Technical Specification Group

TERMINALS

(TSG-T)

Meeting Report of TSG-T meeting #9
Hawaii, 20 - 22 September, 2000
Hosted by North American Friends of 3GPP, TTC and ARIB

(Status: v1.0 as approved at TSG-T #10)

Contents

Chairman: Dr Sang-Keun Park (Samsung)
Vice-chairmen: Kevin Holley (BT) and Ed Ehrlich (Nokia Corporation)
Secretary: Michael Sanders (3GPP support team)
Host: North American Friends of 3GPP (Aerial Communications, AT&T, Bellsouth, Ericsson, Golden Bridge Technologies, InterDigital Communications, Microcell Connexions, Nokia, North American GSM Alliance, Voicestream), TTC and ARIB

1 Opening of the Meeting

The meeting was opened by Dr Park at 14:00. On behalf of the hosts, North American Friends of 3GPP, TTC and ARIB, Gary Jones welcomed the delegates to Hawaii.

A list of the delegates present at the meeting can be found in annex B.

2 Approval of Agenda

TP-000120 contains the draft agenda for TSG-T #9. It was approved without modification and can be found in annex A of this report.

3 Approval of the meeting report from TSG-T#8 meeting

TP-000118 contains the draft report of TSG-T #8. It was approved without modification and was made available (with the word "draft" deleted) in TP-000119.

4 Letters and reports from other groups, LS incoming

4.1 TSG SA, TSG CN, TSG RAN

TP-000171 contains the draft report of the TSG-SA #8. During a presentation of the report, the following points were highlighted:

- T2 MIME issues
    At the request of T2, TSG-T requested TSG-SA #8 to provide feedback as to whether it would be useful to create a new branch in the MIME tree to contain MIME type specifically for use by the 3GPP. TSG-SA felt they did not have the expertise to provide a firm opinion, but felt that a 3GPP MIME tree would probably not be required. T2 was mandated to investigate the matter further.

- distribution of UE functionality between physical elements in the UE
    TSG-SA agreed that this issue required further study. An LS was sent to several WGs requesting feedback on the matter - see documents TP-000122, TP-000123, TP-000125 and TP-000127 below.

TP-000165 contains the draft report of the 3GPP organisational Partners meeting #3 held in July. During a presentation of the report, the following points were highlighted:

- a new TSG called TSG-GERAN (GSM Enhanced Radio Access Network) was created to take over the GSM only work which had previously been done in the ETSI TC SMG.
- attention was drawn to decision D-PCG4/3. This states that "PCG endorsed the view that 3GPP was responsible for the entire 3GPP system with Partners committing themselves to do the work within the project rather than elsewhere [3GPP/PCG#3(00)10]."

TP-000121 is an LS from S5 on "Service Management - New R00 work item proposal". It was pointed out that this same document had already been reviewed during TSG-SA #8 (see TSG-SA report in TP-000171). TSG-SA #8 had requested SA5 to review the work item. This was done by a recent SA5 meeting and an updated set of work items for TSG-SA review was made available for TSG-T in TP-000178. This includes a document describing S5 work item descriptions for Release 2000 (R4/R5). It includes one item called subscription management - it was commented that the scope of the WI was not very clear - did it only cover HLR related information? It was noted that SA5 were also developing a work item description for "User Equipment Management" which is planned to be submitted by S5 to TSG-SA #10 in December. It was proposed that a clear high level model should be proposed by S5 so that TSG-T would be better able ensure that new mechanisms

did not partially duplicate existing mechanisms. It was concluded that the issue should be revisited, taking into account the discussion at the upcoming TSG-SA #9.

TP-000122 is an LS from SA on "Requirements and Scenarios for Call Handling". This issue had been raised at TSG- SA #8 as a result of discussions in TSG-T #8. An LS was created as a result of the TSG-T input document to that meeting (TP-000115 / SP-000313). The LS was noted.

TP-000123 is an LS from S1 on "Applications on external devices (re: SP-00353)". It contains a reminder of the service requirements for such a feature. Regarding the "frustrated subscribers", it was noted that if the services hosted by 3GPP operators require an advanced 3G terminal (without allowing for a PC or less advanced terminal combination), users may not find this situation acceptable. The LS was noted.

TP-000125 is an LS from T2 on "Call Control Applications on External devices" commenting on the S1 reply on the issue in TP-000123. T2 state that they believe that an initial analysis could be done by S2 on this matter, followed reasonably quickly by more detailed work in TSG-CN working groups and other SA working groups but that this would first require a clarification of the requirements and objectives as seen by 3GPP MRPs and other relevant bodies. It was noted that T1 would require guidance on testing applications residing on top of layer 2/3 and conformance testing of elements that are implemented in a PC or a PDA. The LS was noted.

TP-000127 is an LS from S4 on "Call Control Applications in External Devices". TSG-T had originally stated that "*It is understood that S4 is already investigating the split of multimedia calling in Release 99 to include a model where all call control is handled by an external TE (e.g. PC) so this could be also relevant to Release 99 scenarios where we have Circuit Switched Multimedia calls.*" S4 clarified that they had never intended to specify or even assume a specific distribution of the Call Control Functions between Mobile Equipment (ME) and External Devices or Terminal Equipment (TE). Furthermore, they believe that the definition of the functional distribution between ME and TE is the responsibility of S2 and they will conform to any S2 decision in that matter. It was concluded that a more comprehensive discussion would take place on this issue during the TSG-SA #9 meeting and so further discussion on the issue was postponed. The LS was noted.

TP-000124 is an LS from S1 on "Status of IMEI coding". Various 3GPP groups have recently been considering proposals to change the coding format of IMEIs from BCD to hexadecimal. At the TSG-SA meeting in June, it was agreed to wait for feedback from the GSM Association and EICTA before progressing with the change. At its April 2000 meeting, SA WG1 also invited feedback on this proposal from various bodies - this LS contains a summary of the feedback received so far. It was noted that the GSM-A TWG ad hoc was scheduled for early September, but due to a lack of time at the meeting, discussion on the issue had been postponed and a conference call will take place in late September. The LS was noted.

TP-000126 is an LS from T3 on "Clarification of UMTS-AKA for GSM R'99 Mobiles". It had been the understanding of T3 that a Release 99 only GSM ME need not support a USIM which was however not reflected in the relevant S3 specifications (see LS from T3 to S3, cc TSG-T; in TP-000126). The response from S3 in TP-000170 clarifies the situation. S3 will align its specifications with the T3 assumption that a R99 GSM only ME need not support a USIM (wrt security functionality). The LSs were noted.

TP-000167 contains a proposal from the Organisational Partners meeting to modify the terms of Reference of TSG-T taking into account the creation of the TSG-GERAN. See section 7.3 for discussion and conclusions about this document.

TP-000184 is an LS from TSG-CN containing a proposed CR to TS 21.900 on CR categories for frozen releases. It adds guidance to indicate the type of CRs that come under the category "F" (correction). TSG-T endorsed the CR.

4.2   Others

TP-000174 is an LS from ARIB to TSG-RAN copied to TSG-T regarding the ITU document 8F/TEMP/33-E which deals with the handling of measurement uncertainty for (the terrestrial component of) IMT-2000. It states that ARIB has reviewed document 8F/TEMP/33-E and that they agree on the recommendations described in the document and fundamentally on the modification on Recommendation 2 which had been proposed by 3GPP TSG RAN WG4 in R4-000707. The LS was noted.

5   Project Management

See section 7 of this report.

6   TSG-T Working Groups

6.1   T1 "Mobile Terminal Conformance Testing"

6.1.1   Reports from T1

TP-000129 contains the status report from T1 covering the period since the last TSG-T meeting in March. During the presentation, the following points were noted:

General Specifications:
- TS 34.108 is now relatively stable, USIM test parameters and reference bearers must be reviewed.
- TS 34.109 is now stable and is ready to be handed over to RAN2 as agreed at TSG-T #7 (see TP-000132); MCC will transfer the specification. TSG-T1 may propose, at a later point, the insertion of EMMI functionality via CRs.

Radio Test Specifications:
- Regarding TS 34.121, it was noted that the specification is still not stable due to the on-going changes and updates introduced in the core RRM specification;
- 34.122 is still not attracting much interest. No further maintenance done since last meeting. It is 80-90% stable; but the RRM part is still empty – mostly due to the unstable core specifications.

Signalling Test Specifications:
- *34.123-1, Prose text for the Rel'99 Signalling test cases*
  General status
  - Idle mode functions   90%
  - Voice call functions (incl. emergency call)   98%
  - Circuit switched data (up to 64 kb/s) + Fax   98%
  - Auto-calling (restrictions)   100%
  - SMS (PP & CB)   95%
  - GSM/3G support   (rest until end of year)   5%
  - Packet data   (rest until end of year)   70%

- MCC task 161 (who had developed a part of the layer 2 prose tests) has now become inactive but some funding will be kept to help the implementation of release 99 intersystem HO when core specifications are finalised;

- *34.123-2, Implementation Conformance Statement*
  The specification has now been streamlined and now focuses on the recommended applicability of the individual protocol test cases. It is now considered stable and is presented for approval as a version 3. More editorial clean-ups expected at the next TSG-T meeting.

- *34.123-3, Abstract Test Suites (TTCN)*
  After initial difficulties and delays, the framework has been established and the first TTCN test case delivered. A precise rel'99 delivery schedule from MCC/PEX was presented. Indicating the number of drafted TTCN test cases to be delivered at each TSG-T meeting in 2001. It was decided that that specification can be proposed for version 3 with the indicated in March'01. It was also noted (and endorsed by TSG-T) that the verification status of the individual TTCN test cases will be indicated by TSG-T1 in a publicly available register. The actual verification will be carried out by companies or groups of companies, and then reported to TSG-T1. See also later comments.
- T1 proposes to maintain only one on-going version of the specification TS 34.123 so as to avoid a potentially large amount of unnecessary work in maintaining parallel releases. The specification would then indicate specifically if a particular applicability is only valid for a particular release.
  ⇒   TSG-T endorsed this proposal

EMC specifications:
- regarding TS 34.124 "Electro-Magnetic Compatibility (EMC) for Terminal equipment", the work of SWG EMC has been finalized and T1 is proposes that the group will be disbanded by the end of 2000 and that the possibility of handing over the two EMC specifications (TS 34.124 and TR 34.926) to RAN4 should be examined. This would avoid EMC experts having to attend RAN4 and T1 meetings.
  ⇒   TSG-T agreed that a proposal should be made to RAN4 requesting them to take over responsibility for TS 34.124 and TR 34.926. An LS was drafted in TP-000175. The content of the LS was agreed, but it was felt that it should be addressed only to TSG-RAN and it was approved with that modification.

Test cases for regulatory purposes:
- regarding TS 34.910 "Identification of Test requirements for regulatory purposes in different regions/countries", it was noted that input had been received from the Japanese Ministry of P&T, regarding requirements on 3G terminals. These have been incorporated in the latest draft version.

- T1 proposes to maintain only one on-going version of the specification TS 34.123 so as to avoid a potentially large amount of unnecessary work in maintaining parallel releases. The specification would then indicate specifically if a particular applicability is only valid for a particular release.
  ⇒ TSG-T endorsed this proposal

- T1 requested guidance as to how the interface with TSG-GERAN should be arranged. It was agreed that an LS to TSG-GERAN should be drafted to identify areas where care would be required if duplication of work was to be avoided. However, discussions in an ad hoc meeting during the plenary concluded that work-sharing between GERAN4 and TSG-T1 would imply alignment of the description of test cases and of the use of TTCN and this will not be straightforward. It was thus agreed not to draft an LS but instead study on how this could be achieved. It was noted that the possible work-sharing issues between GERAN and TSG-T1 could be raised by the TSG-GERAN convenor during his presentation to the TSG-SA.

- regarding application platform testing, T1 request feedback. For example, it was noted that test cases for MExE would probably be required. TSG-T concluded that the scope of T1 included all UE testing which would include application testing. However, there were currently no resources to work on these issues since the current expertise in T1 only covers up to layer 3;
  ⇒ TSG-T endorsed the proposal that tests at the application level were required and that T1 should have primary responsibility the specifications involved and co-ordinate the work. It was recognised that much of the work would however need to be done under the guidance of T2 (or other groups) and that their input would be required before T1 could assess the scope of the work required. Delegates were requested to consider the issue and provide input to T1. A first assessment of the work can be seen the in the work plan - those application level work items potentially requiring testing are marked as having an impact on TS 34.125 (proposed number for an applications test specification).

- Mr Yokohama, the T1 SWG RF chairman has had to resign his position. He was thanked for hard work as the and the major driver of the RF test specifications. A call for candidates has been sent out onto the TSG-T1, the TSG-T and the TSG-T1/RF e-mail reflectors.

- TP-000164 is a presentation which contains a proposal (endorsed by T1) for the high level processes and procedures to validate the TTCN tests. During the presentation of the document, the following points were noted:

  - it was questioned what the role of T1 was in this process? It was clarified that T1 is responsible for validating the test cases, but does not have the resources to do this. In practice, T1's role is therefore to review the output of the voluntary/funded teams working on the issue.
  - it was noted that the failure to validate TTCN tests in the early days of GSM had caused significant delays in getting products to the market.

  During the TSG-T meeting, an ad hoc meeting was held on this issue. A summary of the conclusions of that meeting is contained in TP-000177. TSG-T endorsed these conclusions including one of which states that the term "verification" should be used be used in place of the term "validation". T1 will maintain a register of the verification status of each test.

TP-000139 is a status report of the work of the two MCC task on terminal testing, task 160 and task 161. During a presentation of the report, it was noted that voluntary contributions for the TTCN test to cover the FDD PS test cases are being sought. If none are forth coming by TSG-T #10, funding should be sought for a new MCC task to do the work. TSG-T approved the report.

6.1.2 Questions for advice and decisions from T1

No issues were raised under this agenda item.

6.1.3 Approval of contributions from T1

TP-000131 contains CRs to TS 34.108. During a review of the document, the following points were noted:

- the CRs are divided into two parts; those required as a result of changes to the core specification (TS 25.133) and those which correct or update the tests
- regarding CR 34.108-019 it was noted that if there were any inconsistencies between values which had been incorporated into TS 34.108 from the GSM-A document "Typical Radio Interface Parameter Sets v1.3" and the appropriate 3G core specification, then a CR would be required either to the core specification or the test specification.
- regarding CR 34.108-017, it was noted that further work may be required to 34.108 to remove references to the SoLSA feature. It was noted that the task of keeping TS 34.108 in line with core specifications was a large and on-going job.
- regarding CR 34.108-019, it was questioned where the figures for the residual BER in table 6.10.2.3.1 were taken from. It was replied that they had been proposed by the GSM-A and agreed by T1. Interested parties were invited to provide feedback to T1 if they believe the figures to be unrealistic.

All CRs in TP-000131 were approved.

TP-000162 (a replacement of TP-000132) contains CRs to TS 34.109. All CRs were approved. With the approval of these CRs, T1 proposed that the specification should be considered as stable. In line with the discussions at previous TSG-T meetings, it was therefore approved that responsibility for the specification should now be handed over to TSG-RAN (WG2).

TP-000163 contains CR to TS 34.121 "Terminal Conformance Specification, Radio Transmission and Reception (FDD". The CRs are divided into two parts; those required as a result of changes to the core specification(s) and those which correct or update the tests. It was noted that further changes would probably be required as a result of continuing changes to the core specifications in RAN4. It was noted that there had been some discussions within RAN4 suggesting that RAN4 should take over or become jointly responsible for TS 34.121 but this needed further discussion amongst the relevant officials before any conclusions about the matter could be made. All CRs in TP-000163 were approved.

TP-000134 contains CRs to TS 34.122 "Terminal Conformance Specification, Radio Transmission and Reception (TDD)". They were approved.

TP-000135 contains CRs to TS 34.123-1 "User Equipment (UE) Conformance Specification, Part 1 – Conformance specification". The CRs are divided into two parts; those required as a result of changes to the core specification (TS 25.133) and those which correct or update the tests. It was noted that there had been some discussion within T1 regarding CR 012 - should ciphering during testing be always switched on? T1 had concluded that this should be the case if it is indicated as implemented. For individual testing, the switch can be set in the TTCN test case. The CRs were approved.

TP-000137 contains TS 34.123-2 "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification". This document allows the identification of which capabilities and options have been implemented. Such a specification is required so that:

- the UE manufacturer can declare what features he has implemented in order to decide what test cases should be applied.
- the applicability of each test case can be show so that for a given set of UE features it can be determined which test cases are required.
- regional bodies can then mandate which tests are necessary in their region.

It was noted that T1 requested that the specification is approved as version 3.1.0 rather then 3.0.0 so as to keep the version number aligned with TS 31.123-1. MCC undertook to look at this issue and make this exception if agreed to be useful. The specification was approved.

6.1.4   Work programme review of TSG-T WG1

No issues were raised under this agenda item. The work plan of TSG-T was reviewed as a whole under agenda item 7.

6.1.5   Other issues

During a discussion on the division of responsibilities between T1 and TSG-GERAN4, it was proposed that T1 should be responsible for intersystem handovers and possibly cell(re)selection from UTRAN to GERAN and that GERAN should be responsible for intersystem handovers and possibly cell(re)selection from GERAN to UTRAN. GERAN4 still needs to comment on this proposal.

6.2   WG T2 Mobile Terminal Services and Capability

6.2.1   Reports from TSG-T WG2

TP-000140 is the status report of T2. TP-000141 contains the presentation of the report. It was noted that participation in T2 is growing - 115 participants at last meeting. During the presentation of the report, the following major issues within T2 currently under discussion were noted as:

- Discussions in MExE on Microsoft's Common Language Infrastructure (CLI) API;
  - further discussions needed, although significant interest.
- Handling of Proprietary Features still under discussion;
  - There is a need to avoid interoperability problems resulting in complaints to operators, but more discussion on this is needed.
- SyncML initiative proposal to T2 under discussion;
  - SyncML provides a richer environment for wide area synchronisation between data on different devices, but a smooth migration path from what we have today is required.
- "Terminal Local Model" needs more effort;
  - There has been limited input over the summer and more input is needed from companies if T2 are to complete this work.
- Set of work on ASCI CRs complete;
  - Agreement that additional parameters can be added to existing AT command responses without this causing backward compatibility problems.
- SMS/CBS/USSD: including numbers in "quotes";
  - This is already implemented in a number of handsets but there is no reference in the main technical document 23.040; T2 will probably provide a CR for this at the next T plenary;
- No input yet on Global Text Telephony;
- CBS & LCS: Misalignment fixed provided no implementation;
  - Cell Broadcast LCS Message Identifier descriptions in 03.41 and 23.041 aligned with 04.35, this is a non-backward-compatible change but it is believed that there are no implementations and this change removes the inconsistency;
  - CBS: Need for SERG to allocate message IDs;
  - Formal registration of codes from 100 to 999 proposed to SERG to allow consistent applications across different networks.

The reports in both TP-000140 and TP-000141 were noted.

6.2.2   Questions for advice and decisions from TSG -T WG2

The presentation of T2 work in TP-000141 included several items for decisions or advice from TSG-T:

- withdrawal of GSM 10.57 "MExE Project scheduling and open issues"
  ⇒ TSG-T endorsed the "withdrawal" of the specification and requested MCC to do this in an appropriate manner.

- 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)"
  ⇒ TSG-T endorsed the "withdrawal" of the specification and requested MCC to do this in an appropriate manner.

- "Advanced Cell Broadcast" work item - is it still required?
  ⇒ TSG-T concluded that the issue should be raised at TSG-SA to see whether there is some interest in this feature.

6.2.3   Approval of contributions from TSG-T WG2

TP-000142 contains CRs to several release 98 specifications. They were all approved.

TP-000143 contains CRs to several release 99 specifications. They were all approved.

TP-000144 contains CRs to several release 2000 specifications. They were all approved.

6.2.4 Work programme review of TSG-T WG2

No issues were raised under this agenda item. The work plan of TSG-T was reviewed as a whole under agenda item 7.

6.2.5 Other issues

No issues were raised under this agenda item.

6.3 WG T3 USIM

6.3.1 Reports from TSG-T WG3

TP-000181 (a revised version of TP-000145) contains the T3 status report to TSG-T #09. During the presentation, the following points were highlighted:

- ETSI EP newSMG9 has been renamed to EP SCP (Smart Card Platform). Dr. Klaus Vedder, Giesecke & Devrient was elected as chairman and Nigel Barnes, Motorola and Mark Hosford, LG InFocom were elected as vice chairmen. Main result of the last meeting was agreement to publish TS 102 221 (based on 3G TS 31.101) for publication as Release 99. They also approved four new work item descriptions: "Technology Independent Card Application Toolkit", "Common application identifier specification", "Enhancement to administrative commands", and "Core API and secure messaging feasibility study".

- MCC task 162 has been continuing work on developing three test specifications, TS 31.120, TS 31.121 and 31.122 - see TP-000180 below.

- work has continued on a test specification for the USIM JAVA API. There had been some discussions about having a reference in the test specification to the JavaCard^{TM} 2.1 Compliance Test Suite (CJCK). T3 #15 had clarified that a test specification shall not contain a reference to a non-public specification or document nor to any other non-public material and further that a test specification shall not contain any requirements, it shall only contain tests for requirements in its core specification. TSG-T endorsed both conclusions.

- T3 had founded a Working Party to deal with API issues. Paul Jolivet from NTT DoCoMo Europe had been elected as the Chairman.

- two new work item descriptions were agreed for a "Multos API" and "USAT local link" - see 6.3.3 below.

- T3 proposed that TSG-T / PCG approve a liaison with the SIMalliance. However, discussion concluded that the decision should be postponed for one meeting since it was possible that need for such a liaison was only short term and may no longer be required by then. The issues was postponed until TSG-T #10.

- the meeting thanked the retiring rapporteurs, Kristian Woodsend and Rune Lindholm who had been instrumental for work in developing (U)SIM toolkit and the 31.101 specification.

- the difference in understanding between T3 and S3 on the support of USIM (security) functionality by a Release 99 GSM only ME has been clarified in the meantime. It had been the understanding of T3 that a Release 99 only GSM ME need not support a USIM which was however not reflected in the relevant S3 specifications (see LS from T3 to S3, cc TSG-T; in TP-000126). The response from S3 in TP-000170 clarifies the situation. S3 will align its specifications with the T3 assumption that a R99 GSM only ME need not support a USIM (wrt security functionality).

- T3 is concerned about R2000 work items developed by other groups which will require USIM support and may only be finalised towards the end of the year (VHE user profiles, IP multi-media services).

TP-000180 contains two status reports produced by MCC task 162 on USIM testing. This is divided into two parts; a) the part of MCC task 162 producing the interface test specifications (3G TS 31.120 and 31.121) and b) the part of MCC task 162 involved in USIM application test specification (3G TS 31.122). It was noted that the work was progressing to schedule and the finalized specifications are expected to be presented to TSG-T #10 in December 2000 for approval. TSG-T expressed their satisfaction with the work done so far and the report in TP-000180 was approved.

6.3.2 Questions for advice and decisions from TSG -T WG3

No issues were raised under this agenda item.

6.3.3 Approval of contributions from TSG-T WG3

TP-000146 contains a CR to GSM 03.19 R98. It was approved.

TP-000147 contains three CRs to GSM 03.48 R99. They were all approved.

TP-000148 contains two CRs to GSM 11.11 R99. One of the CRs, (A125) was withdrawn - see discussion of TP-000176 below. The other CR (A126) was approved.

TP-000149 contains several CRs to GSM 11.14 R98 and R99. They were all approved.

TP-000150 contains a R99 CR to TS 21.111. The CR was approved.

TP-000151 contains a R99 CR to TS 31.101. In line with decision at previous TSG-T meeting, this CR replaces the entire contents of the specification with a reference to an equivalent ETSI EP SCP specification, TS 102 221. The CR was approved.

TP-000152 contains several R99 CRs to TS 31.102. All were approved with the exception of (052) - see discussion of TP-000176 below. The other CRs were approved.

TP-000153 contains a R99 CR to TS 31.110. The CR was approved.

TP-000154 contains several R99 and R00 CRs to TS 31.111. They were all approved.

TP-000155 contains two proposed new T3 work items. They are:

- Multos API
    This work item describes the proposal to standardise an API for USIM toolkit based on the MULTOS smart card operating system. This would be compliant with the requirements specified in the technology neutral stage one specification GSM 02.19. A second part of the work item would be the development of a related test specification.
    It was noted that Telstra also supported the work item.

- USAT local link
    This work would extend the existing bearer independent functionality and allow a (U)SAT application to communicate with local devices using the local connectivity capabilities of the terminal. Some applications may require a secure link. Security facilities offered by the bearer may be used, and if necessary an upper security layer could be defined. For example, an implementation of security mechanisms specified in GSM 03.48 for bearer independent channels, could be considered.

    It was noted that T2 would need to review the CRs before being presented to TSG-T for approval. If these are finalised at the next T3 meeting in early November, T2 would be able to review them in their late November meeting.

Both work items were approved. The chairman reminded all companies involved in the work of their obligations to declare any IRP they may have in line with their organisational partner's IPR policy.

TP-000156 contains TS 31.120 v1.0.0 "UICC-Terminal Interface; Physical, Electrical and Logical Test specification" which was presented for information and comment. Information about the development of this draft specification can be found in TP-000180. The specification was noted.

TP-000157 contains TS 31.121 v1.0.0 "UICC-Terminal Interface; USIM application Test specification" which was presented for information and comment. Information about the development of this draft specification can be found in TP-000180. The specification was noted.

TP-000158 contains TS 31.122 v1.0.0 "USIM Conformance Test Specification" which was presented for information and comment. Information about the development of this draft specification can be found in TP-000180. The specification was noted.

TP-000159 contains a CR to GSM 03.19 R98. It was approved.

TP-000176 contains two change requests to GSM 11.11 and two equivalent CRs to TS 31.102 with corrections to the PLMN selection (with RAT) functionality. The CRs had originally been presented to SMG #32 and TSG-T #8, but the report of SMG #32 stated that the CRs to GSM 11.11 had been postponed due to "*possible problems with the service requirements*". As a result of that decision, TSG-T #8 had also postponed the equivalent CRs to TS 31.102. However, it appears that the postponement of the GSM 11.11 CRs was a result of a misunderstanding and so the CRs are now re-presented to TSG-T #9 for approval. The CRs were approved.

TP-000182 contains a CR to TS 31.102 R99. It was approved.

6.3.4   Work programme review of TSG-T WG3

No documents were submitted under this agenda item.

7   TSG-T Work Programme Review / Co-ordination with TSG-SA

7.1   Release '99

No issues were raised under this agenda item.,

7.2   Release '00

TP-000128 contains the report (draft) from 3GPP TSG-SA ad-hoc meeting on work plan for next Releases, held in Helsinki, 22 - 23 August 2000. The main results of the meeting were:

- conclusions on Work planning and releases have been reached in AHR00-0028 (see TP-000169);
- outline for RAN4 content is proposed, with some enhancements to be proposed by e-mail;
- outline for work plan for the IM subsystem for R5 is proposed in AHR00-0031 (see TP-000173);
- one of the key conclusion is that 3GPP is not working only on the next Release but in parallel on one, two or even more consecutive releases (e.g. stages 1 and 2 of R5 features can be specified in parallel with stage 3 features of RAN4).

TP-000169 contains a proposal for the draft principles for 3GPP Work Planning - Release Mechanisms as elaborated by the TSG-SA R2000 ad hoc meeting mentioned above for presentation to all TSGs during TSG meeting #9. One of the main conclusions is that future releases should be labelled as release 4 (instead of release 2000) and release 5 (instead of release 2001). Furthermore, they propose that the 3GPP work plan which covers only release 2000, be extended to further releases. The document was noted.

TP-000173 contains a proposal for a 3GPP work planning for IP Multimedia (IM) SubSystem as elaborated by the TSG-SA R2000 ad hoc meeting mentioned above. TP-000160 is a proposal that TSG-T, TSG-CN and TSG-RAN should examined the proposals made at ad hoc meeting on R00 planning regarding the work plan - for the IP Multi-media Subsystem. It proposes that TSGs T, RAN and CN give SA the prerogative to determine how the milestones for specification development, identified in TD31 (TP-000173) and the detailed work plan, map into future 3GPP specification releases (i.e. Releases 4 and 5). TSG-SA will have to agree a date to finalise the release and would thus be interested in feedback from the TSGs regarding what date would be most appropriate. During a discussion the work areas for TSG-T involved in the IP Multi-media Subsystem, the following points were noted:

- regarding the proposal to add a new item "Distribution of Functionality between physical elements in the UE",
  - it was clarified that the first task would be to develop a top level model in order to understand the scope of the issue and a second step my be to define additional or improved mechanisms to support this if any are identified during the study phase.
  - it was proposed that this work would be undertaken as part of existing work items, and thus may not need to be listed as a separate item
- it was discussed whether MExE should be specifically mentioned but it was concluded that since it appeared elsewhere on the work plan, this should not be the case;
- testing issue involved also need to be identified.

7.3   Other issues

No other matters were raised under this agenda item.

8   Liaison Statements (LS) outgoing

One outgoing LS was generated during the meeting - see TP-000175 in section 6.1.5.1.

9   Postponed issues from earlier in the meeting

Issues raised under this agenda item are dealt with in the section of this report under which the document was originally discussed.

10   Any Other Business

TP-000167 contains the TSG-T terms of reference with a modification proposed by the 3GPP Organisation Partners. It was proposed that the specific reference to Multi-mode terminals should be deleted since it was covered under the general item of UTRAN based user equipment since this term can be considered to include both single mode and multi-mode user equipment. A revised version was made available in TP-000183 and this was agreed for submission to the next PCG meeting in November 2000 for approval.

The ITU ad hoc contact person presented a summary of the on-going discussions within TSG-RAN regarding measurement uncertainty principles. He referred to two TSG-RAN issues as follows:

-        the first was a draft answer to ITU-R WP 8F on the handling of measurement uncertainties. It was noted that the document has not yet been approved by RAN, but was presented an indication of the direction of the discussions. It informs the ITU that the current terminology and procedures used within the 3GPP have been aligned with the ones suggested by the ITU. A new section for test tolerance has been included in the test specification. The proposed changes do not functionally modify the 3GPP tests.

-        It was noted that the current ITU recommendation (M.1457) only refers to the base station test specifications and that RAN will propose that the Terminal test specification should also be referenced.

The approved versions of these documents were made available after the end of the TSG-T meeting as part of the TSG-RAN meeting.

11   Work Plan and Future Meeting Schedule

The following TSG-T (and associated TSG-SA) meetings are currently scheduled. The full schedule of all 3GPP related meetings is continuously updated and can be found on the server at:

http://webapp.etsi.org/meetingcalendar/QueryForm.asp

Meeting	Date	Host	Location
TSG-T #10 TSG-SA #10	6 - 8 December, 2000 11 - 14 December, 2000	Unisys	Bangkok, Thailand
TSG-T #11 TSG-SA #11	14 - 16 March, 2001 19 - 22 March, 2001		Palm Valley, US
TSG-T #12 TSG-SA #12	13 - 15 June, 2001 18 - 21 June, 2001	Ericsson	Stockholm
TSG-T #13 TSG-SA #13	19 - 21 September, 2001 24 - 27 September, 2001	Lucent	China
TSG-T #14 TSG-SA #14	12 - 14 December, 2001 17 - 20 December, 2001		Japan
TSG-T #15 TSG-SA #15	March 2002 March 2002		Korea

12   Close of the meeting

The meeting was closed by the chairman at 16:00. He thanked the delegates for their work and the hosts for their efficient arrangements and excellent facilities.

ANNEX A   Approved Agenda

Agenda Item	Input documents (TP-000nnn)
1 Opening of the meeting (14:00 Wednesday September 20)	
2 Approval of Agenda	120
3 Approval of the meeting reports from TSG-T#8 meeting	118

4   Letters and reports from other groups, LS incoming
   4.1   OP, PCG, TSG SA, TSG CN, TSG RAN
 	
   4.2   Others
	
	121, 122, 123, 124, 125, 126, 127,
	    165, 166, 168, 170, 171, 178
	
	174

5   Project Management
   5.1   TSG-SA Ad Hoc Results on Work Plan for next Releases
   5.2   Others
	
	128, 160, 169

6   Reports from TSG-T Working Groups
   6.1   WG T1 Mobile Terminal Conformance Testing
       6.1.1   Reports from TSG-T WG1
       6.1.2   Questions for advice and decisions from T1
       6.1.3   Approval of contributions from T1
       6.1.4   Work programme review of T1
 	
   6.2   WG T2 Mobile Terminal Services and Capability
       6.2.1   Reports from T2
       6.2.2   Questions for advice and decisions from T2
       6.2.3   Approval of contributions from T2
       6.2.4   Work programme review of T2
 	
   6.3   WG T3 USIM
       6.3.1   Reports from TSG-T WG3
       6.3.2   Questions for advice and decisions from T3
       6.3.3   Approval of contributions from T3
 	
       6.3.4   Work programme review of T3
	
	129, 130, 139, 164
	
	131, 132, 133, 134, 135, 136, 137, 138
	
	140, 141
	
	142, 143, 144
	
	145, 180
	
	146, 147, 148, 149, 150, 151, 152,
	    153, 154, 155, 156, 157, 158, 159,
	    176, 182

7   TSG-T Project Management / Work Programme Review and
Co-ordination with TSG-SA
   7.1   Release '99
   7.2   Release '00
   7.3   Other issues
	
	172, 173
	161

8 Liaison Statements (LS) outgoing	
9 Postponed issues from earlier in the meeting	
10 Any Other Business	167
11 Work Plan and Future Meeting Schedule	
12 Close of the meeting (by 17:00 Friday September 22)	

ANNEX B　　　　　　　　List of attendees

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ANNEX C   Document list

Below is a list of the documents considered at TSG-T #8. The full list of all TSG-T documents can be found on the 3GPP server as TST-T-Index.doc (http://www.3gpp.org/ftp/TSG_T/TSG_T/). All documents listed below can also be found under this directory.

For allocation of document numbers for future meetings, please contact the TSG-T secretary, Michael Sanders (sanders@ETSI.fr)

Tdoc	Title	Source	Agenda	Status
TP-000118	Draft report for TSG-T #8 (Düsseldorf, 21 - 23 June, 2000)	TSG-T secretary	3	revised - see TP-000119
TP-000119	Report for TSG-T #8 (Düsseldorf, 21 - 23 June, 2000)	TSG-T secretary	3	approved
TP-000120	Draft agenda for TSG-T#9 (Hawaii, 20 - 22 Sept, 2000)	TSG-T chair	2	approved
TP-000121	LS from S5: Service Management - New R00 work item proposal	S5 (S5-000322)	4.1	discussed
TP-000122	LS from SA: Requirements and Scenarios for Call Handling	TSG-SA (SP-00353)	4.1	noted
TP-000123	LS from S1: Applications on external devices (re: SP-00353)	S1 (S1-000611)	4.1	noted
TP-000124	LS from S1: Status of IMEI coding	S1 (S1-000563)	4.1	noted
TP-000125	LS from T2: re: Call Control Applications on External devices	T2 (T2-000446)	4.1	noted
TP-000126	LS from T3: Clarification of UMTS-AKA for GSM R'99 Mobiles	T3 (T3-000470)	4.1	noted
TP-000127	LS from S4: re: Call Control Applications in External Devices	S4 (S4-000425)	4.1	noted
TP-000128	Report (draft) from 3GPP TSG SA Ad-Hoc on Work Plan for next Releases (Helsinki, 22 - 23 August 2000)	TSG-SA ad hoc	5.1	discussed
TP-000129	T1 status report	T1 chairman	6.1.1	noted
TP-000130	Draft minutes from T1 #8	T1 secretary	6.1.1	noted
TP-000131	CR to TS 34.108 v3.0.1 **for approval**	T1	6.1.3	approved
TP-000132	CR to TS 34.109 v3.0.0 **for approval**	T1	6.1.3	approved
TP-000133	CR to TS 34.121 v3.1.0 **for approval**	T1	6.1.3	approved
TP-000134	CR to TS 34.122 v3.0.1 **for approval**	T1	6.1.3	approved
TP-000135	CR to TS 34.123-1 v3.0.0 **for approval**	T1	6.1.3	approved
TP-000136	CR to TS 34.124 v3.0.0 **for approval**	T1	6.1.3	approved
TP-000137	TS 34.123-2 "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification" **for approval**	T1	6.1.3	approved
TP-000138	TR 34 926 "Electromagnetic compatibility (EMC); Table of International requirements for Mobile terminals and ancillary equipment" **for information**	T1	6.1.3	noted
TP-000139	Task 160 and 161 September report	T1	6.1.1	approved
TP-000140	T2 status report	T2 secretary	6.2.1	noted
TP-000141	T2 status report (presentation slides)	T2 chairman	6.2.1	noted
TP-000142	CRs to release 98 specifications **for approval**	T2	6.2.3	approved
TP-000143	CRs to release 99 specifications **for approval**	T2	6.2.3	approved
TP-000144	CRs to release 00 specifications **for approval**	T2	6.2.3	approved
TP-000145	T3 status report	T3 chairman	6.3.1	revised - see TP-000181
TP-000146	CRs to GSM 03.19 **for approval**	T3	6.3.3	approved
TP-000147	CRs to GSM 03.48 **for approval**	T3	6.3.3	approved
TP-000148	CRs to GSM 11.11 **for approval**	T3	6.3.3	approved
TP-000149	CRs to GSM 11.14 **for approval**	T3	6.3.3	approved
TP-000150	CRs to TS 21.111 **for approval**	T3	6.3.3	approved
TP-000151	CR to TS 31.101 **for approval**	T3	6.3.3	approved
TP-000152	CRs to TS 31.102 **for approval**	T3	6.3.3	approved
TP-000153	CR to TS 31.110 **for approval**	T3	6.3.3	approved
TP-000154	CRs to TS 31.111 **for approval**	T3	6.3.3	approved
TP-000155	Proposed new T3 work item descriptions **for approval**	T3	6.3.3	approved
TP-000156	TS 31.120 v1.0.0 "UICC-Terminal Interface; Test specification" for information	T3	6.3.3	noted
TP-000157	TS 31.121 v1.0.0 "UICC-Terminal Interface; Application Test specification" for information	T3	6.3.3	noted
TP-000158	TS 31.122 v1.0.0 "USIM Conformance Test Specification" for information	T3	6.3.3	noted
TP-000159	CR 03.19-A004 R98 "Correction of the AID coding for the API packages"	NTT DoCoMo	6.3.3	approved
TP-000160	3GPP Work Plan - for the IP Multi-media Subsystem	BT, Lucent, Nortel	5	discussed
TP-000161	Specifications Status List	MCC	7	noted
TP-000162	CR to TS 34.109 v3.0.0 for approval	T1	6.1.3	approved
TP-000163	CR to TS 34.121 v3.1.0 for approval	T1	6.1.3	approved
TP-000164	Presentation - Validation of TTCN test cases	T1	6.1.1	discussed
TP-000165	Report of OP#3	OP Secretary	4.1	noted
TP-000166	Draft Report PCG#4	PCG Secretary	4.1	noted
TP-000167	Proposed TOR for TSG T	OP Mtg#3	4.1	discussed - see TP-000183
TP-000168	Guidance for calls for IPR	MCC, Adrian Scrase	4.1	noted
TP-000169	Draft Principles of 3GPP Work Planning - Release Mechanisms	SA R00 Planning Ad-hoc	3	discussed

Tdoc	Title	Source	Agenda	Status
TP-000170	LS form S3 "USIM support in R99 GSM Only terminals"	S3 (S3-000629)	4.2	noted
TP-000171	Draft TSG-SA Report#8 (Düsseldorf, June 2000)	SA secretary	4.1	noted
TP-000172	3GPP Work Plan	MCC	7.2	discussed
TP-000173	3GPP Work Planning for IM SubSystem	SA Ad hoc	7.2	discussed
TP-000174	ARIB's comment on the ITU document 8F/TEMP/33-E	ARIB	4.2	discussed
TP-000175	LS to RAN on Transfer of EMC documents RAN WG4	TSG T	8	approved
TP-000176	Change Requests to TS 31.102 "Characteristics of the USIM application" and GSM 11.11 "SIM ME interface specification"	T3	6.3.3	approved
TP-000177	Report form an Ad Hoc meeting to advise TSG T1 on how TTCN test cases should be verified ANRITSU	SA Ad hoc	6.1	noted
TP-000178	Work Item Descriptions for Release 2000 (R4/R5)	SA WG5	4.1	discussed
TP-000179	Common language infrastructure proposal for MEXE	Microsoft	6.2	informative
TP-000180	Progress report of MCC TASK 162	MCC TASK 162	6.3.1	endorsed
TP-000181	T3 status report	T3 chairman	6.3.1	noted
TP-000182	CR to 31.102-054 R98 "Update condition for OPLMN Selector list"	NTT DoCoMo	6.3.3	approved
TP-000183	Revised Terms of Reference for T	TSG T	10	agreed
TP-000184	LS on CR to 21.900 regarding categories for frozen releases	TSG CN	4.1	endorsed

ANNEX D   List of change requests presented to TSG-T #9

TSG Doc	TSG status	Spec	CR	rv	Rel	Cat	Subject	Old vers	New vers	WG
TP-000146	approved	03.19	A003		R98	F	Definition of the value of the getShareableInterfaceObject() method byte parameter for the	7.2.0	7.3.0	T3
TP-000159	approved	03.19	A004		R98	F	Correction of the AID coding for the API packages	3.2.0	3.3.0	T3
TP-000147	approved	03.48	A012		R99	F	Modification of the fields to be included in the 03.48 response packet checksum computation.	8.3.0	8.4.0	T3
TP-000147	approved	03.48	A013		R99	F	Clarification of the KID and KIC fields for Open Platform keys.	8.3.0	8.4.0	T3
TP-000147	approved	03.48	A014		R99	F	Clarification on Access Domain parameters in Install(Install) command	8.3.0	8.4.0	T3
TP-000176	approved	11.11	A116		R99	F	PLMN Selection Corrections and additions for EDGE	8.3.0	8.4.0	T3
TP-000176	approved	11.11	A119		R99	C	Addition of RPLMN file	8.3.0	8.4.0	T3
TP-000148	withdrawn	11.11	A125		R99	F	Addition of warning regarding network selection with access technology	8.3.0		T3
TP-000148	approved	11.11	A126		R99	F	Standardise the current GAIT commands and reserving these CLA/INS codes	8.3.0	8.4.0	T3
TP-000149	approved	11.14	A183		R98	F	Clarification for Alpha Identifier in PLAY TONE	7.5.0	7.6.0	T3
TP-000149	approved	11.14	A184		R99	F	Clarification for Alpha Identifier in PLAY TONE	8.3.0	8.4.0	T3
TP-000149	approved	11.14	A185		R98	F	EVENT DOWNLOAD-MT call : correction of the sub-address description	8.3.0	8.4.0	T3
TP-000149	approved	11.14	A186		R99	F	EVENT DOWNLOAD-MT call : correction of the sub-address description	8.3.0	8.4.0	T3
TP-000149	approved	11.14	A187		R98	F	correction to GET INPUT regarding number of response string variables	7.5.0	7.6.0	T3
TP-000149	approved	11.14	A188		R99	F	correction to GET INPUT regarding number of response string variables	8.3.0	8.4.0	T3
TP-000150	approved	21.111	005		R99	F	Partial AID selection requirements	3.2.0	3.3.0	T3
TP-000143	approved	21.904	006		R99	F	Reflection of document structure changes in core specifications and correction of editorial	3.1.0	3.2.0	T2
TP-000143	approved	21.904	007		R99	F	Reflection of document structure changes in core specifications and correction of editorial	3.1.0	3.2.0	T2
TP-000143	approved	23.039	002		R99	F	Clarification of SC to SME protocol reference information.	3.1.0	3.2.0	T2
TP-000144	approved	23.040	016		R00	F	Presence of TP-PI	4.0.0	4.1.0	T2
TP-000144	approved	23.040	017		R00	D	Big endian integer representation	4.0.0	4.1.0	T2
TP-000144	approved	23.040	018		R00	B	SMS Address fields section needs clarification	4.0.0	4.1.0	T2
TP-000144	approved	23.040	019		R00	B	User prompt indication	4.0.0	4.1.0	T2
TP-000143	approved	23.041	005		R99	A	Defining Assisted GPS Broadcast Identifiers	3.2.0	3.3.0	T2
TP-000143	approved	23.057	010		R99	F	Storage of user private data in the user profile in the network	3.2.0	3.3.0	T2
TP-000143	approved	23.057	011		R99	F	Correction of UAProf tags	3.2.0	3.3.0	T2
TP-000143	approved	23.057	012		R99	F	WAP UAProf URL correction	3.2.0	3.3.0	T2
TP-000144	approved	23.140	001		R00	B	Set of mandatory media formats for MMS	3.0.1	4.0.0	T2
TP-000143	approved	27.007	041		R99	F	TE software implementations must take account of extra parameters	3.5.0	3.6.0	T2
TP-000143	approved	27.007	042		R99	F	APN presentation	3.5.0	3.6.0	T2
TP-000144	approved	27.007	043		R00	B	Introduction of a new AT command +CUUS1 to manage User-to-User Information element	3.5.0	4.0.0	T2
TP-000144	approved	27.007	044		R00	B	Indication of priority and/or sub-address in the unsolicited result code CCWA	3.5.0	4.0.0	T2
TP-000144	approved	27.007	045		R00	B	eMLPP SIM Commands	3.5.0	4.0.0	T2
TP-000144	approved	27.007	046		R00	B	VBS, VGCS SIM Commands	3.5.0	4.0.0	T2
TP-000144	approved	27.007	047		R00	B	Extension of dial command for VBS and VGCS	3.5.0	4.0.0	T2
TP-000144	approved	27.007	048		R00	B	Introduction of a new AT command +COTDI to manage Originator-to-dispatcher information	3.5.0	4.0.0	T2
TP-000143	approved	27.103	001	1	R99	F	Introduction of PUSH and TARGET	3.0.0	3.1.0	T2

TP-000151	approved	31.101	023		R99	F	Replacement of the techincal contents with a reference to TS 102 221.	3.2.0	3.3.0	T3
TP-000176	approved	31.102	030		R99	F	PLMN Selection additions	3.2.0	3.3.0	T3
TP-000176	approved	31.102	036		R99	F	Alignment to GSM 11.11 regarding Terminology	3.2.0	3.3.0	T3
TP-000152	approved	31.102	044	1	R99	F	Correction to call information access conditions and correction of DF_GSM file IDs	3.2.0	3.3.0	T3
TP-000152	approved	31.102	045		R99	F	Clarification of the type 3 links of the phonebook	3.2.0	3.3.0	T3
TP-000152	approved	31.102	046		R99	F	Alignment of EF(CCP2) with EF(ECCP)	3.2.0	3.3.0	T3
TP-000152	approved	31.102	047	1	R99	F	Correction of record length, editorial errors, missing FID	3.2.0	3.3.0	T3
TP-000152	approved	31.102	048		R99	F	APN Control List coding	3.2.0	3.3.0	T3
TP-000152	approved	31.102	049		R99	F	Alignment with TS 33.102 regarding authentication Sequence Numbers	3.2.0	3.3.0	T3
TP-000152	approved	31.102	050		R99	F	Preferred language selection	3.2.0	3.3.0	T3
TP-000152	approved	31.102	051		R99	F	Application Selection by partial AID	3.2.0	3.3.0	T3
TP-000152	withdrawn	31.102	052		R99	F	Addition of warning regarding network selection with access technology	3.2.0		T3
TP-000152	approved	31.102	053		R99	F	Phone book clarifications	3.2.0	3.3.0	T3
TP-000182	approved	31.102	054		R99	F	Update condition for OPLMN Selector list	3.2.0	3.3.0	T3
TP-000153	approved	31.110	003	1	R99	F	Reservation of TAR values	3.1.0	3.2.0	T3
TP-000154	approved	31.111	005		R99	F	Correction of Profile Download regarding USAT service table	3.1.0	3.2.0	T3
TP-000154	approved	31.111	006		R00	C	Modification of GET INKEY	3.1.0	4.0.0	T3
TP-000154	approved	31.111	007		R00	C	DTMF issues	3.1.0	4.0.0	T3
TP-000154	approved	31.111	008		R99	F	correction to GET INPUT regarding number of response string variables	3.1.0	3.2.0	T3
TP-000154	approved	31.111	009		R99	F	Clarification for Alpha Identifier in PLAY TONE	3.1.0	3.2.0	T3
TP-000154	approved	31.111	010		R99	F	EVENT DOWNLOAD-MT call : correction of the sub-address description	3.1.0	3.2.0	T3
TP-000154	approved	31.111	011		R00	F	Addition of a Technology Indicator Tag in a Terminal Response message	3.1.0	4.0.0	T3
TP-000131	approved	34.108	001		R99	C	RRC Message Contents: RLCSize	3.0.1	3.1.0	T1
TP-000131	approved	34.108	002		R99	C	RRC Message Contents: RLCParam	3.0.1	3.1.0	T1
TP-000131	approved	34.108	003		R99	C	RRC Message Contents: PCPreamble	3.0.1	3.1.0	T1
TP-000131	approved	34.108	004		R99	C	RRC Message Contents: RBIdentity	3.0.1	3.1.0	T1
TP-000131	approved	34.108	005		R99	C	RRC Message Contents: TrCHParam	3.0.1	3.1.0	T1
TP-000131	approved	34.108	006		R99	C	RRC Message Contents: UECapability	3.0.1	3.1.0	T1
TP-000131	approved	34.108	007		R99	C	RRC Message Contents: RBMapping	3.0.1	3.1.0	T1
TP-000131	approved	34.108	008		R99	C	RRC Message Contents: PagingCause	3.0.1	3.1.0	T1
TP-000131	approved	34.108	009		R99	C	RRC Message Contents: CipheringAndIntegrity	3.0.1	3.1.0	T1
TP-000131	approved	34.108	010		R99	C	RRC Message Contents: RLCInfo	3.0.1	3.1.0	T1
TP-000131	approved	34.108	011		R99	C	RRC Message Contents: CompressedMode	3.0.1	3.1.0	T1
TP-000131	approved	34.108	012		R99	C	RRC Message Contents: SIB	3.0.1	3.1.0	T1
TP-000131	approved	34.108	013		R99	D	RRC Message Contents: PhyCH	3.0.1	3.1.0	T1
TP-000131	approved	34.108	014		R99	C	RRC Message Contents: Measurement	3.0.1	3.1.0	T1
TP-000131	approved	34.108	015		R99	C	RRC Message Contents: TFCS	3.0.1	3.1.0	T1
TP-000131	approved	34.108	016		R99	C	RRC Message Contents: DPCHFrameOffset	3.0.1	3.1.0	T1
TP-000131	approved	34.108	017		R99	F	Test USIM Parameters	3.0.1	3.1.0	T1
TP-000131	approved	34.108	018		R99	F	Correction to definition of the test algorithm for authentication (clause 8.1.2)	3.0.1	3.1.0	T1
TP-000131	approved	34.108	019		R99	F	Reference Radio Bearer Configurations	3.0.1	3.1.0	T1
TP-000131	approved	34.108	020		R99	F	TDD Single mode	3.0.1	3.1.0	T1
TP-000162	approved	34.109	001		R99	C	Clarification of UE test loop mode 2 loop back scheme	3.0.0	3.1.0	T1

TP-000162	approved	34.109	002		R99	F	Clarification of loopback delay requirement	3.0.0	3.1.0	T1
TP-000162	approved	34.109	003		R99	F	Change Request about specification TS 34.109	3.0.0	3.1.0	T1
TP-000162	approved	34.109	004		R99	C	UE test loop mode 1, loopback of PDCP SDUs	3.0.0	3.1.0	T1
TP-000163	approved	34.121	019		R99	F	Editorial corrections for References and Frequency Stability (2, 5.2, 5.3)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	020		R99	F	Corrections for Output Power Dynamics in the Uplink (5.4)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	021		R99	F	Transients for uplink inner loop power control (5.4.2.4.2)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	022		R99	F	Transmit On/Off power (5.5.2.4.2)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	023		R99	F	Change of TFC (5.6.4.2)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	024		R99	F	Clarification of the definition on Peak Code Domain Error (5.13.2.1)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	025		R99	F	UE interfering signal definition (6.3, 6.4, 6.5, 6.7)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	026		R99	F	Performance requirements (7.1, 7.2, 7.3, 7.4, 7.5)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	027		R99	F	CR on clause 7.6 and 7.7 in TS34.121 (7.6, 7.7)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	028		R99	F	Performance requirements (7.9, 7.10, 7.11)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	029		R99	F	Corrections for Annex D (Annex-D)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	030		R99	F	Corrections for Annex E (Annex-E)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	031		R99	F	Corrections for Transmit ON/OFF Power, Change of TFC and Power setting in uplink	3.1.0	3.2.0	T1
TP-000163	approved	34.121	032		R99	F	Corrections for power setting in uplink compressed mode (5.7)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	033		R99	B	CR for subclause 7.8: Power control in downlink (7.8)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	034		R99	F	Corrections to clause 5.8, 5.9, 5.10, 5.11 and 5.12	3.1.0	3.2.0	T1
TP-000163	approved	34.121	035		R99	F	Corrections to EVM and PCDE formulae (B.2.7.1, B.2.7.2)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	036		R99	F	New initial conditions for Spurious emission test case (6.8.4.1)	3.1.0	3.2.0	T1
TP-000163	approved	34.121	037		R99	F	C.4.1 UL reference measurement channel for BTFD performance requirement (C.4.1)	3.1.0	3.2.0	T1
TP-000134	approved	34.122	001		R99	F	Corrections to EVM and PCDE formulae (B.2.7.1, B.2.7.2)	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	001		R99	F	Idle mode test cases	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	002		R99	C	Section 8, RRC Tests: RLCSize	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	003		R99	C	Section 8, RRC Tests: HFN	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	004		R99	C	Section 8, RRC Tests: RLCParam	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	005		R99	C	Section 8, RRC Tests: RBIdentity	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	006		R99	C	Section 8, RRC Tests: TrCHParam	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	007		R99	C	Section 8, RRC Tests: UECapability	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	008		R99	C	Section 8, RRC Tests: RBMapping	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	009		R99	C	Section 8, RRC Tests: PagingCause	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	010		R99	B	Section 8, RRC Tests: RRCConnRelease-TM	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	011		R99	B	Section 8, RRC Tests: SignallingRelease	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	012		R99	C	Section 8, RRC Tests: CipheringAndIntegrity	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	013		R99	B	Section 8, RRC Tests: Countercheck_rev	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	014		R99	C	Section 8, RRC Tests: RLCInfo	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	015		R99	C	Section 8, RRC Tests: CompressedMode	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	016		R99	F	Section 8, RRC Tests: SIB	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	017		R99	D	Section 8, RRC Tests: PhyCH	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	018		R99	C	Section 8, RRC Tests: Measurement	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	019		R99	C	Section 8, RRC Tests: FailureCases	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	020		R99	C	Section 8, RRC Tests: TFCS	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	021		R99	C	Section 8, RRC Tests: DPCHFrameOffset	3.0.0	3.1.0	T1

TP-000135	approved	34.123-1	022		R99	C	Section 8, RRC Tests: ReEstablishmentTimer	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	023		R99	F	Section 8, RRC Tests: InterFrequencyHardHandOver	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	024		R99	C	clause 12.4.1.5 "Routing area updating / abnormal cases / attempt counter check /	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	025		R99	C	SM test cases	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	026		R99	F	MM : Authentication	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	027		R99	F	Update of radio bearer test cases (aligned to GSMA ISG version 1.3)	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	028		R99	B	MAC tests	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	029		R99	B	PDCP tests	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	030		R99	B	BMC tests	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	031		R99	F	RRC updates	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	032		R99	F	clause 12.6.1.2 "Authentication rejected"	3.0.0	3.1.0	T1
TP-000135	approved	34.123-1	033		R99	C	clause 12.6 "PS authentication and ciphering"	3.0.0	3.1.0	T1
TP-000136	approved	34.124	001		R99	F	Idle mode conditions and test loops	3.0.0	3.1.0	T1
TP-000136	approved	34.124	002		R99	F	Adding End- user data besides BER and BLER for EMC data testing	3.0.0	3.1.0	T1
TP-000136	approved	34.124	003		R99	D	Editorial modifications for purposes of clarification	3.0.0	3.1.0	T1

ANNEX E   List of all officials within TSG-T

This table lists all chairman and vice chairman of all working groups and subworking groups within the Terminals TSG.

Position	Name	Organisation	Partner	Email	Tel
TSG-T (Terminals)					
Chair	Sang-Keun PARK	Samsung	TTA	skpark@samsung.com	+82 3312809835
Vice chair	Ed EHRLICH	Nokia Corporation	T1	ed.ehrlich@nokia.com	+1 972 894 4495
Vice chair	Kevin HOLEY	BT	ETSI	kevin.holley@bt.com	+44 1473 605604
Secretary	Michael SANDERS	ETSI (3GPP support)	3GPP	sanders@etsi.fr	+33 4 9294 4290
TSG-T WG1 (UE testing)					
Chair	Bjarke NIELSEN	Qualcomm Europe	ETSI	bnielsen@qualcomm.com	+49 170 5488456
Vice chair	Peter GEORGE	Anritsu Ltd	ETSI	Peter.George@eu.anritsu.com	+44 777 5704722
Secretary	Lidia SALMERON	ETSI (3GPP support)	3GPP	salmeron@etsi.fr	+33 4 9294 4349
- EMC Sub Working Group					
Chair	John FENN	Samsung Electronics	ETSI	johnbfenn@aol.com	+44 802 339070
- RF Sub Working Group					
Chair	Mitsuru YOKOYAMA	Agilent Technologies	ARIB	mitsuru_yokoyama@agilent.com	+81 78 993 2763
- Signalling Sub Working Group					
Chair	Dan FOX	Anritsu Ltd	ETSI	dan.fox@eu.anritsu.com	+44 1582 433357
TSG-T WG2 (UE capabilities)					
Chair	Kevin HOLEY	BT	ETSI	kevin.holley@bt.com	+44 1473 605604
Vice chair	Peter NEUMANN	Siemens	ETSI	peter.neumann@mch.siemens.de	+49 89 7223 6718
Vice chair	Toshihiro SHIMIZU	Matsushita	ARIB	toshi.shimizu@mci.co.uk	+44 1635 871 466
Secretary	Friedhelm RODERMUND	ETSI (3GPP support)	3GPP	rodermund@etsi.fr	+33 4 9294 4324
- Mobile Execution Environment (MExE) (Sub Working Group 1)					
Chair	Mark CATALDO	Motorola	ETSI	mcatald1@email.mot.com	+44 1793 566 297
- UE Capabilities and Interfaces (Sub Working Group 2)					
Chair	Kazuya HASHIMOTO	NEC	ARIB	kazuya.hashimoto@nectech.co.uk	+44 1189 654 527
- Messaging (Sub Working Group 3)					
Chair	Ian HARRIS	Vodafone - Airtouch	ETSI	ian.harris@vads.vodafone.co.uk	+44 1635 673 270
TSG-T WG3 (USIM)					
Chair	Klaus VEDDER	Giesecke & Devrient	ETSI	klaus.vedder@gdm.de	+49 89 4119 1542
Vice chair	Günter MARINGER	T-Mobil	ETSI	guenter.maringer@t-mobil.de	+49 228 936 1249
Secretary	Michael SANDERS	ETSI (3GPP support)	3GPP	sanders@etsi.fr	+33 4 9294 4290
- API Sub Working Group					
Chair	Paul JOLIVET	DoCoMo Europe	ETSI	paul.jolivet@docomo.fr	+33 1 5688 3030