

Source: Secretary TSG-Terminals, Adrian ZOICAS (ETSI MCC)

Title: DRAFT Report from TSG-T#5 meeting

Last saved: 19/10/99 11:10

---

## Content

1	Opening of the meeting .....	3
2	Approval of Agenda & Registration of documents .....	3
3	Report of TSG-T#4 Miami .....	3
3.1	Follow-up on Action points / Outstanding issues .....	3
4	Objectives for meeting TSG#5 .....	4
5	Letters and reports from other groups .....	4
6	WG T1 Mobile Terminal Conformance Testing .....	4
6.1	Progress report from T1 .....	4
6.2	Liaison Statements to TSG-T .....	5
6.3	Approval of Deliverables & Work programme review .....	5
6.3.1	Submitted for information as v1.0.0 .....	5
6.3.2	Status update (version number) and/or Re-scheduling .....	6
6.4	TSG-T1 Meeting Calendar .....	8
7	WG T2 Mobile Terminal Services and Capability .....	8
7.1	SWG1 Execution Environment .....	8
7.2	SWG2 Terminal Interfaces .....	8
7.2.1	Physical connector of the terminal .....	8
7.2.2	Synchronisation and Object exchange .....	9
7.2.3	Use of DTE-DCE interface for SMS and CBS .....	9
7.2.4	AT commands .....	9
7.2.5	Alternatives to AT commands .....	10
7.2.6	TE-MS multiplexer protocol .....	10
7.3	SWG3 Messaging .....	11
7.3.1	Multimedia Messaging Service (MMS) .....	11
7.3.2	Cell Broadcast Service (CBS) .....	11
7.3.3	Enhanced Cell Broadcast Service (CBS) .....	11
7.3.4	Short Message Service (SMS); Point-to-Point (PP) .....	11
7.3.5	Alphabets and language-specific information .....	12
7.3.6	23.039 and 23.042 are unchanged .....	12
7.3.7	Fax in GSM and UMTS .....	12
7.4	SWG4 Services End to End Interworking .....	12
7.5	SWG5 Multi-system Terminals .....	13
7.6	SWG6 Terminal Features and Performance .....	13
7.6.1	Specific Absorption Rate (SAR) .....	14
7.6.2	Electrical safety requirements and regulations .....	14
7.6.3	Terminal Capability Requirements (TCR) .....	14
7.6.4	Terminology and Vocabulary in 3GPP .....	14
7.6.5	Terminal Management .....	16
7.7	TSG-T2 Meeting Calendar .....	17
8	WG T3 USIM .....	17
8.1	Review of open issues .....	17
8.1.1	Phonebook / Abbreviated Dialling Number (ADN) .....	17
8.1.2	Allocation of Application Identifiers (AIDs) .....	17
8.1.3	Application selection, PIN-handling and logical channels .....	17
8.1.4	Security and network parameters .....	17
8.2	Transfer of Other GSM Specifications .....	17
8.3	Approval of Deliverables .....	18

8.4	Approval of new Work Items.....	18
8.5	TSG-T3 Meeting Calendar .....	20
9	TSG-T Work Plan/ Co-ordination with TSG-SA.....	20
10	Liaison Statements to other TSGs.....	20
11	Future meeting schedule.....	21
12	Any Other Business .....	21
13	Close of the meeting .....	21
<b>Annex A:</b>	<b>TSG-T qualification status for R99 in December '99 (12 Oct '99).....</b>	<b>22</b>
<b>Annex B:</b>	<b>TSG-T qualification status for R99 in Dec '99 (split by WG/SWG) .....</b>	<b>24</b>
B.1:	WG T1 Mobile Terminal Conformance Testing.....	24
B.2	WG T2 Mobile Terminal Services and Capability.....	24
B.3	WG T3 USIM .....	26
	Agenda.....	27
	List of Documents.....	28
	List of Participants.....	30
	History .....	33

---

## 1 Opening of the meeting

70 delegates attended the 5<sup>th</sup> meeting of 3GPP TSG-Terminals (TSG-T#5) from 7-8 October 1999, held at the Kyongju Hilton Hotel in Kyongju, KOREA. The meeting was organised by TTA (the Telecommunication Technology Association) and sponsored by Ericsson, ETRI (the Electronics and Telecommunications Research Institute), HYUNDAI Electronics, Korea Telecom, LG Information & Communications, Motorola, NOKIA Korea and SAMSUNG Electronics.

The meeting was chaired by Sang-Keun PARK (SAMSUNG), TSG-T Chairman, assisted by the two TSG-T Vice Chairmen Kevin HOLLEY (BT) and Ed EHRLICH (NOKIA USA) and the TSG-T Secretary, Adrian ZOICAS (ETSI MCC).

Sang-Keun PARK (SAMSUNG) addressed a welcome message to Kyongju on behalf of TTA and the hosting organisations.

---

## 2 Approval of Agenda & Registration of documents

The draft agenda (TP-99196) was approved without modification and together with the list of meeting documents can be found in annex. All the meeting documents are available on the 3GPP server at [ftp://ftp.3gpp.org/TSG\\_T/TSG\\_T/TSMT\\_05/Docs/](ftp://ftp.3gpp.org/TSG_T/TSG_T/TSMT_05/Docs/)

---

## 3 Report of TSG-T#4 Miami

The DRAFT report of the previous meeting, TSG-T#4 held in Miami, was presented in TP-99147 and approved without change. The APPROVED report can be found in document TP-99150 at [ftp://ftp.3gpp.org/TSG\\_T/TSG\\_T/TSMT\\_04/Report/](ftp://ftp.3gpp.org/TSG_T/TSG_T/TSMT_04/Report/) and at [ftp://ftp.3gpp.org/TSG\\_T/TSG\\_T/TSMT\\_05/Docs/](ftp://ftp.3gpp.org/TSG_T/TSG_T/TSMT_05/Docs/)

### 3.1 Follow-up on Action points / Outstanding issues

The Chairman informed that:

- PCG **agreed** on funding arrangements between the SDOs and initial allocations from the 1999 budget for the TSG-T requests:
  - USIM test specifications (156 kEuro: 100%);
  - 3G TTCN for MS interoperability (101 kEuro; i.e. 10% from 1014 kEuro).

In terms of managing these activities will be placed under the management of the MCC with expert guidance being provided by the TSGs when required.

- PCG **decided** 3GPP should seek a Registered Application Provider Identity (RID) from ISO in order that USIM Application Identifiers (AIDs) may be allocated. ETSI will maintain the register of USIM AIDs on behalf of 3GPP and MCC (T3 officer) will seek the RID for 3GPP.
- PCG **noted** the discussions in the TSGs concerning the global type approval of 3GPP terminals and the conclusion that TSG-T should define a super set of relevant test from which regulators could select regional sets as appropriate. PCG further **noted** that whilst regulatory issues were outside of the scope of 3GPP there may be a role for the Market Representation Partners (MRP) to perform.
- PCG **noted** the TSG-T request for agreed definitions of “global roaming” and “global circulation” in the context of the scope of 3GPP. The UMTS Forum had already agreed a definition for “global circulation” but no clear proposal had been received for a definition of “global roaming”. The missing consensus within TSG-T on the need to standardize a 3G terminal connector was **reported**. If the problem cannot be solved in TSG-T then the matter should be raised to PCG for decision.

## 4 Objectives for meeting TSG#5

The Chairman pointed out that the prime objectives of the TSG#5 meeting were:

- To decide on WHAT should be included in Release 99;
- To identify WHAT from Release 99 CANNOT be delivered (v3.x.y) at TSG#6 in December 1999;
- For the identified Release 99 delays, to PROPOSE re-scheduled target dates for v3.00 delivery;
- To present an exact status of the TSG-T deliverables for Release 99 to TSG-SA / PCG;
- TSG-CN and TSG-RAN to deliver the “Core” specifications for the ITU/IMT-2000 process.

## 5 Letters and reports from other groups

TP-99166	New ASN.1 Syntax Checking Service from ETSI PTCC	OCG/PEX
----------	--	---------

TSG-T noted and encouraged especially WG T1 (WG T1 Mobile Terminal Conformance Testing) to use the new support service from ETSI’s Protocol Testing Competence Centre (PTCC) [pex@etsi.fr](mailto:pex@etsi.fr).

TSG-T approved two position papers regarding the ITU-T SG11 WP3 on the “Roadmap Document ITU-T IMT-2000” (TP-99190) which will be submitted to SA, PCG and 3GPP2 for information.

TP-99218	LS to SA, PCG, 3GPP2 on “3GPP TSG T Position on supplement to recommendation Q 1701 from ITU T WP 3/11” (with annex from TP-99217) NOTE: 3GPP TSG-T regards the MT-USIM and CN-USIM specifications to be the responsibility of the 3GPPs, rather than of the ITU-T.	T
TP-99221	LS to SA, PCG, 3GPP2 on “3GPP TSG T Position#2 on supplement to recommendation Q 1701 from ITU T WP 3/11 (with annex from TP-99220) NOTE: T2 deliverables added	T

## 6 WG T1 Mobile Terminal Conformance Testing

TP-99156	Request to PCG for funding of 3GPP TTCN Specifications (PCG#2(99)17)	T
TP-99167	Report from T1 (presentation)	T1
TP-99168	Minutes from T1#4 in Kobe	T1

### 6.1 Progress report from T1

Bjarke NIELSEN (SONY), T1 Chairman, introduced the “Progress report from WG T1” (TP-99167/8).

#### Points of discussion:

- The terms Mobile Station, UE, Terminal, etc. caused some discussion and confusion. What are the correct terms, who defines them and where can they be found?
- At some time later, we will have to tests regarding “hooks and extensions”. Who takes care of ANSI41, 3GPP2 ?
- Which other groups should T1 liase with (EP UMTS, GSM NA, GSM Association, UMTS Forum, etc.)?
- From a legal point of view, who drives the establishment of a common understanding regarding a regulatory regime?
- Audio testing may not be part of the regulatory type approval. A unified way of evaluating audio (video) may prove to be impossible.
- Testing of speech (video) codecs may in the future be done only in the development labs of manufacturers. Manufacturers will then declare conformance.
- The Digital-Analogue Interface (DAI) may then be obsolete. If codecs must be tested - how to test them?

- T1 is meeting ETSI STQ (Speech and Transmission Quality) to establish a common understanding.

**Item to be discussed at future T1 meetings:**

- Test philosophy: can we assume availability of a physical connector for all 3G equipment?  
If not, should then the air interface always be used?
- The 3G equipment may be so deeply buried into other equipment, that it can not perform “stand alone” functions (may be no MMI, maybe only SMS function, etc.)
  - we may need functions to isolate specific 3G parts (points of observation and evaluation!
  - we may also need a complete capability inquiry (like a classmark!)

This may limit what can be tested, but will allow a common and automatic testing of 3G terminals.

**Points of Observation:**

T1 noted (via e-mail) the outcome from the PCG#2 meeting:

- PCG requested T1 to make a super-set of global regulatory requirements.
- PCG has agreed the funding of TTCN; 10% (101kEuro) will be funded in 1999.
- GSM North America wants to liase with T1 regarding regulatory requirements in US.
- T1 can liase directly (via TSG-T) with 3GPP2. But who are the contact persons?

## 6.2 Liaison Statements to TSG-T

INCOMING		
TP-99161	LS to T on Confirmation of work items regarding USIM (UICC/ME interface) and Test SIM	T1
TP-99171	LS to T on schedule for Prose test case generation for T1 SWG Signaling	T1
TP-99202	Proposal on how to handle approval of MS Conformance Test Specifications coupled to a certain 3GPP release	Ericsson
OUTGOING		
TP-99208	LS to TSG-SA on prioritization of conformance test cases for 3G terminals (revised as TP-99212)	T
TP-99211	LS to TSG-SA on resource situation and the general strategy and status of the elaboration of test cases (revised as TP-99222)	T
TP-99212	LS to TSG-SA on the distribution of a proposal for prioritization of the elaboration of conformance test cases for 3G terminals (Revision of TP-99208)	T
TP-99222	LS to TSG-SA on resource situation and the general strategy and status of the elaboration of test cases. (Revision of TP-99211)	

## 6.3 Approval of Deliverables & Work programme review

TP-99157	T1 work programme BEFORE meeting T#5, October 1999 and expected deliverables	Secretary
TP-99169	TR 34.124 v1.0.0 for information: "EMC requirements for Mobile terminals and ancillary equipment"	T1
TP-99170	TS 34.109 v1.0.0 for information: "Terminal Logical Test Interface; Special conformance testing functions"	T1
TP-99204	Approval of a new work item on "Terminal Conformance Specification; Terminals Requirements for Regulatory approval (3G TS 34.110)"	T1
TP-99215	Approval of a new work item on "Identification of test requirements for regulatory purposes in different regions/countries (3G TR 34.910)" (Revision of TP-99204)	T

### 6.3.1 Submitted for information as v1.0.0

T 1/RF (Chairman: Mitsuru YOKOYAMA, HP)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 34.109	Terminal Logical Test Interface	v1.0.0	07-2000	Leif MATTISSON
T 1/EMC (Chairman: John FENN, SAMSUNG)				
TR 34.124	Electro-Magnetic Compatibility (EMC) for terminal equipment	v1.0.0	03-2000	Ole SOERENSEN

(TP-99170) TS 34.109 “Terminal Logical Test Interface” specifies terminal functions required for conformance testing purposes. Major discussion areas are EMMI, reference environment, Test SIM (see the LS in TP-99161). Many areas depend on final test methodology. V3 availability is delayed from 03/2000 to 07/2000. Consequently it will not meet the December '99 deadline for inclusion in R99.

(TP-99169) TR 34.124 “Electro-Magnetic Compatibility (EMC) for Terminal equipment” contains a superset of regulatory EMC requirements for 3G terminals as known today. When stable, it will be included in the “regulatory” deliverable. T members were invited to evaluate the TR and to send EMC comments directly to the Rapporteur and

T1/EMC Chairman, John FENN. V3 availability is delayed from 12/1999 to 03/2000. Consequently, it will not meet the December '99 deadline for inclusion in R99.

### 6.3.2 Status update (version number) and/or Re-scheduling

T 1/RF (Chairman: Mitsuru YOKOYAMA, HP)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 34.121	Terminal Conformance Specification, Radio Transmission and Reception (FDD)	v1.2.0	12-1999	Kenji HIGUCHI
TS 34.122	Terminal Conformance Specification, Radio Transmission and Reception (TDD)	v0.1.0	12-2000	Thomas MAUCKSCH

TS 34.121 “Terminal Conformance Specification, Radio Transmission and Reception (FDD)” has reached v1.2.0 and contains the measurement procedures for the transmitting characteristics, the receiving characteristics and the performance requirements in FDD mode. It is on schedule for TSG-T approval in December '99 and inclusion in R99 as V3.

TS 34.122 “Terminal Conformance Specification, Radio Transmission and Reception (TDD)” contains the measurement procedures for transmitting and receiving characteristics and the performance requirements in TDD mode. Little progress has been made so far and delays are expected. The current status is v0.1.0 and the current planning foresees V1 in 12/1999 and V3 in 12/2000. Consequently it will not meet the December '99 deadline for inclusion in R99.

T 1/Signalling (Chairman: Daniel FOX, ANRITSU)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 34.123-1	Mobile Station (MS) protocol conformance specification; Part 1: Protocol conformance specification (3G TS 34.123-1)	v0.0.3	07-2000	Lidia SALMERON
TS 34.123-2	Mobile Station (MS) Protocol/RF/EMC conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification (3G TS 34.123-2)	v0.0.1	07-2000	Shicheng HU
TS 34.123-3	Mobile Station (MS) protocol conformance specification; Part 3: Abstract Test Suites (ATS) (3G TS 34.123-3)	v0.0.0	03-2001	Shicheng HU

TS 34.123-1 “Mobile Station (MS) Conformance Specification, Part 1 – Conformance specification” contains a prose description of the test cases. TP-99171 (LS from T1/SIG) identifies the availability target dates for test cases. Additional work is being done on identifying the corresponding core specifications and on identifying “General tests” - like idle mode, handover, etc. The interface from T1/SIG to T1/RF SWG should be defined better i.e. who makes which test specifications. The current planning foresees V1 in 12/1999 and V3 availability was advanced from 12/2000 to 07/2000. Consequently, it will not meet the December '99 deadline for inclusion in R99.

TS 34.123-2 “Mobile Station (MS) Conformance Specification, Part 2 – ICS Implementation Conformance Statement” contains a list of capabilities which can / should be implemented in a 3G terminal. The information flow from the “Core” specification to this deliverable should be defined, however it is not clear who will maintain this document. What do we mean, when we claim that a capability is “mandatory”? It gets confused with mandatory regarding type approval (in the regulatory regime). TSG-T decided to recommend that 3GPP uses “core requirement” instead of “mandatory”, and noted that “mandatory” is reserved for regulatory relevance, which is out of the scope of 3GPP. The work in T1 will be linked to T2’s list of Terminal Capabilities Requirements contained in TS 21.904. The revised planning foresees V1 in 12/1999 and V3 availability was delayed from 12/1999 to 07/2000. Consequently, it will not meet the December '99 deadline for inclusion in R99.

TS 34.123-3 “Mobile Station (MS) Conformance Specification, Part 3 – Abstract Test Suites (ATS)” contains TTCN test specifications for the test cases described in part 1. It is being discussed which version of TTCN (v2, v2++ or v3) should be used. T1 may have to choose v3 to ensure “survival” of these standards and tools over the next 10 years. Otherwise, the migration will be difficult. Special functions will have to be implemented. TSG-T1 SIG and ETSI MTS/PEX met 28 September to discuss this. PCG has decided to fund the TTCN work, which should be done by experts to be recruited. TSG-T1/SIG will be responsible to manage the work program for the recruited experts, while TSG-T1 will be responsible for monitor the budget/deadlines etc. V1 is foreseen for 07/2000 (at least 50% stable regulatory test suites). The availability of V3 was advanced from 12/2001 to 03/2001. Consequently, it will not meet the December '99 deadline for inclusion in R99.

Following discussions in the TSG T plenary meeting, it was decided that there was a need for clarification of the use of the term “mandatory” in 3GPP documents.

- The term “mandatory” is associated with regulatory requirements, and should not be used in 3GPP specifications. It may however, be used in reports describing regulatory requirements. Given that, the term “mandatory” is in common use in 3GPP working groups, but that there is no common understanding of what is meant by the term, we propose that its use should be replaced by the term “Core Requirement” when describing functionality which is essential for the proper operation of the 3G system.
- Core Requirements in the terminal can be conditional on that terminal’s ability to support a specific function or service. Thus, there are certain Core Requirements of a terminal supporting only the baseline functionality (i.e. not supporting any service(s)). A terminal supporting a given service will have additional Core Requirements.

### 6.3.3 Approval of new Work Items

TP-99204 contains a new work item proposal (NOT for R99) and a deliverable (v0.0.1) on “Terminal Conformance Specification; Terminals Requirements for Regulatory approval” with the intention to establish a living document accumulating regional requirements. This proposal was refined in TP-99215 and subsequently approved as a Technical Report (TR) entitled “Identification of test requirements for regulatory purposes in different regions/countries (3G TR 34.910)”. This TR should contain a collection of test requirements identified for regulatory purposes in different regions / countries. The actual test case descriptions will be contained in other deliverables. The Rapporteur for TR 34.910 is Bjarke NIELSEN and the current planning foresees V1 for 03/2000 and V3 for 03/2001.

TSG-T1 further indicated that a large number of test cases can be foreseen in a complex system like 3G UMTS. Given the time schedule, the given resources are not sufficient to implement a satisfactory number of test specifications/cases. The subsequent discussion resulted in 3 Liaison Statements to TSG-SA:

TP-99219: TSG-T proposes to allow a general delay of test specification releases compared to the release of core specifications and thereby allow the matching of a release “xx” of test specifications to a release “xx” of the core specifications.

TP-99212: TSG-T identified that the most important test case requirements are the ones foreseen to be used for regulatory use. TSG-T1 will elaborate a list of identified test case requirements and assign then a priority. TSG-SA is asked to distributed this list among the SDOs and request them to ask regulatory authorities in their country/regions for comments. The SDOs can indicate the need for changing priorities or the addition of new test cases requirements – dependent on their plans for regulatory approvals. The actual T1 list of currently identified test case requirements will be elaborated within a month. The LS will then be sent to TSG-SA via the e-mail reflector.

TP-99222: TSG-T wishes to draw the attention of TSG-SA to the lack of resources in TSG-T1. TSG-SA is asked to examine the possibility of the SDOs to send extra resources to TSG-T1. If that appears not to be possible, TSG-T is proposing the establishment of a funded project team.

## 6.4 TSG-T1 Meeting Calendar

Meeting	Date	Location	Host
T1/ ETSI STQ	20 Oct 1999	Bern (ad-hoc Audio issues)	Swisscom
T1/RF/SIG/EMC	21-22 Oct 1999	Sophia Antipolis (France)	ETSI
T1/RF/SIG/EMC	7-8 Dec 1999	Sophia Antipolis (France)	ETSI
T1#5	9-10 Dec 1999	Sophia Antipolis (France)	ETSI
T1/RF/SIG	24-25 Jan 2000	TBD	TBD
T1/RF/SIG/EMC	6-8 Mar 2000	TBD (TNC: R&S in Munich)	TBD
TSG T1#6	9-10 Mar 2000	TBD (TNC: R&S in Munich)	TBD
T1/RF/SIG/EMC	29-31 May 2000	TBD	TBD
T1#7	1-2 Jun 2000	TBD	TBD
T1/RF/SIG/EMC	18-20 Sep 2000	TBD	TBD
T1#8	21-22 Sep 2000	TBD	TBD
T1/RF/SIG/EMC	4-6 Dec 2000	TBD	TBD
T1#9	7-8 Dec 2000	TBD	TBD

NOTE 1: T1 and its SWGs meet the week between RAN4 and TSG-T.  
NOTE 2: SWGs should meet at least once in-between each T1/SWG meeting.  
NOTE 3: As date/location/host may change the on-line 3GPP meeting calendar should be consulted at:  
<http://www.etsi.org/MeetingsCalendar/ViewMeetings.asp>

## 7 WG T2 Mobile Terminal Services and Capability

Kevin HOLLEY (BT), T2 Chairman, and Friedhelm RODERMUND (ETSI MCC), T2 Secretary, presented the "Progress report from WG T2" (TP-99173/4).

TP-99173	T2 Progress Report	T2 secretary
TP-99174	T2 Progress Report (slides)	T2 chairman
TP-99175	T2 work program (status after T2#5 Helsinki and T2#6 Kypngju)	MCC
TP-99158	T2 work program BEFORE meeting T#5, October 1999 and expected deliverables	T Secretary

### 7.1 SWG1 Execution Environment

**SWG1 Execution Environment** (Chairman: Mark CATALDO, Motorola) develops specifications for a terminal execution environment using wireless, fixed, and cordless access.

After the approval of MExE R99 stage 1 at SMG#29, SWG1 commenced to incorporate the R99 requirements into MExE R99 stage 2 (3G TS 23.057). The R99 requirements are SIM MexE certificate management, security clarifications and QoS aspects.

T 2/ SWG1 Execution Environment (Chairman: Mark CATALDO, Motorola)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.057	Mobile Station Application Execution Environment (MExE); Functional description; Stage 2	v1.5.0	12-1999	Mark CATALDO

The current status is v1.5.0 and T2 expects the deadline of December '99 for inclusion in R99 to be met.

### 7.2 SWG2 Terminal Interfaces

**SWG2 Terminal Interfaces** (Chairman: Lars NOVAK, Ericsson) develops specifications relating to external interfaces to terminals, and for the development of AT commands and alternatives to AT commands.

#### 7.2.1 Physical connector of the terminal

TP-99181	3G TR 27.901 v1.0.0 "Report on Terminal Interfaces - An Overview" for information	T2
----------	---	----

The conclusion of T2 on the physical connector of the terminal can be found in TR 27.901 v1.0.0 "Report on Terminal Interfaces", which was presented to TSG-T for information. T2 concluded that 3GPP should not produce any technical specification for terminal interfaces other than the radio interface and the USIM interface. The SDOs could develop



their own optional physical connector specification based on their market requirements. T endorsed the conclusion of T2.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 27.901	Report on Terminal Interfaces - An Overview	V1.2.0	12-1999	

The deadline of December '99 for inclusion in R99 is expected to be met.

## 7.2.2 Synchronisation and Object exchange

TP-99180	3G TR 27.903 v1.0.0 "Discussion of Synchronisation Standards" for approval	T2
TP-99191	3G TS 27.103 v1.0.0 "Wide Area Network Synchronisation" for approval	T2

On the topic synchronisation and object exchange substantial progress has been made. TR 27.903 "Discussion of Synchronisation Standards" (TP-99180) and TS 27.103 "Wide Area Network Synchronisation" (TP-99191) were submitted as v1.0.0 and approved by TSG-T for upgrade to v3.0.0.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 27.903	Discussion of Synchronisation Standards	V3.0.0		
TS 27.103	Wide Area Network Synchronisation	V3.0.0		

The deadline for inclusion in R99 has been met at T#5.

There were comments from the floor that it is not normal practice in 3GPP to approve a specification at the first time it is presented. Normally reports and specifications are first viewed for information and then later are approved. It was agreed that TSG-T would make an exception in this case. However, there were requests from the floor that for each document submitted for information or approval to have a cover sheet (template) stating what the specification is for (purpose), when it is expected to be finalised, what are the open issues, and what is the status of the open issues. This was approved by TSG-T. This needs to be highlighted to SA.

## 7.2.3 Use of DTE-DCE interface for SMS and CBS

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 27.005	Use of Data Terminal Equipment – Data Circuit terminating; Equipment (DTE-DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	V3.0.0		Friedhelm RODERMUND

The deadline for inclusion in R99 was met at T#4 in Miami.

## 7.2.4 AT commands

TP-99176	2G Change Requests for approval	T2
TP-99177	3G Change Requests for approval	T2

TSG-T approved several 2G and 3G Change Requests for inclusion of new AT commands into TS 27.007.

### 2G Change Requests

TDOCC	SPEC	CR	R	PH	SUBJECT	CAT	VERS	NEW_V
T299820	07.07	A08		R97	AT command – Request GPRS service 'D'	F	6.3.0	6.4.0
T299821	07.07	A08		R98	AT command – Request GPRS service 'D'	A	7.3.0	7.4.0

### 3G Change Requests

TDOCC	SPEC	CR	R	R3	SUBJECT	CAT	VERS	NEW
T2-99661	27.007	006			ECSD AT command correction	D	3.1.0	3.2.0
T2-99670	27.007	007			Alarm functionality	B	3.1.0	3.2.0
T2-99671	27.007	008			Phonebook storage	B	3.1.0	3.2.0

T2-99672	27.007	009		Time Zone	B	3.1.0	3.2.0
T2-99673	27.007	010		Additional result code for +CSSN	B	3.1.0	3.2.0
T2-99674	27.007	011		New command for setting of Date format	B	3.1.0	3.2.0
T2-99675	27.007	012		New command for Silent mode	B	3.1.0	3.2.0
T2-99676	27.007	013		New command for setting of Time format	B	3.1.0	3.2.0
T2-99763	27.007	014		GSM 400 Spectrum update	B	3.1.0	3.2.0
T2-99822	27.007	015		AT command – Request GPRS service 'D'	A	3.1.0	3.2.0

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 27.007	AT command set for 3GPP User Equipment (UE)	V3.2.0		Friedhelm RODERMUND

The current status is v3.2.0 and the deadline for inclusion in R99 was met at T#4 in Miami.

## 7.2.5 Alternatives to AT commands

Work Package	MI/TSGT-02TI_AAT_U	Terminal interfaces (Alternatives to AT commands)
--------------	--------------------	---

For the second consecutive time no contributions were received on the “Alternatives to AT commands”.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
DTS/TSGT-02TI_AAT_U	Alternatives to AT commands	???????	12-1999	Lars NOVAK

The deadline of December '99 for inclusion in R99 cannot be met.

## 7.2.6 TE-MS multiplexer protocol

TP-99176	2G Change Requests for approval	T2
TP-99177	3G Change Requests for approval	T2

TSG-T approved several 2G and 3G Change Requests for inclusion into TS 27.010.

### 2G Change Requests

TDOCC	SPEC	CR	R	PH	SUBJECT	CAT	VERS	NEW_V
T299662	07.10	A02		R97	Clarification of CR bit	F	6.3.0	6.4.0
T299663	07.10	A02		R98	Clarification of CR bit	A	7.0.0	7.1.0
T299665	07.10	A02		R97	Correction of the bits in the start and close flags of	F	6.3.0	6.4.0
T299666	07.10	A02		R98	Correction of the bits in the start and close flags of	A	7.0.0	7.1.0
T299668	07.10	A02		R97	Correction of value octets in RPN command	F	6.3.0	6.4.0

### 3G Change Requests

TDOCC	SPEC	CR	R	3	SUBJECT	CAT	VERS	NEW
T2-99664	27.010	003			Clarification of CR bit	A	3.1.0	3.2.0
T2-99667	27.010	004			Correction of the bits in the start and close flags of the frame in	A	3.1.0	3.2.0

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 27.010	Terminal Equipment to Mobile Station (TE-MS) multiplexer protocol	V3.2.0		Friedhelm RODERMUND

The current status is v3.2.0 and the deadline for inclusion in R99 was met at T#4 in Miami.

## 7.3 SWG3 Messaging

**SWG3 Messaging** (new Chairman: Ian HARRIS from Vodafone) defines UMTS-specific messaging applications to allow non-real time multimedia messaging, a Short Message Service, and Cell Broadcast Services. After the resignation of SWG3 chairman Arthur GIDLOW (One2One), Ian HARRIS (Vodafone) was appointed as the new SWG3 chairman.

### 7.3.1 Multimedia Messaging Service (MMS)

S1 agreed to send the stage 1 for the Multimedia Messaging Service (MMS) 3G TS 22.140, which was created by T2 for information to TSG-SA. T2 commenced the work on the MMS stage 2. The group is making significant efforts to finalise this document within 1999. However, there is a risk that this schedule can not be met.

Work Package	MI/TSGT-02MMS_U	Multimedia Messaging Service (MMS) stage 1, 2/3
Work Task 1	TS 22.140	MMS stage 1 (v1.0.0 done by T2 for S1)
Work Task 2	TS 23.140	MMS stage 2/3 (at risk for R99)

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.140	Multimedia Messaging Service; stage 2/3	0.1.0	12-1999	Gunnar SCHMIDT

The deadline of December '99 for inclusion in R99 is at risk.

### 7.3.2 Cell Broadcast Service (CBS)

TP-99179	3G TS 23.041 v2.0.0 "Technical realization of Cell Broadcast Service (CBS)" for approval	T2
----------	--	----

3G TS 23.041 "Technical realization of Cell Broadcast Service" was presented as v2.0.0 and approved by TSG-T for upgrade to v3.0.0.

Work Package	MI/TSGT-02SMS_CB_U	Cell Broadcast Service (CBS)
Work Task 1	TS 23.041 v3.0.0	CBS (stage 2/3)

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.041	Technical realisation of Cell Broadcast Service (CBS)	V3.0.0		Gunnar SCHMIDT

The current status is v3.0.0 and the deadline for inclusion in R99 was met at T#5.

Kevin HOLLEY (BT) commented that the status of Cell Broadcast as a service was unclear in other groups and he believed that the work item as a whole is at risk because of uncertainty in the overall service implementation across all TSGs. This needs to be reported to SA.

### 7.3.3 Enhanced Cell Broadcast Service (CBS)

So far, there was only little input regarding an Enhanced Cell Broadcast Service. The deadline of December '99 for inclusion in R99 cannot be met.

### 7.3.4 Short Message Service (SMS); Point-to-Point (PP)

TP-99176	2G Change Requests for approval	T2
TP-99177	3G Change Requests for approval	T2

TSG-T approved several 2G and 3G Change Requests for inclusion into TS 23.040.

#### 2G Change Requests

TDOCC	SPEC	CR	R	PH	SUBJECT	CAT	VERS	NEW_V
T299762	03.40	A08		R98	Change to reserved port number range for SMS	C	7.2.0	7.3.0

### 3G Change Requests

TDOCC	SPEC	CR	R	3	SUBJECT	CAT	VERS	NEW
T2-99761	23.040	003			Change to reserved port number range for SMS	C	3.1.0	3.2.0
T2-99902	23.040	004			New TP-PID value for delivery of ANSI-136 Short Messages	B	3.1.0	3.2.0
T2-99873	23.040	005			EI values in concatenated SM's	D	3.1.0	3.2.0

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.040	Technical realization of the Short Message Service (SMS); Point-to-Point (PP)	V3.2.0		

The current status is v3.2.0 and the deadline for inclusion in R99 was met at T#4 in Miami.

### 7.3.5 Alphabets and language-specific information

TP-99177	3G Change Requests for approval	T2
----------	---------------------------------	----

TSG-T approved one Change Request for inclusion into TS 23.038.

### 3G Change Request

TDOCC	SPEC	CR	R	3	SUBJECT	CAT	VERS	NEW
T2-99840	23.038	002			Language codes for Hebrew, Arabic and Russian	B	3.1.0	3.2.0

The current status is v3.2.0 and the deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.038	Alphabets and language-specific information	V3.2.0		Ian HARRIS

### 7.3.6 23.039 and 23.042 are unchanged

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.039	Interface protocols for the connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs)	V3.0.0		Ian HARRIS
TS 23.042	Compression algorithm for text messaging services	V3.0.0		Ian HARRIS

The deadline for inclusion in R99 was met at T#4 in Miami.

### 7.3.7 Fax in GSM and UMTS

TP-99178	3G TR 22.945 v2.0.0 "Study on provisioning of fax in GSM and UMTS" for approval	T2
----------	---	----

TR 22.945 "Study on provisioning of fax in GSM and UMTS" was presented as v2.0.0 and approved by TSG-T for upgrade to v3.0.0.

Reference	Title	Status	Target v3.0.0	Rapporteur
TR 22.945	Study on provisioning of fax in GSM and UMTS	V3.0.0		

The current status is v3.0.0 and the deadline for inclusion in R99 was met at T#5.

## 7.4 SWG4 Services End to End Interworking

SWG4 Services End to End Interworking has currently no chairman and no activity. It will meet on an ad hoc basis as the need arises.

T 2/ SWG4 Services End to End Interworking (No Chairman)
--

Reference	Title	Status	Target v3.0.0	Rapporteur

## 7.5 SWG5 Multi-system Terminals

**SWG5 Multi-system Terminals** (Chairperson: Sofi PERSSON, Telia)

The SWG's name and the TR title had been changed from "multi-mode" to "multi-system terminals" issues.

SWG5 is collecting and referring to work already done on multi-system terminals and from that identifies issues that need additional treatment to make usage of multi-system terminals efficient.

TP-99199	TR 21.910 v1.0.0 "Multi-system issues"			T2
----------	--	--	--	----

TR 21.910 on "Multi-system issues" was presented for information. Comments from other 3GPP WGs were invited. SA should be informed on described interactions with PLMN selection. It is planned to hold a 3GPP workshop on multi-system issues.

T 2/ SWG5 Multi-mode Terminals (Chairperson: Sofi PERSSON, Telia)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 21.910	Multi-system issues	V1.0.0	12-1999	Sofi PERSSON

The deadline of December 99 for inclusion in R99 is at risk.

The need for a specification on Terminal Categorisations for UMTS is currently under discussion. No consensus was reached so far. The need for a report on network planning was discussed.

TSG-T agreed to inform SA that some of the work was looking at PLMN selection and it would be worth confirming that the ideas in T2 were in agreement with the counterpart work in S1.

T2 will propose a 3GPP **workshop on multi-system terminals** and invite all interested parties. This needs to be reported to SA.

### Terminal Usage Mode and Maximum Output Power

At the last T2 meeting in Helsinki, it was decided to propose the creation of a TS on the relation between Terminal Usage Mode and Maximum output power of the terminal. The purpose of such a specification is to have an agreed maximum output power for e.g. hand-held terminals.

In this Kyongju T2 meeting, several companies objected to the creation of such TS and the issue was raised to the T-level. After an animated debate, Kevin HOLLEY (BT) pointed out that Power classes are defined by RAN.

Ericsson and Telia pointed out that RAN only specifies the technical (RF) parameters for the different power classes and not how the classes are used. The two companies expressed support for limiting the output power for hand-held terminals. Motorola, Nokia and Siemens were of the opinion that work on terminal power classes (output power of the terminal which is necessary for network planning) is being done in RAN, is out of the scope of TSG-T and it should be abandoned by T2. This proposal however, could not find consensus in TSG-T. A show of hands indicated 10 Yes, 8 No and 5 abstentions.

TSG-T decided to inform SA that T2 identified the need for work in 3GPP to help operators by identifying what the expected power class should be for network planning purposes, but for the time being it could not find yet a way forward.

Kevin HOLLEY, T2 Chairman and T Vice-Chairman, summarised that there was no consensus to change the status quo so that T2 will continue to discuss this work and the matter will be revisited at TSG-T#6 in December '99.

## 7.6 SWG6 Terminal Features and Performance

**SWG6 Terminal Features and Performance** (Chairman: Kazuya HASHIMOTO, NEC) covers aspects as terminal safety and environmental requirements. In addition, SWG6 works on general features, reviewing all terminal features and identifying a minimum set of features required to support a given application.

### 7.6.1 Specific Absorption Rate (SAR)

T 2/ SWG6 Terminal Features and Performance (Chairman: Kazuya HASHIMOTO, NEC)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 34.925	Specific Absorption Rate (SAR)	v3.0.0		Sven JOHNSSON

The deadline for inclusion in R99 was met at T#4 in Miami.

### 7.6.2 Electrical safety requirements and regulations

TP-99182	3G TR 34.907 v2.0.0 "Report on electrical safety requirements and regulations" for approval			T2
----------	---	--	--	----

TR 34.907 v2.0.0 "Report on electrical safety requirements and regulations" was approved by TSG-T for upgrading to v3.0.0.

T 2/ SWG6 Terminal Features and Performance (Chairman: Kazuya HASHIMOTO, NEC)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 34.907	Report on electrical safety requirements and regulations	v3.0.0		Eiji IIMORI

The current status is v3.0.0 and the deadline for inclusion in R99 was met at T#5.

### 7.6.3 Terminal Capability Requirements (TCR)

TP-99192	3G TR 21.904 v1.0.0 "Terminal Capability Requirements" for information			T2
TP-99187	3G TR 21.904 v1.0.1 "Terminal Capability Requirements" (revision of TP-99192)			T
TP-99200	Proposed liaison statement on mechanisms for maintaining the Terminal Capabilities Report			T2
TP-99209	LS to all 3GPP WGs on maintenance of TR 21.904 on "Terminal Capabilities Requirements"			T

TR 21.904 v1.0.0 Terminal Capability Requirements is presented for information. A mechanism for maintaining the Terminal Capabilities Report is proposed to TSG-T for endorsement and forwarding to all working groups.

T#5 modified the titles of A.1, B.1 headings to say: "to facilitate conformance testing" TR 21.904 V1.0.1 (TP-99187). This version of the TR should be sent out by MCC (T2 Secretary) to all 3GPP WGs together with the LS in (TP-99209).

T 2/ SWG6 Terminal Features and Performance (Chairman: Kazuya HASHIMOTO, NEC)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 21.904	Terminal Capability Requirements (TCR)	v1.0.1	12-1999	Craig BISHOP

The deadline of December 99 for inclusion in R99 is at risk.

### 7.6.4 Terminology and Vocabulary in 3GPP

Issues on definitions used for the Mobile Station/Terminal, and on terminology and vocabulary in 3GPP are raised to TSG-T (TP-99197 and TP-99198) to find a proper way forward.

TP-99197	Definitions used for the Mobile Station/Terminal			T2
TP-99203	LS to TSG-SA, CN, RAN on "Definitions used for the Mobile Station/Terminal" (Revision of TP-99197)			T

Within 3GPP there seems to be no common view, so far, on how to define the piece of user equipment that we might call UE, terminal, MS or even TE.

- From the GSM specifications (02.17) we find that a *Mobile Station (an MS)*, consists of a SIM card in combination with a *Mobile Equipment (an ME)*.
- Further, the ME (we find by deduction from 04.02) is made up by *MT (Mobile Termination)* plus *TA (Terminal Adaptation)*, if applicable, plus *TE (Terminal Equipment)*, if applicable, i.e. ME= (MT) or (MT + TE) or (MT + TA + TE).

TSG-T endorsed the usage of the well established terms *MS* and *ME* (see the two bullets above), at the expense of the misleading term *UE* and the imprecise term *Terminal*. TSG-T further endorses the three principles for terminology definitions proposed in the S1 report "Terminology and Vocabulary within S1", dated 28.7.99.

TSG-SA, TSG-CN and TSG-RAN were asked to support this position in order to achieve an alignment of the vocabulary in 3GPP.

TP-99198	Terminology and vocabulary in 3GPP	T2
TP-99205	LS to TSG-SA, CN, RAN on "Terminology and vocabulary in 3GPP"	T

TP-99198 discusses some proposed general guidelines for the work with terminology within 3GPP.

Concerns have been expressed for a long time for the consistency of the existing definitions, and according to TSGS#4(99)241, TSG-SA will "appoint a group to examine the definitions given in 3G vocabulary documents and create an overall vocabulary/ terminology document containing the agreed abbreviations and definitions to be used in 3GPP specifications".

Partly as a response to this, S1 has produced a report "Terminology and Vocabulary within TSG-S1: Report and Recommendations", dated 28.7.99.

At the moment it is not clear how this S1 report was treated at the last S1 meeting; possibly the discussion was postponed. Nevertheless it appears relevant to comment on the included proposed principles and the recommendations. Some reactions are already known and commented on below.

#### Discussion on the general guidelines

- In the S1 report three *principles* are proposed for the work:

Principle: use English words where possible

Principle: don't use common words as technical terms

Principle: re-use GSM terms

- Further, in the S1 report three *categories of definitions* are proposed by the following recommendations:

RECOMMENDATION 1, for terms local to a specification: If a special term is used in only one specification, it should be defined in that specification.

RECOMMENDATION 2, for terms local to the subject domain of service requirements: A new terminology document, 22.vvv, be produced and maintained by TSG-S1, relating specifically to the 22.000 series, called eg "Vocabulary for 22.000 series Service Requirements Specifications".

RECOMMENDATION 3, for terms used throughout 3GPP: A terminology document be produced and maintained by TSG-SA, "3GPP-VOCAB", which contains terms that have been identified as applying across the 3GPP project. The number of such terms should be as small as possible to minimise the learning burden on writers and readers.

- The motivation behind this is efficiency for the document writers and readers; they should only have to look in the "document neighbourhood" for the definitions.
- Although the intention is to achieve efficiency the conclusion seems not feasible in practice.
- Several questions arise: What is a subject domain? How many vocabularies can we expect? Five (one for each TSG plus a common one)? Who decides and *who would be able to know* what terms that apply across 3GPP? When is this the case and when is the term "not widely [used] elsewhere" and should go into a subject domain vocabulary?
- Further, when a term is defined for the first time it surely is unique to this document. Then it is vital that the information of this is spread to enable usage in other places as well as preventing a redefinition of the same term by accident somewhere else.
- It appears that S1 has had discussions with the MCC on the matter and that it has been concluded that the proposal in its complete extent is not feasible. Possibly a proposal will come suggesting that TSG-RAN continue their vocabulary, while the other TSGs have one together.

- It does not seem motivated to have a split vocabulary for TSG-RAN, or any other group, in particular from a TSG-T point of view. The MS not only comprises all protocol layers but is also referenced in almost all other areas (except network transport).

### Conclusions

TSG-T endorsed the above principles, motivated by an unambiguous and efficient usage of the vocabulary document(s):

- There should only be *one* 3GPP vocabulary common to all groups.
- All documents should reference this vocabulary.
- It is allowed to copy some of the definitions in a specific document, with the note that the common vocabulary always overrides the local.
- Also definitions unique to a document should be included in the common vocabulary. An exception can be made when the definition clearly was made not to introduce a new concept, but solely to make the text more compact or easy to write.

TSG-SA, TSG-CN and TSG-RAN were asked to support this position in order to advance the work on a 3GPP vocabulary in the most rational way.

## 7.6.5 Terminal Management

TP-99201	Terminal Management	T2 Chairman
----------	---------------------	-------------

The T2 chairman believes that Terminal Management (TM) is of importance to 3GPP and therefore raises what he believes to be the most important aspects in this document which is **not endorsed** by T2.

### Introduction

Aspects on TM have recently been discussed in SA Plenary and SA5. This is not a new discussion, but has previously at great length been discussed in SMG Plenary, T3/SMG9 and T2/SMG4. As concluded in Tdoc TSGS5#4(99)106, it may be a concern of many groups.

### Definition

TM (TM) is a secure mechanism that allows the network operator, with permission from the authenticated user, to remotely change settings within a terminal and obtain terminal diagnostic information.

### Scope

TM allows:

- the network operator to assist the user
- terminal diagnostic information to be fed back to the network operator
- a population of unmanned terminals to be managed for a customer (user groups or machine-machine solutions)

### Discussion

TM requires a mechanism to be implemented in the terminal, which is linked to remote functions in the network. This can either be implemented by defining a new protocol, or by re-using existing toolkits such as SAT and MExE. It is believed that SAT and MExE can provide everything required for TM, and that it would be against the defined S1 principles (using toolkits for new developments wherever possible) to define a new protocol. The T2 chairman has been informed that similar conclusions have already been reached by S1 on TM.

It is therefore suggested that requirements for TM be handled as part of the MExE and SAT work items.

### Conclusion

TSG-T **agreed** that the above represents an appropriate starting point for the definition and scope for TM, **endorsed** the principle that the mechanisms SAT and MExE are suitable and sufficient, and **agreed** that it is appropriate for TSG-T to be responsible for TM. **This needs to be confirmed by SA.**



## 7.7 TSG-T2 Meeting Calendar

Meeting	Date	Location	Host
T2 SWG3 MMS ad hoc	9-10 Nov 1999	UK	Motorola
T2#7/SMG4	22-26 Nov 1999	Ystad, Sweden	Ericsson
T2 SWG1	Dec 1999		
T2#8/SMG4	24-28 Jan 2000	US	TIP1
T2#9/SMG4	15-19 May 2000	Netherlands	CMG
T2#10/SMG4	28 Aug - 01 Sep 2000	Ireland	Logica
T2#11/SMG4	20-24 Nov 2000		

## 8 WG T3 USIM

Klaus VEDDER (Giesecke & Devrient), T3 Chairman, and Michael SANDERS (ETSI MCC), T3 Secretary, presented the progress of WG T3 (TP-99183). The new T3 Work Items are given in (TP-99184/210).

TP-99183	T3 Status Report presentation (slides)	T3
TP-99159	T3 work program BEFORE meeting T#5, October 1999 and expected deliverables	T Secretary

### 8.1 Review of open issues

#### 8.1.1 Phonebook / Abbreviated Dialling Number (ADN)

The decision on the different proposals evaluated has been taken at T3#8 meeting in Bonn.

#### 8.1.2 Allocation of Application Identifiers (AIDs)

The AIDs issue has been resolved:

- ETSI Secretariat applied for an RID on behalf of 3GPP (see TP-99184)
- A new WI on AID was submitted to this T#5 meeting for approval (see TP-99184)

#### 8.1.3 Application selection, PIN-handling and logical channels

The specification of the application selection has not yet been completed:

- Special emphasis is required for multi-application UICCs.
- Two different selection methods are under consideration.
- Decision should be taken by T3#10 in November 1999.

#### 8.1.4 Security and network parameters

- Some security and network parameters still need to be clarified;
- Liaison Statements to S3 and R2 were agreed by T3.

## 8.2 Transfer of Other GSM Specifications

SMG9 #19, Munich, 20 to 23 September 1999 agreed to transfer the following specifications to T3 after completion of its work on GSM Release 99 following its next meeting in February 2000:

- GSM 02.19 SIM Application Programming Interface (API) - stage 1
- GSM 03.19 SIM Application Programming Interface (API) - stage 2 - (Java<sup>TM</sup>)
- GSM 11.17 SIM conformance test specification
- GSM 11.XX Administration commands

NOTE: GSM 11.11, GSM 11.12 and GSM 11.18 will not be transferred as they are covered by 3G 31.101 and 3G 31.102 (the GSM specifications will be modelled according to and stay in line with the 3G specifications)

### 8.3 Approval of Deliverables

T 3/ USIM (Chairman: Klaus VEDDER, Giesecke & Devrient)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 21.111	USIM and IC Card Requirements	v3.0.0		Günter MARINGER

The deadline for inclusion in R99 was met at T#3 in Yokohama.

TP-99185	3G TS 31.101 V 1.0.0 "UICC-Terminal Interface; Physical and Logical Characteristics"	T3
TP-99186	3G TS 31.102 V 1.0.0 "Characteristics of the USIM Application"	T3

The two deliverables were presented to TSG-T #5 for information. Note that the titles had been changed:

Deliverable	OLD Title	NEW Title
TS 31.101	UICC physical and logical characteristics	UICC-Terminal Interface; Physical and Logical Characteristics
TS 31.102	USIM characteristics	Characteristics of the USIM Application

T 3/ USIM (Chairman: Klaus VEDDER, Giesecke & Devrient)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 31.101	UICC-Terminal Interface; Physical and Logical Characteristics	V1.0.0	12-1999	Peter VESTERGAARD Rune LINDHOLM
TS 31.102	Characteristics of the USIM Application	V1.0.0	12-1999	Makoto.KOBAYASHI Christian HEIM

T3 is confident that the deadline of December 99 for inclusion in R99 will be met.

### 8.4 Approval of new Work Items

TP-99184	New T3 Work Items (4)	T3
TP-99210	New Work Item USIM/UICC Database (1)	T3

WI #	T3 Doc	Title	Release	Target v3.0.0 approval
1	T3-99319	UICC Application Identifiers	R99	December 1999
2	T3-99320	Terminal tests for the UICC Interface	based on R99 core spec	June 2000
3	T3-99321	UICC Test Specification	based on R99 core spec	June 2000
4	T3-99328	USIM Application Toolkit (USAT)	R99	March 2000
5	T3-99262	UICC/USIM Database	R00	September 2000

#### Work Item 1: "UICC Application Identifiers"

It will be modelled after an existing ETSI guide EG 201 220. This concept was endorsed by PCG.

This work item creates a specification for the definition and administration of application identifiers for the UICC. An application Identifier consists of a RID (Registered application provider Identifier) and a PIX (Proprietary Identifier eXtension). As endorsed by the PCG, the 3GPP has applied to ISO for an RID. The new specification will describe the coding of the PIX as well as the registration procedure in accordance with ISO/IEC 7816-5.

- Target TSG approval of v3.0.0 is 12/1999 (for information as v1,0,0 to TSG-T by e-mail in November 99)
- Rapporteur: Christian Dietrich and Jean-Marc Gambin, both Schlumberger
- Supporting companies: Gemplus, Giesecke & Devrient (G&D), NTT DoCoMo, Schlumberger, Sonera.

#### Work Item 2: Terminal tests for the UICC Interface

This work item creates a terminal test specification for the interface between the UICC and the terminal. It will be based on the tests currently contained in GSM 11.10-1 clause 27.

- Target TSG approval of v3.0.0 is 06/2000
- Rapporteur to be provided by Orga (subject to confirmation)
- Supporting companies: Aspects Software, Ericsson, G&D, Nokia, NTT DoCoMo, Orga, Schlumberger

The above time scales are dependent on the provision of funding for a project team to write this specification as requested by TSG-T to PCG in SP-99277.

- 3GPP member companies are asked to provide experts for the proposed project team.

**Work Item 3: UICC Test Specification**

This work item creates a test specification for the UICC. It will be based on tests currently contained in GSM 11.17.

- Target TSG approval of v3.0.0 is 06/2000
- Rapporteur to be provided by Aspects Software (subject to confirmation)
- Supporting companies: Aspects Software, Ericsson, Gemplus, G&D, Nokia, NTT DoCoMo, Orga, Schlumberger.

The above time scales are dependent on the provision of funding for a project team to write this specification as requested by TSG-T to PCG in SP-99277.

- 3GPP member companies are asked to provide experts for the proposed project team.

**Work Item 4: USIM Application Toolkit (USAT)**

This specification for an application execution environment for the 3G UICC and its interface to the 3G terminal, based on GSM 11.14 (SIM Application Toolkit).

The TS defines requirements of the USIM and the interface to the 3G Terminal in relation to the USIM Application Toolkit. These are derived from the service and security requirements defined in TS 22.100 and 22.101. It defines commands and procedures in both the USIM and 3G Terminal for using the USIM Application Toolkit.

Major issues for first release are:

- alignment of 3G document with new structure of “core” standards
- completion of outstanding SMG9 Release 99 issues
- rationalisation of specification
- document not yet transferred to 3GPP
- Target TSG approval of v3.0.0 is 03/2000, consequently it will not meet the December '99 deadline.
- Rapporteur: Kristian WOODSEND, Aspects Software ([kristian@aspects.demon.co.uk](mailto:kristian@aspects.demon.co.uk))
- Supporting companies: NTT DoCoMo, De La Rue, Vodafone, Mitsubishi Electric, Giesecke & Devrient (G&D), Gemplus.

**Work Item 5: UICC/USIM Database management**

There is a requirement for operators to be able to use secure and complex data structures in the UICC/USIM, which may be updated over the air. This leads to the need for new functionality in the UICC/USIM to allow the storage and manipulation of complex data in the card in a more efficient way by means of a database. The work item will address the use of databases for this purpose and specify issues such as access policy, memory recovery requirements and processes, synchronisation processes (in conjunction with TSG-T2) as well as the relationship between performance and structure. This work item proposes the updating of 31.101 and 31.102 with the following scope of work:

- Specification of access policy;
- Specification of internal interface for UICC applications;
- Specification of external interface (considering the use with both handset core software and MExE, but not including the definition of MExE commands);
- Specification of memory recovery requirements and processes;
- Specification of parameters and operations for data views manipulation;
- Investigation of over the air compatibility for downloading;
- Specification of synchronisation processes; (in conjunction with TSG-T2)
- Investigation into compression techniques;
- relationship between performance and structure of database;
- test scenarios.

Additionally, as part of the scope, the use of database management for an evolution of the 3G phonebook feature should be investigated.

Service aspects: CRs will be proposed to S1 to include the service requirements for the feature in 22.100 / 22.101 as appropriate.

- Security Requirements from TSG-SA WG3 shall be taken into account.
- Target TSG approval of v3.0.0 is 09/Rapporteur: Bruno BASQUIN, Gemplus
- Supporting companies: Vodafone, Gemplus, Siemens, Schlumberger, NTT DoCoMo
- Secondary responsibility: T2 (Terminal capabilities), S1 (Services), S3 (Security)

## 8.5 TSG-T3 Meeting Calendar

Meeting	Date	Location	Host
TSG-T3#10	02 - 05 November 1999	Austin, Texas, USA	Schlumberger
TSG-T3#3 editing meeting	08 - 10 December 1999	Sophia Antipolis, FR	ETSI
TSG-T3 #11	06 - 07 December 1999	Sophia Antipolis, FR	ETSI
TSG-T3#12 / SMG9#20	18-21 January 2000	Rome	TIM
TSG-T3 #13	February/March 2000	Tokyo	Japan Telecom
TSG-T3#14 / SMG9#21	May 2000	Gotland, Sweden	Across, Telenor, Telia
NOTE: As date/location/host may change the on-line 3GPP meeting calendar should be consulted at: <a href="http://www.etsi.org/MeetingsCalendar/ViewMeetings.asp">http://www.etsi.org/MeetingsCalendar/ViewMeetings.asp</a>			

## 9 TSG-T Work Plan/ Co-ordination with TSG-SA

The status at TSG#5 of TSG-T deliverables identified as belonging to Release 1999 (R99) for delivery in December 1999 (12 Oct '99) can be found in the annexes A and B.

## 10 Liaison Statements to other TSGs

TP-99203	LS to TSG-SA, CN, RAN on "Definitions used for the Mobile Station/Terminal"	T
TP-99205	LS to TSG-SA, CN, RAN on "Terminology and vocabulary in 3GPP"	T
TP-99212	LS to TSG-SA on the distribution of a proposal for prioritization of the elaboration of conformance test cases for 3G terminals. – Will be send to TSG-SA via the e-mail reflector when the priority list has been elaborated.	T
TP-99219	LS to TSG-SA on how to handle approval of MS Conformance Test Specifications coupled to a certain 3GPP release	T
TP-99222	LS to TSG-SA on resource situation and the general strategy and status of the elaboration of test cases	T
TP-99218	LS to SA, PCG, 3GPP2 on "3GPP TSG T Position on supplement to recommendation Q 1701 from ITU T WP 3/11" (with annex from TP-99217) NOTE: 3GPP TSG-T regards the MT-USIM and CN-USIM specifications to be the responsibility of the 3GPPs, rather than of the ITU-T.	T
TP-99221	LS to SA, PCG, 3GPP2 on "3GPP TSG T Position#2 on supplement to recommendation Q 1701 from ITU T WP 3/11" (with annex from TP-99220) NOTE: T2 deliverables added	T

The report from TSG-T Chairman to TSG-SA#5 can be found in **SP-99475 (PowerPoint presentation) and SP-99476 (Detailed Report)**.

Seven LSs from TSG-T to SA had been submitted as follows:

Topic	TSG-T Number	TSG-SA Number
Terminology & Vocabulary	TP-99203	SP-99457 (identical with SP-99407)
	TP-99205	
Testing	TP-99212	SP-99458
	TP-99219	SP-99419
	TP-99222	SP-99420
	TP-99218	SP-99421
ITU-T Q.1701	TP-99221	SP-99422

## 11 Future meeting schedule

Meeting	Date	Location	Host
TSG-T#6	13-15 December 1999	Nice / France	ETSI
TSG-T#7	13-15 March 2000	Madrid/ Spain	Telefonica
TSG-T#8	19-21 June 2000	Dusseldorf /Germany	Mannesmann
TSG-T#9	25-27 September 2000	Bangkok / Thailand (TBC)	Unisys
TSG-T#10	11-13 December 2000	??... / USA (TBC)	T1

NOTE: As date/location/host may change the on-line 3GPP meeting calendar should be consulted at:  
<http://www.etsi.org/MeetingsCalendar/ViewMeetings.asp>

After each and every meeting, Secretaries of 3GPP TSG/WG/SWG should send - without fail - the meeting calendar information to the 3GPP-support group [Emanuelle.Wurfell@etsi.fr](mailto:Emanuelle.Wurfell@etsi.fr).

## 12 Any Other Business

<b>TP-99165</b>	3GPP Vocabulary - TR 25.990 V1.0.0 (1999-09)	RAN4
-----------------	--	------

**TP-99165** was noted and the TSG-T members were invited to send comments to the Rapporteur [Peter.Okrah@motorola.com](mailto:Peter.Okrah@motorola.com)

NOTE: See also chapter 7.6.4 on "Terminology and Vocabulary in 3GPP".

<b>TP-99162</b>	Maintenance of earlier releases of 2G GSM versions of specifications	Ian DOIG, MCC
-----------------	--	------------------

**TP-99162** was noted i.e. that responsibility for maintenance of earlier releases of 2G GSM versions of specifications transferred to 3GPP is now with the 3GPP TSGs.

<b>TP-99223</b>	3GPP Work program Database (presentation)	Ian DOIG, MCC
-----------------	---	------------------

**TP-99223** was noted.

## 13 Close of the meeting

The Chairman, Sang-Keun PARK (SAMSUNG), warmly thanked:

- TTA and especially the Korean "Electronic meeting Support Team" for the excellent meeting facilities;
- TSG-T WGs for their hard work and good progress made on Release 99;
- the participants for their active contributions and suggestions and
- the Korean and MCC meeting Support Teams.

On behalf of the TSG-T participants, Kevin HOLLEY (TSG-T Vice-Chairman) expressed gratitude to the hosts and sponsoring organisations for the very good choice of meeting location / environment / facilities.

**Annex A: TSG-T qualification status for R99 in December '99 (12 Oct '99)**

**A Qualified for R99 in Dec '99**

Reference	Title	Status	Target v3.0.0	Rapporteur
21.111	USIM and IC Card Requirements	v3.0.0		Günter MARINGER
22.945	Study on provisioning of fax in GSM and UMTS	V3.0.0		
23.038	Alphabets and language-specific information	V3.2.0		Ian HARRIS
23.039	Interface protocols for the connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs)	V3.0.0		Ian HARRIS
23.040	Technical realization of the Short Message Service (SMS); Point-to-Point (PP)	V3.2.0		
23.041	Technical realisation of Cell Broadcast Service (CBS)	V3.0.0		Gunnar SCHMIDT
23.042	Compression algorithm for text messaging services	V3.0.0		Ian HARRIS
27.005	Use of Data Terminal Equipment – Data Circuit terminating; Equipment (DTE-DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	V3.0.0		Friedhelm RODERMUND
27.007	AT command set for 3GPP User Equipment (UE)	V3.2.0		F. RODERMUND
27.010	Terminal Equipment to Mobile Station (TE-MS) multiplexer protocol	V3.2.0		Friedhelm RODERMUND
27.103	Wide Area Network Synchronisation	V3.0.0		
27.903	Discussion of Synchronisation Standards	V3.0.0		
34.907	Report on electrical safety requirements and regulations	V3.0.0		Eiji IIMORI
34.925	Specific Absorption Rate (SAR)	v3.0.0		Sven JOHNSSON

**B Expected qualification for R99 in Dec '99**

Reference	Title	Status	Target v3.0.0	Rapporteur
23.057	Mobile Station Application Execution Environment (MExE); Functional description; Stage 2	v1.5.0	12-1999	Mark CATALDO
27.901	Report on Terminal Interfaces - An Overview	V1.2.0	12-1999	
31.101	UICC-Terminal Interface; Physical and Logical Characteristics	V1.0.0	12-1999	Peter VESTERGAARD Rune LINDHOLM
31.102	Characteristics of the USIM Application	V1.0.0	12-1999	Makoto.KOBAYAS HI Christian HEIM
34.121	Terminal Conformance Specification, Radio Transmission and Reception (FDD)	v1.2.0	12-1999	Kenji HIGUCHI
New Work Item 1	UICC Application Identifiers		12-1999	

**C Qualification at Risk for R99 in Dec '99**

Reference	Title	Status	Target v3.0.0	Rapporteur
21.904	Terminal Capability Requirements (TCR)	V1.0.1	12-1999	Craig BISHOP
21.910	Multi-system issues	V1.0.0	12-1999	Sofi PERSSON
23.140	Multimedia Messaging Service; stage 2/3	0.1.0	12-1999	Gunnar SCHMIDT

**D Impossible qualification for R99 in Dec '99**

Reference	Title	Status	Target v3.0.0	Rapporteur
34.109	Terminal Logical Test Interface	V1.0.0	07-2000	Leif MATTISSON
34.122	Terminal Conformance Specification, Radio Transmission and Reception (TDD)	V0.1.0	12-2000	Thomas MAUCKSCH
34.123-1	Mobile Station (MS) protocol conformance specification; Part 1: Protocol conformance specification	V0.0.3	07-2000	Lidia SALMERON
34.123-2	Mobile Station (MS) Protocol/RF/EMC conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification	V0.0.1	07-2000	Shicheng HU
34.123-3	Mobile Station (MS) protocol conformance specification; Part 3: Abstract Test Suites (ATS)	V0.0.0	03-2001	Shicheng HU

34.124	Electro-Magnetic Compatibility (EMC) for terminal equipment	V1.0.0	03-2000	Ole SOERENSEN
DTS/TSGT-02TI_AAT_U	Alternatives to AT commands	???????	12-1999	Lars NOVAK
New Work Item 2	Terminal tests for the UICC Interface		06-2000	
New Work Item 3	UICC Test Specification		06-2000	
New Work Item 4	USIM Application Toolkit (USAT)		03-2000	

## Annex B: TSG-T qualification status for R99 in Dec '99 (split by WG/SWG)

### B.1: WG T1 Mobile Terminal Conformance Testing

T 1/RF (Chairman: Mitsuru YOKOYAMA, HP)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 34.109	Terminal Logical Test Interface	V1.0.0	07-2000	Leif MATTISSON
T 1/EMC (Chairman: John FENN, SAMSUNG)				
TR 34.124	Electro-Magnetic Compatibility (EMC) for terminal equipment	V1.0.0	03-2000	Ole SOERENSEN

Consequently they will not meet the December '99 deadline for inclusion in R99.

T 1/RF (Chairman: Mitsuru YOKOYAMA, HP)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 34.121	Terminal Conformance Specification, Radio Transmission and Reception (FDD)	v1.2.0	12-1999	Kenji HIGUCHI
TS 34.122	Terminal Conformance Specification, Radio Transmission and Reception (TDD)	v0.1.0	12-2000	Thomas MAUCKSCH

TS 34.121 is on schedule for TSG-T approval in December '99 and inclusion in R99 as V3.

TS 34.122 will not meet the December '99 deadline for inclusion in R99.

T 1/Signalling (Chairman: Daniel FOX, ANRITSU)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 34.123-1	Mobile Station (MS) protocol conformance specification; Part 1: Protocol conformance specification (3G TS 34.123-1)	v0.0.3	07-2000	Lidia SALMERON
TS 34.123-2	Mobile Station (MS) Protocol/RF/EMC conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification (3G TS 34.123-2)	v0.0.1	07-2000	Shicheng HU
TS 34.123-3	Mobile Station (MS) protocol conformance specification; Part 3: Abstract Test Suites (ATS) (3G TS 34.123-3)	v0.0.0	03-2001	Shicheng HU

Consequently they will not meet the December '99 deadline for inclusion in R99.

### B.2 WG T2 Mobile Terminal Services and Capability

T 2/ SWG1 Execution Environment (Chairman: Mark CATALDO, Motorola)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.057	Mobile Station Application Execution Environment (MExE); Functional description; Stage 2	v1.5.0	12-1999	Mark CATALDO

TSG-T hopes the December '99 deadline for inclusion in R99 to be met.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 27.901	Report on Terminal Interfaces - An Overview	v1.2.0	12-1999	
TR 27.901	Report on Terminal Interfaces - An Overview	v1.2.0	???????	

The deadline of December '99 for inclusion in R99 is to be met

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 27.903	Discussion of Synchronisation Standards	v3.0.0		
TS 27.103	Wide Area Network Synchronisation	v3.0.0		

The deadline for inclusion in R99 has been met at T#5.



T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 27.005	Use of Data Terminal Equipment - Data Circuit terminating; Equipment (DTE-DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	V3.0.0		Friedhelm RODERMUND

The deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 27.007	AT command set for 3GPP User Equipment (UE)	V3.2.0		Friedhelm RODERMUND

The deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
DTS/TSGT-02TI_AAT_U	Alternatives to AT commands	???????	12-1999	Lars NOVAK

The deadline of December '99 for inclusion in R99 cannot be met.

T 2/ SWG2 Terminal Interfaces (Chairman: Lars NOVAK, Ericsson)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 27.010	Terminal Equipment to Mobile Station (TE-MS) multiplexer protocol	V3.2.0		Friedhelm RODERMUND

The deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.140	Multimedia Messaging Service; stage 2/3	0.1.0	12-1999	Gunnar SCHMIDT

The deadline of December '99 for inclusion in R99 is at risk.

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.041	Technical realisation of Cell Broadcast Service (CBS)	V3.0.0		Gunnar SCHMIDT

The deadline for inclusion in R99 was met at T#5.

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.040	Technical realization of the Short Message Service (SMS); Point-to-Point (PP)	V3.2.0		

The deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.038	Alphabets and language-specific information	V3.2.0		Ian HARRIS

The deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG3 Messaging (Chairman: Ian HARRIS (Vodafone))				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 23.039	Interface protocols for the connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs)	V3.0.0		Ian HARRIS
TS 23.042	Compression algorithm for text messaging services	V3.0.0		Ian HARRIS

The deadline for inclusion in R99 was met at T#4 in Miami.

Reference	Title	Status	Target v3.0.0	Rapporteur
TR 22.945	Study on provisioning of fax in GSM and UMTS	V3.0.0		

The deadline for inclusion in R99 was met at T#5.

T 2/ SWG5 Multi-mode Terminals (Chairperson: Sofi PERSSON, Telia)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 21.910	Multi-system issues	V1.0.0	12-1999	Sofi PERSSON

The deadline of December 99 for inclusion in R99 is at risk.

T 2/ SWG6 Terminal Features and Performance (Chairman: Kazuya HASHIMOTO, NEC)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 34.925	Specific Absorption Rate (SAR)	v3.0.0		Sven JOHNSSON

The deadline for inclusion in R99 was met at T#4 in Miami.

T 2/ SWG6 Terminal Features and Performance (Chairman: Kazuya HASHIMOTO, NEC)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 34.907	Report on electrical safety requirements and regulations	V3.0.0		Eiji IIMORI

The deadline for inclusion in R99 was met at T#5.

T 2/ SWG6 Terminal Features and Performance (Chairman: Kazuya HASHIMOTO, NEC)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TR 21.904	Terminal Capability Requirements (TCR)	V1.0.1	12-1999	Craig BISHOP

The deadline of December 99 for inclusion in R99 is at risk.

## B.3 WG T3 USIM

T 3/ USIM (Chairman: Klaus VEDDER, Giesecke & Devrient)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 21.111	USIM and IC Card Requirements	v3.0.0		Günter MARINGER

The deadline for inclusion in R99 was met at T#3 in Yokohama.

T 3/ USIM (Chairman: Klaus VEDDER, Giesecke & Devrient)				
Reference	Title	Status	Target v3.0.0	Rapporteur
TS 31.101	UICC-Terminal Interface; Physical and Logical Characteristics	V1.0.0	12-1999	Peter VESTERGAARD Rune LINDHOLM
TS 31.102	Characteristics of the USIM Application	V1.0.0	12-1999	Makoto.KOBAYASHI Christian HEIM

Confident that the December 99 deadline of for inclusion in R99 will be met. NOTE: Titles changed.

T 3/ USIM (Chairman: Klaus VEDDER, Giesecke & Devrient)				
Reference	Title	Status	Target v3.0.0	Rapporteur
New Work Item 1	UICC Application Identifiers		12-1999	
New Work Item 2	Terminal tests for the UICC Interface		06-2000	
New Work Item 3	UICC Test Specification		06-2000	
New Work Item 4	USIM Application Toolkit (USAT)		03-2000	

---

## Agenda

- |    |   |  |
|----|---|--|
| 1  | Opening of the meeting  |  |
| 2  | Approval of Agenda & Registration of documents  | 148, 196   |
| 3  | Report of TSG-T#4 Miami<br>- Follow-up on Action points / Outstanding issues  | 147, 150   |
| 4  | Chairman's report and objectives for meeting#5<br>4.1 PCG activity<br>4.2 Objectives for meeting#5  | 152, 153, 154,   |
| 5  | Letters and reports from other groups, LS incoming<br>5.1 From other TSGs<br>5.2 From outside 3GPP  | 149, 151, 160, 194<br>166, 190, 193, 195                             |
| 6  | WG T1 Mobile Terminal Conformance Testing<br>6.1 Progress report/ meeting calendar<br>6.2 Liaison Statements to TSG-T<br>6.3 Approval of Deliverables (TS/TR)<br>6.4 Work programme review of WG T1     | 156,<br>167, 168, 202<br>161, 171<br>169, 170, 192<br>157, 204, 215, |
| 7  | WG T2 Mobile Terminal Services and Capability<br>7.1 Progress report/ meeting calendar<br>7.2 Liaison Statements to TSG-T<br>7.3 Approval of Deliverables (TS/TR)<br>7.4 Work programme review of WG T2 | 173, 174<br>197 - 200<br>176 - 182, 187, 191<br>158, 175             |
| 8  | WG T3 USIM<br>8.1 Progress report/ meeting calendar<br>8.2 Liaison Statements to TSG-T<br>8.3 Approval of Deliverables (TS/TR)<br>8.4 Work programme review of WG T3                                    | 155<br><br><br>159, 210,   |
| 9  | TSG-T Work Plan/ Co-ordination with TSG-SA  | 163, 172, 188, 189, 201  |
| 10 | Liaison Statements (LS) outgoing<br>10.1 LS to other TSGs<br>10.2 LS to outside 3GPP  | 203, 205, 207 - 209, 211, 212, 217-219, 222                          |
| 11 | Future meeting schedule   |  |
| 12 | Any Other Business  | 162, 165, 223  |
| 13 | Close of the meeting  |  |

## List of Documents

Doc No	Title	Source	Agenda item	Replaced by
TP-99147	DRAFT Report of TSG-T#4 meeting, Miami, Florida (USA) 17-18 June 1999	T Secretary	3	
TP-99148	DRAFT Agenda for TSG-T#5, Seoul, Korea, 7- 8 October 1999	T Chairman	2	
TP-99149	EXCERPT from Draft Report of TSG SA Meeting #4, Miami, USA, 21-23 June 1999	SA Secretary	5.1	
TP-99150	Report of TSG-T#4 meeting, Miami, Florida (USA) 17-18 June 1999	T	3	
TP-99151	LS from S1 to S2, SMG2, RAN on requirements for all-IP option for release 2000	S1	5.1	
TP-99152	TSG-T Management Report to PCG#02 (PCG#2(99)34)	T Chairman	4.1	
TP-99153	Report to PCG#02 on work in TSG-SA (PCG#2(99)31)	SA Chairman	4.1	
TP-99154	DRAFT Report of PCG#02, Sophia Antipolis 6-7 July 1999	PCG Secretary	4.1	
TP-99155	Request to PCG for funding of USIM testing (PCG#2(99)16)	T	8	
TP-99156	Request to PCG for funding of 3GPP TTCN Specifications (PCG#2(99)17)	T	6	
TP-99157	T1 work programme BEFORE meeting T#5, October 1999 and expected deliverables	T Secretary	6.4	
TP-99158	T2 work programme BEFORE meeting T#5, October 1999 and expected deliverables	T Secretary	7.4	
TP-99159	T3 work programme BEFORE meeting T#5, October 1999 and expected deliverables	T Secretary	8.4	
TP-99160	LS from S2 on work plan for all-IP option for Release 2000	S2	5.1	
TP-99161	LS from T1 on Confirmation of work items regarding USIM (UICC/ME interface) and Test SIM	T1	6.2	
TP-99162	Maintenance of earlier releases of 2G GSM versions of specifications	Ian DOIG, MCC	12	
TP-99163	3GPP Programme Management for R99 and R2000	BT	9	
TP-99164	Withdrawn			
TP-99165	3GPP Vocabulary - TR 25.990 V1.0.0 (1999-09)	RAN4	12	
TP-99166	New ASN.1 Syntax Checking Service from ETSI PTCC	ETSI OCG/PEX	5.2	
TP-99167	Report from T1 (presentation)	T1	6.1	
TP-99168	Minutes from T1 #4 in Kobe	T1	6.1	
TP-99169	TR 34.124 v1.0.0 for information:"EMC requirements for Mobile terminals and ancillary equipment"	T1	6.3	
TP-99170	TS 34.109 v1.0.0 for information:"Terminal Logical Test Interface; Special conformance testing functions"	T1	6.3	
TP-99171	LS from T1 to T on schedule for Prose test case generation for T1 SWG SIGNalling	T1	6.2	
TP-99172	3GPP R99 plans for SIM Application Toolkit	BT	9	
TP-99173	T2 Progress Report	T2 secretary	7,1	
TP-99174	T2 Progress Report (slides)	T2 chairman	7,1	
TP-99175	T2 work program (status after T2#5 Helsinki and T2#6 Kyongju)	MCC	7,4	
TP-99176	2G Change Requestsfor approval	T2	7,3	
TP-99177	3G Change Requests for approval	T2	7,3	
TP-99178	3G TR 22.945 v2.0.0 "Study on provisioning of fax in GSM and UMTS" for approval	T2	7,3	
TP-99179	3G TS 23.041 v2.0.0 "Technical realization of Cell Broadcast Service (CBS)" for approval	T2	7,3	
TP-99180	3G TR 27.903 v1.0.0 "Discussion of Synchronisation Standards" for approval	T2	7,3	
TP-99181	3G TR 27.901 v1.0.0 Report on "Terminal Interfaces - An Overview" for information	T2	7,3	
TP-99182	3G TR 34.907 v2.0.0 Report on "Electrical safety requirements and regulations" for approval	T2	7,3	
TP-99183	T3 Status Report presentation (slides)	T3	8,1	
TP-99184	New T3 Work Items	T3	8,4	
TP-99185	3G TS 31.101 V 1.0.0 "UICC-Terminal Interface; Physical and Logical Characteristics"	T3	8,3	
TP-99186	3G TS 31.102 V 1.0.0 "Characteristics of the USIM Application"	T3	8,3	
TP-99187	TR 21.904 V1.0.1 "Terminal Capability Requirements (TCR)" (revision of TP-99192)	T		
TP-99188	3GPP Specification TS 21.101 version 0.3.0 "Release 1999 Specifications"	Ian DOIG, MCC	9	

TP-99189	GSM Specification 01.01 version 0.3.0 "GSM Release 1999 Specifications"	Ian DOIG, MCC	9	
TP-99190	Roadmap Document ITU-T IMT-2000	ITU-T SG11 WP3 (via Ericsson)	5.2	
TP-99191	3G TS 27.103 v1.0.0 "Wide Area Network Synchronisation" for approval	T2	7,3	
TP-99192	TR 21.904 V1.0.0 "Terminal Capability Requirements (TCR)" for information	T2		
TP-99193	Draft Liaison statement to 3GPP concerning Global Certification or Type Approval	UMTS FORUM		
TP-99194	Draft Report of 3GPP2 workshop on Hooks and Extension	RAN Vice- Chairman	6	
TP-99195	<b>Withdrawn</b>			
TP-99196	APPROVED Agenda for TSG-T#5, Seoul, Korea, 7- 8 October 1999	T	2	
TP-99197	Definitions used for the Mobile Station/Terminal	T2		
TP-99198	Terminology and vocabulary in 3GPP	T2		
TP-99199	TR 21.910 V1.0.0	T2		
TP-99200	Proposed liaison statement on mechanisms for maintaining the Terminal Capabilities Report	T2		
TP-99201	Terminal Management	T2 Chairman	9	
TP-99202	Proposed LS to TSG R & TSGs on freeing GSM Release 97 & Release 98	N1&N2 Chairmen		TP-99216
TP-99203	Definitions used for the Mobile Station/Terminal (Revision of TP-99197)	T		
TP-99204	Approval of a new work item on "Terminal Conformance Specification; Terminals Requirements for Regulatory approval (3G TS 34.110)"	T1	6,4	
TP-99205	LS to SA, CN, RAN on "Terminology and vocabulary in 3GPP"	T		
TP-99206	<b>Unused</b>			
TP-99207	LS from T to SA on resource situation and the general strategy & status of the elaboration of test cases	T		TP-99211
TP-99208	LS from T to SA on prioritisation of conformance test cases for 3G terminals	T		
TP-99209	LS to all 3GPP WGs on maintenance of the report on "Terminal Capabilities Requirements (TCR)" (3GPP TR 29.109 version 1.0.0)	T		
TP-99210	New Work Item on "USIM/UICC Database"	T3		
TP-99211	LS from T to SA on resource situation and the general strategy and status of the elaboration of test cases (replacing TP-99207)	T		TP-99222
TP-99212	LS from T to SA on the distribution of a proposal for prioritisation of the elaboration of conformance test cases for 3G terminals	T		
TP-99213	LS from CN to all TSGs on freeing GSM Release 97 & Release 98	CN		
TP-99214	Response to LS from ITU T regarding Q 1701 Supplement	Ericsson, Motorola and G&D		TP-99217
TP-99215	Approval of the modified new work item for T1 (TP-99204) on "Identification of test requirements for regulatory purposes in different regions/countries (3G TR 34.910)"	T		
TP-99216	Revised Proposal on how to handle approval of MS Conformance Test	Ericsson		
TP-99217	3GPP TSG T Position on supplement to recommendation Q 1701 from ITU T WP 3/11	Ericsson, BT, Motorola, Omnipoint, G&D, Siemens,		
TP-99218	LS to SA, PCG, 3GPP2 on "3GPP TSG-T Position#1 on supplement to recommendation Q .1701 from ITU-T WP 3/11" (T3-related)	T		
TP-99219	LS to SA on TSG-SA on how to handle approval of MS Conformance Test Specifications coupled to a certain 3GPP release	T		
TP-99220	3GPP TSG T Position #2 on supplement to recommendation Q 1701 from ITU T WP 3/11	Ericsson		
TP-99221	LS to SA, PCG, 3GPP2 on "3GPP TSG-T Position#2 on supplement to recommendation Q 1701 from ITU T WP 3/11" (T2-related)	T		
TP-99222	LS to SA on resource situation and the general strategy and status of the elaboration of test cases (replacing TP-99211)	T		
TP-99223	3GPP Work program Database (presentation)	Ian DOIG, MCC		

## List of Participants

				Phone	Fax	Email
Mr. Ramin Afchar	CETECOM GmbH	ETSI	3GPPMEMBER	+49 211 533 2894	+49 211 533 3804	ramin.afchar@d2privat.de
Mr. Thomas Aichberger	GIESECKE & DEVRIENT GmbH	ETSI	3GPPMEMBER	+49 89 4119 1926	+49 89 4119 1905	thomas.aichberger@gdm.de
Mr. Niels Peter Skov Andersen	MOTOROLA A/S	ETSI	3GPPMEMBER	+45 43 48 81 10	+45 43 48 82 76	npa001@email.mot.com
Mr. Nigel Barnes	MOTOROLA Ltd	ETSI	3GPPMEMBER	+44 1 256 790 169	+44 1 256 790 190	Nigel.Barnes@motorola.com
Mr. David Barnes	DTI	ETSI	3GPPMEMBER	+44 1634 570 244	+44 1634 572 360	dbarnes3@compuserve.com
Mr. Stephen Beer	DERA	ETSI	3GPPMEMBER	+44 1684 89 4088	+44 1684 89 5646	sjbeer@dera.gov.uk
Mr. Philippe Bellordre	France Telecom	ETSI	3GPPMEMBER	+33 1 45 29 57 95	+33 1 45 29 69 78	philippe.bellordre@cnet.francet-elecom.fr
Mr. Jonas Brandén	ERICSSON L.M.	ETSI	3GPPMEMBER	+46 46 19 41 04	+46 46 19 38 10	jonas.branden@ecs.ericsson.se
Dr. Gunilla Bratt	ERICSSON L.M.	ETSI	3GPPMEMBER	+46 46 193 729	+46 46 193 216	gunilla.bratt@ecs.ericsson.se
Mr. Luca Caroli	TELECOM ITALIA S.p.A.	ETSI	3GPPMEMBER	+39 06 3900 2064	+39 06 3900 3607	lcaroli@tim.it
Mr. Mark Cataldo	MOTOROLA Ltd	ETSI	3GPPMEMBER	+44 1793 566297	+44 1793 566 225	mcatald1@ecid.cig.mot.com
Mr. Jean Alain Chabas	PHILIPS Consumer Electronics	ETSI	3GPPMEMBER	02 43 18 47 14	02 43 41 11 26	alain.chabas@lme.pcc.philips.com
Mr. Alan Chau	NOKIA Corporation	ETSI	3GPPMEMBER	+44 1252 865 232	+44 1252 865 065	alan.chau@nmp.nokia.com
Mr. Byoung-Moon Chin	ETRI	TTA	3GPPMEMBER	+82 42 860 6560	+82 42 861 5404	bmchin@pec.etri.re.kr
Mr. Ed Ehrlich	Nokia Telecommunications Inc.	T1	3GPPMEMBER	+1 972 894 4495	+1 972 894 5525	ed.ehrlich@nokia.com
Mr. Edgar Fernandes	MOTOROLA Ltd	ETSI	3GPPMEMBER	+44 1256 790 319	+44 1256 790 190	edgar_fernandes@europe27.mot.com
Mr. Bill Gorst	DERA	ETSI	3GPPMEMBER	+44 1 684 896085	+44 1 684 896121	gorst@dera.gov.uk
Mr. François Grassot	BOUYGUES Telecom	ETSI	3GPPMEMBER	+33 6 85 32 53 95	+33 6 85 33 97 14	frg@rigeltelecom.com
Ms. Annette Grongvist	SONERA Corporation	ETSI	3GPPMEMBER	+358 2040 64468	+358 2040 3019	annette.grongvist@sonera.fi
Mr. Mee-Hyang Han	DACOM Corporation	TTA	3GPPMEMBER	+82 2 2220 7984	+82 2 2220 0765	mhhan@chollian.net
Mr. Hamabe Hirono	NTT DoCoMo	ARIB	3GPPMEMBER	+81 468 40 3012	+81 468 40 3725	saeki-h@cet.yrp.nttdocomo.co.jp
Mr. Kevin Holley	BT	ETSI	3GPPMEMBER	+44 1473 605604	+44 1473 623794	kevin.holley@bt.com
Mr. Masayuki Ikeda	SEIKO ESPON CORPORATION	ARIB	3GPPMEMBER	+81 266 52 8444	+81 266 53 9631	ikeda.masayuki@epson.co.jp

**Technical Specification Group Terminals  
Meeting #5, Kyongju, Korea, 7-8 October 1999**

**TSGT#5(99)225**

page 31 of 33

	N					
Mr. Kazuhisa Iwamoto	DoCoMo Europe S.A.	ETSI	3GPPMEMBER	+33 1 5688 3030	+33 1 5688 3045	iwamoto@docomo.fr
Mr. Paul Jolivet	DoCoMo Europe S.A.	ETSI	3GPPMEMBER	+33 1 49 69 24 17	+33 1 49 69 25 02	paul.jolivet@fr.delarue.com
Mr. Gary Jones	Omnipoint Corporation	T1	3GPPMEMBER	+1 301 951 2524	+1 301 951 2580	gjones@omnipoint-corp.com
Mr. Hiroshi Kanno	Fujitsu Limited	ARIB	3GPPMEMBER	+81 44 754 8648	+81 44 754 8507	kanno@mcws.ts.fujitsu.co.jp
Dr. Myeong-Cheol Kim	LG Technology Center Europe	ETSI	3GPPMEMBER	+49 241 963 2664	+49 241 963 2661	m.kim@lgtce.de
Mr. Hiroshi Komatsu	Japan Telecom Co. Ltd	ARIB	3GPPMEMBER	+81 355408420	+81 355 408485	hkomatsu@japan-telecom.co.jp
Mr. Masahide Kubo	ARIB	ARIB	3GPPORG_REP	+81 3 5510 8593	+81 3 3592 1103	kubo@arib.or.jp
Mrs. Evelyne Le Strat	NORTEL NETWORKS (EUROPE)	ETSI	3GPPMEMBER	+33 1 39 44 53 39	+33 1 39 44 50 12	elestrat@nortelnetworks.com
Mrs. Anne-Gaelle Lelong-Gilbert	ALCATEL France	ETSI	3GPPMEMBER	+33 01 55 66 65 56	+33 01 55 66 44 50	anne-gaelle.lelong@bsf.alcatel.fr
Mr. Jeongmo Smile Lim	NOKIA KOREA	TTA	3GPPMEMBER	+82 2 2186 5044	+82 2 2186 5079	smile.lim@nokia.com
Mr. Rune Lindholm	NOKIA Corporation	ETSI	3GPPMEMBER	+358 10 505 1	+358 10 505 4544	rune.lindholm@nmp.nokia.com
Mr. Rob Lockhart	Motorola Inc.	T1	3GPPMEMBER	+1 561 739 2650	+1 561 739 3505	rob.lockhart@mot.com
Mr. Yutaka Maeda	ARIB	ARIB	3GPPORG_REP	+81 33 55 10 85 94	+81 33 59 21 103	maeda@arib.or.jp
Dr. Tsuneichi Makihira	Mitsubishi Electric Co.	ARIB	3GPPMEMBER	+81 6 6495 5691	+81 6 6495 5266	makihira@cew.melco.co.jp
Mr. Kimon Miltiadou	DERA	ETSI	3GPPMEMBER	+44 1684 894 028	+44 1684 895 646	kmiltiadou@dera.com
Mr. Sumio Miyagawa	Siemens K.K.	TTC	3GPPMEMBER	+81 3 5423 6745	+81 3 5423 8728	miyagawa@twics.com
Mr. Atsushi Murase	NTT DoCoMo	ARIB	3GPPMEMBER	+81 468 40 3101	+81 468 40 3732	murase@cet.yrp.nttdocomo.co.jp
Mr. Shun-Ichiro Nagareda	Matsushita Communication	ARIB	3GPPMEMBER	+81 46 840 5532	+81 46 84 05 183	shun-ichiro.nagareda@yrp.mci.mei.co.jp
Mr. Tatsuya Nakatani	Fujitsu Limited	ARIB	3GPPMEMBER	+81 44 754 3855	+81 44 754 3145	nakatani@mcws.ts.fujitsu.co.jp
Ms. Helena Neira	Nippon Ericsson	ARIB	3GPPMEMBER	+81 33 222 4658	+81 33 222 9439	elena.neira@nrj.ericsson.se
Dr. Peter Neumann	SIEMENS AG	ETSI	3GPPMEMBER	+49 89 72 23 67 18	+49 89 72 23 70 78	peter.neumann@mch.siemens.de
Mr. Bjarke Nielsen	SONY INTERNATIONAL (EUROPE)	ETSI	3GPPMEMBER	+49 89 945 78 107	+49 89 945 78 412	bjarke.nielsen@ipce.eu.sony.co.jp
Dr. Sang-Keun Park	Samsung Electronics Co., Ltd	TTA	3GPPMEMBER	+82 331 280 9835	+82 331 280 1660	skpark@khgw.info.samsung.co.kr
Ms. Sofi Persson	TELIA AB	ETSI	3GPPMEMBER	+46 40 10 51 25	+46 70 616 1362	sofi.a.persson@telia.se

**Technical Specification Group Terminals  
Meeting #5, Kyongju, Korea, 7-8 October 1999**

**TSGT#5(99)225**

page 32 of 33

Mr. Friedhelm Rodermund	ETSI	ETSI	3GPPORG_REP	+33 4 92 94 43 24	+33 4 93 65 28 17	friedhelm.rodermund@etsi.fr
Mr. Joon Ryu	Samsung Electronics Co., Ltd	TTA	3GPPMEMBER	+82 331 280 1686	+82 331 280 1660	joonryu@khgw.info.samsung.co.kr
Mr. Hidekazu Saeki	NTT DoCoMo	ARIB	3GPPMEMBER	+81 468 40 3012	+81 468 40 3725	saeki-h@cet.yrp.nttdocomo.co.jp
Mr. Hidetoshi Saito	ARIB	ARIB	3GPPORG_REP	+81 355 108593	+81 335 921103	h-saito@arib.or.jp
Mr. Nick Sampson	ORANGE PCS LTD	ETSI	3GPPMEMBER	+44 1454 206436	+44 79 73 987883	nick.sampson@orange.co.uk
Mr. Michael Sanders	ETSI	ETSI	3GPPORG_REP	+33 4 92 94 42 90	+33 4 93 65 47 16	michael.sanders@etsi.fr
Mr. Akio Sasaki	ARIB	ARIB	3GPPORG_REP	+813 5510 8594	+813 3592 1103	arib@mb.kcom.ne.jp
Mr. Gunnar Schmidt	ROBERT BOSCH GmbH	ETSI	3GPPMEMBER	+49 5341 28 5853	+49 5341 28 5140	gunnar.schmidt@fr.bosch.de
Mr. Toshihiro Shimizu	Matsushita Communication	ARIB	3GPPMEMBER	+44 16 35 87 04 66	+44 16 35 87 13 45	toshi.shimizu@mci.co.uk
Mr. Yoichi Shimokawara	SONY Corporation	ARIB	3GPPMEMBER	+81 3 5782 5199	+81 3 5782 5213	shimo@wtlab.sony.co.jp
Mr. Jonas Sundborg	ERICSSON L.M.	ETSI	3GPPMEMBER	+46 8 404 8035	+46 8 5087 7300	jonas.sundborg@era.ericsson.se
Mr. Denis Susko	CETECOM GmbH	ETSI	3GPPMEMBER	+49 2054 9519947	+49 2054 951913	denis.susko@cetecom.de
Mr. Teruo Takeda	Hewlett-Packard Japan, Ltd	ARIB	3GPPMEMBER	+81 78 993 2812	+81 78 993 2683	teruo_takeda@om.jpn.hp.com
Mr. Petri Timonen	SONERA Corporation	ETSI	3GPPMEMBER	+358 2040 65341	+358 42 554 3377	petri.timonen@sonera.fi
Mr. Guido Tognetti	TELITAL S.p.A.	ETSI	3GPPMEMBER	+39 040 4192 111	+39 040 251 257	guido.tognetti@rs1.telital.it
Mr. Sumusu Uriya	NEC Corporation	ARIB	3GPPMEMBER	+81 45 939 2325	+81 45 939 2346	uriya@ccmail.mcd.yh.nec.co.jp
Mr. Peter van de Berg	ERICSSON L.M.	ETSI	3GPPMEMBER	+46 461 947 82	+46 461 934 55	peter.vandenberg@ecs.ericsson.se
Dr. Klaus Vedder	GIESECKE & DEVRIENT GmbH	ETSI	3GPPMEMBER	+49 89 4119 1542	+49 89 4119 1540	klaus.vedder@gdm.de
Mr. Paul Voskar	NOKIA Corporation	ETSI	3GPPMEMBER	+44 1252 865 2 76	+44 1252 865 065	paul.voskar@nokia.com
Mr. Stan Willemsen	SIEMENS AG	ETSI	3GPPMEMBER	+49 2871 91 2231	+49 2871 91 3387	stan.willemsen@bch.siemens.de
Mr. Albert Yuhan	Omnipoint Corporation	T1	3GPPMEMBER	+1 973 872 5791	+1 973 872 5714	ayuhan@omnipoint-pcs.com
Mr. Adrian Zoicas	ETSI	ETSI	3GPPORG_REP	+33 4 92 94 42 21	+33 4 92 38 52 21	adrian.zoicas@etsi.fr
Mr. Zoran Zvonar	ANALOG DEVICES	ETSI	3GPPMEMBER	+1 781 937 1171	+1 781 937 1051	zoran.zvonar@analog.com



---

## History

<b>Document history</b>	
<b>19 October 1999</b>	<p>DRAFT dispatched by e-mail exploder and put on the server for TSG-T comment as file TP-99225 at:</p> <p>ftp://www.3gpp.org/TSG_T/TSG_T/TSGT_05/Report/ and ftp://www.3gpp.org/TSG_T/TSG_T/TSGT_06/Docs/</p> <p>Comments, if any, to be addressed to:</p> <p><b>Mr Adrian ZOICAS, 3GPP TSG-T Secretary</b> ETSI Secretariat Tel :+33 (0)4 92 94 42 21 e-mail: adrian.zoicas@etsi.fr</p>