editorial mistakes in the main text	F	3.1.0	3.2.0	T2-000543	UCR
23.039	002		R99	Clarification of SC to SME protocol reference information	F	3.1.0	3.2.0	T2-000484	TEI

23.041	005		R99	Defining Assisted GPS Broadcast Identifiers	A	3.2.0	3.3.0	T2-000553	TEI
23.057	010		R99	Storage of user private data in the user profile in the network	F	3.2.0	3.3.0	T2-000401	MExE
23.057	011		R99	Correction of UAPProf tags	F	3.2.0	3.3.0	T2-000504	MExE
23.057	012		R99	WAP UAPProf URL correction	F	3.2.0	3.3.0	T2-000523	MExE
27.007	041		R99	TE software implementations must take account of extra parameters	F	3.5.0	3.6.0	T2-000548	TEI
27.007	042		R99	APN presentation	F	3.5.0	3.6.0	T2-000448	TEI
27.103	001	1	R99	Introduction of PUSH and TARGET	F	3.0.0	3.1.0	T2-000445	SYNC

## 8.3 R00 Change Requests

The R00 change requests can be found in **TP-000144**.

Spec	CR	Rev	Rel	Subject	Cat	Vers-Curr	Vers-New	T2 Tdoc	Workitem
23.040	016		R00	Presence of TP-PI	F	4.0.0	4.1.0	T2-000459	SMS TEI
23.040	017		R00	Big endian integer representation	D	4.0.0	4.1.0	T2-000461	SMS TEI.
23.040	018		R00	SMS Address fields section needs clarification	B	4.0.0	4.1.0	T2-000477	SMS TEI
23.040	019		R00	User prompt indication	B	4.0.0	4.1.0	T2-000485	SMS TEI
23.140	001		R00	Set of mandatory media formats for MMS	B	3.0.1	4.0.0	T2-000555	MMS
27.007	043		R00	Introduction of a new AT command +CUUS1 to manage User-to-User Information element	B	3.5.0	4.0.0	T2-000428	ASCI
27.007	044		R00	Indication of priority and/or sub-address in the unsolicited result code CCWA	B	3.5.0	4.0.0	T2-000449	ASCI
27.007	045		R00	eMLPP SIM Commands	B	3.5.0	4.0.0	T2-000542	ASCI
27.007	046		R00	VBS, VGCS SIM Commands	B	3.5.0	4.0.0	T2-000549	ASCI
27.007	047		R00	Extension of dial command for VBS and VGCS	B	3.5.0	4.0.0	T2-000550	ASCI
27.007	048		R00	Introduction of a new AT command +COTDI to manage Originator-to-dispatcher information element	B	3.5.0	4.0.0	T2-000551	ASCI

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## 9 Decisions requested from TSG-T#9

T2 requests the following decisions from TSG-T#9:

- Approval of R98 CR in **TP-000142**
- Approval of R99 CRs in **TP-000143**
- Approval of R00 CRs in **TP-000144**
- Withdrawal of GSM 10.57 "MExE Project scheduling and open issues"
- Withdrawal of GSM 03.39 "Digital Cellular Telecommunications System (Phase 2) Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs)"