3GPP TSG T WG1 #7 Harpenden, UK 8-9 June 2000



DRAFT Report from the 3GPP TSG T WG1 #7 Plenary Meeting

8-9 June 2000

Glen Eagle Hotel, Harpenden, UK

Revision: 2

Chairman: Bjarke Nielsen

Secretary: Lidia Salmerón

TABLE OF CONTENTS

| 1 | Opening of the meeting | 3 |
|-------------------------------|---|----|
| 2 | Adoption of the agenda | 3 |
| 3 | Registration of input documents | 3 |
| 4 | Approval of the minutes from last meeting | 3 |
| 5 | Incoming LS's | 4 |
| 6 | Time schedule for next meetings | 5 |
| 7 7.2 7.3 7.4 7.5 | Status reports | 6 |
| 8 | Status of the List of priorities for SDO distribution | 14 |
| 9 | Work methods and tasks | 14 |
| 10 | Status of the 'GSM Certification Forum' | 15 |
| 11 | Postponed issues | 16 |
| 12 | Review of TSG-T1 status report to TSG-T | 16 |
| 13 | Any other business | 16 |
| 13 | Closing of the meeting | 16 |
| Ann | ex A. List of participants | 17 |
| Ann | ex B. List of documents | 19 |
| Anno C.1 C.2 C.3 | Test USIM | 21 |
| | function | 22 |
| C.4 | T1 iWD-001 Combined testing areas for RF and Signaling; Idle mode operations, handover and measurement report | |
| C.5 | TS 34.123-2 ICS | 22 |
| Histo | ory | 23 |

1 Opening of the meeting

The seventh TSG T1 Plenary meeting was held on 8-9 June in Harpenden (UK) and was hosted by Anritsu.

Mr Nielsen opened the meeting at 9.00 am and thanked Anritsu for hosting the meeting.

2 Adoption of the agenda

The original agenda in **T1-000047** was revised by the chairman in **T1-000095**. The agenda was approved.

3 Registration of input documents

The documents were allocated to the agenda as indicated in Annex B.

T1-000100: E-mail on change request procedure

Ms Salmeron presented this document containing an e-mail previously sent to the e-mail reflector as a request from the last plenary meeting. The meeting agreed to follow the procedure described in the document and to improve it once we have more experience in the issue. The document was noted.

4 Approval of the minutes from last meeting

Follow-up on action points / outstanding issues

The report from the last T1#6 meeting (Münich) can be found in Tdoc **T1-000048**. The following actions points were identified:

| Responsible | AP Description | Status | Comments |
|--------------|---|--------|--|
| All | To send contributions about the different regulatory | Open | Ms Salmeron will present contribution |
| | situations | | for European regulation in t1-000093 |
| All | To provide information about how testing is handled in 3GPP2. | Open | |
| SWG | To check 21.905 to see what new vocabulary is needed | Open | Open for RF. |
| chairmen | | | OK for signalling |
| | | | Open for EMC |
| Mr Mattisson | To update ToR of RF and SIG subgroups | Closed | At the last joint meeting was decided |
| | | | that this is not needed any more. |
| | Response from T1-000006 is expected (LS from S4 on | Open | |
| | acoustic req. and test methods for 3G terminals) | | |
| | Response from T1-000024 | Open | Some clarification will be presented at |
| | | | the T1/RF report. This discussion is still |
| | | | going on in RAN4 |
| | Clarification on Low battery voltage test | Open | To be presented at this meeting. |
| Mr Fox | To reformat tables in review of status of 34.123-1 | Done | |
| Chairman | Forward EMC document (regional requirements) to T | Done | The spec number allocated is 34.936 |

| Ericsson | T1-000034 LS to T2 on information regarding EMMI | Open | |
|-------------|--|------|--|
| ETSI MCC | Update of 34.121 circulated on the e-mail reflector | Done | |
| Ms Salmeron | To send TS 34.108 v0.0.3 to the editor of the document | Done | |
| Ms Salmeron | To send CR cover sheet and explanations on the CR | Done | |
| | procedure | | |

The minutes from the last meeting were approved without changes.

5 Incoming LS's

T1-000049: LS from RAN4 on inter-RAT cell re-selection and handover performance requirements

RAN4 informs that it has started the work on performance requirements and related test cases on *UTRAN to GSM* cell reselection, especially for handover between *UTRAN and GSM*. Performance requirements and test cases are specified in 3GPP TS 25.133 (FDD) and TS 25.123 (TDD).

T1/RF does not see any impact on its current work. The document was noted.

T1-000050: LS from RAN2 on Response to LS (T1-000025) on Clarification of UE behaviour on CRC error detection

T1/RF assumptions are according to RAN2 explanation. The LS was noted.

T1-000051: LS from RAN1 on Answer to liaison on UE behaviour at CRC error

This is the same response as in **T1-000050**. The LS was noted. The LS was already discussed in T1/RF meeting in Yokohama.

T1-000053: LS on Review and future ownership of TS 34.109

RAN2 gives some comments on TS34.109 and agrees with being the owner of the TS once it is approved. Mr Mattisson noted that there is an open issue in PDCP. The LS was noted.

T1-000054: LS from RAN2 on Changes to TR-25.926 UE radio access capabilities

RAN2 informs that TR 25.926 is going to be aligned with the ISG RABs, as the ISG RABs should be used as the basis for conformance testing.

Mr Fox explained that the ISG document has been used for the test cases, but for the moment there is no support of all the ISG RAB, therefore testing beyond ISG RAB is not relevant for us for the moment. T1/SIG already knows that 25.926 is not stable.

Mr Fox drafted a LS in T1-000110 that was discussed under section 7.4 of this report.

T1-000085: LS from R2 on changes to TR 25.926 UE radio access capabilities for TDD The CR in this document was further reviewed by RAN2. The final CRs are included in **T1-000101.** Mr Mattisson confirmed that this information has been taken into account in the Radio bearer test cases.

Mr Hu noted that for the moment we do not have any TDD signalling test cases.

T1-000084:LS from CN1 on usage of terms GSM, UMTS and GERAN

CN1 informs that they will change some of the terminology in their specifications as soon as the new terminology is agreed by the other groups. The LS was noted.

6 Time schedule for next meetings

The meeting schedule is included in Tdoc **T1-000096**. It was noted that some of the dates were wrong. The document was revised in **T1-000112**. The meeting in May was moved to the week 14 to 18 May. The changes are included in **T1-000120** are agreed.

The table below shows the planned dates for the next plenary and subgroups meetings.

| Meeting | Date | Location | Host |
|--------------|----------------|-------------------|-------|
| 3GPPT1-/RF | 28 - 30 Aug | Naantali, FINLAND | Nokia |
| 3GPPT1-/ SIG | 28 - 30 Aug | Naantali, FINLAND | Nokia |
| 3GPPT1-/EMC | 28 - 30 Aug | Naantali, FINLAND | Nokia |
| 3GPPT1-#8 | 31 Aug – 1 Sep | Naantali, FINLAND | Nokia |

7 Status reports

7.2 SMG7 status report

The SMG7 #25 report is included in document **T1-000087**. Ms Salmeron presented the document **T1-000092**, which contains a presentation with the main issues discussed at the SMG7 meeting.

There was some discussion about the transfer of activities. It was noted that for the moment there are some practical problems collocating the SMG7 and T1 meetings, since SMG7 is meeting for 4 days.

Mr Fox was concerned about the maintenance of the common tests between T1 and SMG7. Changes proposed to SMG7 test shall be evaluated to see if there is any impact in T1 specs.

AP7.1: The chairmen of the T1 and Subgroups will come together with the SMG7 chairman to discuss the level of overlapping between the SMG7 and T1 specifications

7.3 TSG-T1/EMC status report

- Presentation of report(s) and T1 decisions where needed.
- *Presentation of new TR what is the number?*
- CR's to 34.124
- New issues regarding automotive directive?

The report from the T1/EMC meeting is in **T1-000109**.

T1/EMC has held two meeting since the last T1 meeting. The last EMC had only 3 delegates due to a simultaneous meeting of CISPR (In St. Petersburg, Russia). The LS sent by T1 last year is going to be treated at this meeting. The output from this CISPR meeting is very important for T1/EMC.

Two CRs are proposed to T1 for approval (T1-000056 and T1-000111). Mr Fenn noted that these CRs contain some vocabulary that should be included in the 3G vocabulary.

Next meeting: Finland, collocated with T1 plenary

Japan, in 17th -19th October

No meeting in November collocated with T1

No work was done on TR 34.926, since T1/EMC is waiting for the output from the CISPR meeting.

The automotive directive was not discussed at the T1/EMC due to the lack of participants. As this is only of interest to the European delegates the document was not discussed during the T1 plenary.

The report from the T1/EMC was agreed.

T1-000056: CR to 34.124 on editorial changes

This CR proposed a general cleaning up of the specification. Additionally, a definition for BLER is included. This definition will have to be included in the vocabulary document TR21.905.

Clarification between Block Error Ratio and Bit Error Rate was requested. Mr Fenn explained that BLER is a calculation, Block error rate is an event recorded on a measuring instrument.

It was noted that the sentence deleted in clause 6 corresponds to a technical change proposed in **T1-000111**. In a specification we should not refer to any product specific details.

The CR was agreed in principle but finally withdrawn due to the withdrawal of T1-000113.

T1-000111: CR to 34.124 on Adding End- user data besides BER and BLER for EMC data testing.

The meeting proposed some changes from "Rate" to "Ratio" and "Measurement" to "Derivation" however, the word assessment was the agreed one. It was also noted that the formula for BER was incorrect: the denominator shall contain all bits. Document **T1-000113** was intended to record the changes however, due to the extensive changes and the absence of many of the T1/EMC delegates, the CR was withdrawn.

7.4 TSG-T1/Sig status report

- Presentation of report(s) and T1 decisions where needed.
- Status of the TTCN/Prose elaboration, project team and time schedule
- Presentation of 34.123 part 1 approval as version 2.0.0?

 Time plan for implementation of additional issues (packet data and 2G/3G handover)
- Presentation of 34.123 part 2 approval as version 2.0.0 How should this document be continued if 21.904 spec is not continued?
- Presentation of TS34.108 (common test environment) approval of 2.0.0

Mr Fox presented the report from the T1/Sig subgroup included in document **T1-000102**. The following points will be treated in this section:

The T1/Sig has had two normal meetings and one ad-hoc meeting on TTCN.

The actual 34.123-1 contains 521 test cases. Some of the tests are based on the GSM ones including some modifications.

Regarding 34.123-3, two teams of experts have been recruited and some discussion on the design of the test cases have been treated.

The report was approved.

The main open issues for T1/Sig are:

- the instability of the core specifications.
- not enough progress in 34.123-2
- TTCN expert team will not on their own will produce 34.123-3. The spec cannot be written without voluntary contributions. For the moment there are no voluntary contributions but they are needed due to the very aggressive time schedule.

• 34.123-1

The chapters have been restructured, since the previous structure (previously taken from 11.10) was not suitable.

T1-000103 contains the new version of 34.123-1 and the cover sheet for presentation. This specification have been split in different files in a similar way as it was done for 11.10-1. Mr Fox noted that the table of contents is correct but not the page number.

AP7.2: ETSI will fix the format of the 34.123-1 before presentation to T.

The main areas where test case are missing are: idle mode, MAC, PDCP, BMC, 2G/3G systems and packet data.

There are still some discussion about the low battery voltage test. For the moment the core specifications do not seem testable. Mr Yokoyama recommended that RAN4 shall include some requirements in the core specification. This will be treated in a LS later on (T1-000107).

The document **T1-000103** was approved as version 2.0.0 (once the formatting from ETSI is done).

During the T1/Sig the scope of the test cases in 34.123-1 was also clarified. It was agreed that only test cases for the signalling protocol will be included, this means that content test cases will not be included, what puts out test cases for speech, for example. As no time was available at the end of the meeting, the LS will be reviewed on the e-mail reflector.

AP7.3: T1/sig to review LS on scope of test cases in 34.123-1 on the e-mail reflector.

• 34.123-3

T1-000090: Status report from Task Forces 160 and 161

Mr Hu gave a presentation on Tasks 160 and 161. He explained that the work has been split in small packages. It was noted that another 9 men/month are still needed to complete Task 160 (TTCN).

The four experts composing Task 161 (prose) will work on the development of (1) L2 PDCP & BMC, (2) L2 MAC, (3) Review and refine RRC test and (4) Intersystem HO (CS). Some result are expected by June, with the completion of all the work by August.

The six experts composing Task 160 (TTCN) will work on the development of ATS for (1) RRC elementary procedures, (2) RRC idle mode, (3) RRC Handover, (4) L2/MAC, RLC, (5) MM & SMS, and (6) CC & General tests. How to do the Radio bearer test cases is still under study. The general structure of the ATS is planned for August, while the test cases marked with priority 1 and 2 shall be ready for validation by November.

The approval of 34.123-3 is planned for February 2001 (including validated test cases).

Some requests to T1:

• Request the remaining 9 mm funding. This funding is already planned but allocated to the next year.

AP7.4: Chairman to request 9 mm funding to TSG T.

• Raise the intersystem HO test from priority 4 to 2, as expressed by several companies at the last T meeting. This will be discussed at the T1/Sig. The test cases could be done without changing the priority.

AP7.5: T1/Sig to discuss the priority of intersystem handover and report to T1.

• To include the TTCN validation in the agenda for the next meeting.

AP7.6: Chairman to include TTCN validation in the agenda.

It was clarified that the validation has to be done by voluntary contributions. This issue has to be solved by T1/Sig. Co-operation between the test equipment manufacturers and UE manufacturers is needed to guarantee the proper function of the test cases.

AP7.7: T1/Sig to present a proposal for the next T1 meeting on how to perform the validation of test cases.

T1-000106: Development plan for 34.123-3

The proposed plan is included in MS Project as not all the delegates have this application available it was agreed to produce a PDF version.

AP7.8: Ms Salmeron to produce a PDF version of it and place it in the server.

Mr Fox explained that the project is divided in 4 phases:

- Phase 1: Coding of the ATS framework
- Phase 2: Coding of priority 1 test cases ---> 34.123-3 v1.0.0
- Phase 3: Coding of priority 2 test cases ---> 34.123-3 v1.1.0
- Phase 3: Coding of rest of R99 test cases ---> 34.123-3 v3.0.0

The development cycle will have the following steps:

- 1. Coding, visual inspection and compilation without errors
- 2. Validation by a voluntary team
- 3. Return of test cases + execution logs to authors for corrections
- 4. Revalidation
- 5. Submission for approval.

It was highlighted that the funding is not enough to cover all the areas identified as part of R99. Voluntary contributions are needed. To facilitate the development and integration of voluntary contributions, the ATS framework will be firstly developed and circulated.

• <u>34.123-2</u>

T1-000058: LS from T2 on Future work of UE Capability Requirement TR21.904

T2 informs about its decision of maintaining the TR 21.904 until December 2000 and that there will not be a new work item for release 2000. The document was noted.

After this, the future of 34.123-2 was discussed in the meeting. Mr Fox explained that the conclusions from the joint meeting between T1/RF and T1/Sig were that the documents used as a basis for the generation of the ICS are either not stable (25.926 and RAN specifications) or not provide all the expected information (as it is the case of 21.904). This concluded with the recommendation of defer the approval until September.

T1 is not completely satisfied with the format of the 21.904. It is very difficult to establish the relation between the capabilities and the test cases. This problem is increased with the tendency to allow more and more features in UEs.

Mr Fox said that to complete the ICS document as it is at the moment we would need a map between a capability in the UE and the core requirement, what it is out of our scope.

Mr Sood said that 21.904 is a report and the intention of it was not to impose additional requirements to those specified in the core specifications.

Mr Mattisson said that for Radio bearer tests, the information from 25.926 is needed. The ICS document is very important for this test cases.

According to Mr Hu that the actual information in the ICS is enough to run the NAS protocol test cases. On the other hand, it is not enough to run the AS tests. In his opinion, this document is needed and shall be reviewed in future meetings. This last opinion was not shared by Mr Nielsen, who thinks that due to the big flexibility of features, the realisation of the ICS document it is very difficult.

The meeting agreed to defer the approval of the 34.123-2 and linked it to 34.123-3. Contributions are needed to restructure the document by the next meeting.

The latest version of the document is included in **T1-000105** for information.

AP7.9: All to send contribution on how to restructure the ICS document.

• 34.108

T1-000104 contains the cover sheet for presentation of 34.108 version 1.0.3 for approval. Mr Fox presented the document since the editor was not present. He explained that some work is still expected in the Signal Levels area. The use of ciphering in all test cases is expected.

This week GSMA ISG produced a new version of the document on Typical Radio Parameters version 1.2. This is presented to the meeting as **T1-000114**. This document is the basis for the reference radio bearer in 34.108 and it is used for the radio bearer test cases. The proposed changes to 34.108 are included in **T1-000115**.

The meeting agreed to postponed until Friday the approval of 34.108 to give time to the T1/Sig chairman and the editor of the Radio Bearer test cases to check if the changes in the ISG documents are purely editorial or if a review from the T1/Sig is necessary. The new proposal for 34.108 reflecting the new ISG document will be presented in **T1-000116**. Tomorrow, either **T1-000104** or **T1-000116** will be approved, depending on the study to be done tonight.

On Friday, Mr Mattisson said that after looking into detail in the changes done to the ISG RAB, he thinks it is better to include this changes by CR, since there is a big impact in the radio bearer test cases in 34.123-1. Consequently, 34.108 included in **T1-000104** was agreed and **T1-000116** was withdrawn. Additionally, the review of **T1-000115** was postponed to the e-mail reflector.

AP7.10: T1/Sig to review T1-000115 on the e-mail reflector.

It was noted that changes to 34.108 and 34.123-1 need to be co-ordinated since test cases in 34.123-1 refer to clauses in 34.108.

• Other LS from T1/Sig

T1-000107: LS to RAN4 on low battery voltage testing

T1 asks for some clarification on the terms "ineffective use" used in the requirement for low battery voltage. The LS was approved.

AP7.11: Ms Salmeron to send the LS in T1-000107.

T1-000110: LS to RAN2 on response to T1-000054

T1 informs RAN2 that we are using the RAB defined by GSMA ISG and 25.926. T1 also thinks 25.926 is very useful for our ICS document. The LS was approved.

AP7.12: Ms Salmeron to send the LS in T1-000110.

7.5 TSG-T1/RF status report

- *Presentation of report(s) and T1 decisions where needed.*
- Presentation of 34.109 (Logical Test Interface) approval of version 3.
- Presentation of 34.121, v3... + Change Requests
 - Evaluation of stability release 99 freeze expected in September!
- Presentation of 34.122 (TDD) approval of version 2.0.0

Mr Yokoyama presented the report in **T1-000080r2**. The T1/RF has held two meetings since the last T1 meeting. Discussions about test loop implementation and measurement uncertainty have taken place.

• <u>34.121</u>

18 CRs to 34.121 are presented at this meeting for approval. Mr Yokoyama explained that the CR in **T1-000064** is withdrawn due to overlapping with other CRs. The changes in this document are included in **T1-000075**.

Different types of CR are proposed:

- The following CR due to changes in the core specifications were approved.

T1-000061: CR to 34.121 on Out-of-synchronisation handling of the UE

T1-000071: CR to 34.121 on Modifications to test power control in downlink

T1-000072: CR to 34.121 on Modifications to clause 5.13 "Transmit Modulation"

T1-000060: CR to 34.121 on Modifications to clause 5.4 "Output Power Dynamics in the Uplink"

T1-000062: CR to 34.121 on Modifications to clauses 5.8, 5.9, 5.10 and 5.11

T1-000069: CR to 34.121 on Modifications to clauses 5.5, 5.6 and 5.7

T1-000073: CR to 34.121 on Modifications to test for inner loop power control in the uplink

T1-000063: CR to 34.121 on Modifications to Chapter 6 "Receiver Characteristics"

T1-000070: CR to 34.121 on Modifications to Chapter 7 "Performance requirements"

T1-000117: CR to 34.121 on Modifications to Chapter 8 "Requirements for support of RRM"

T1-000118: CR to 34.121 on Modifications to Annex C "Measurement channels"

T1-000067: CR to 34.121 on Modifications to Annex D, Annex E, Annex G and Annex H

T1-000059: CR to 34.121 on Editorial corrections to clauses 2, 3, 4 and 5.1

The following CR on improvement of expressions was approved:

T1-000074: CR to 34.121 on Revision of Annex B: Global in-channel Tx test

- The following CRs containing new proposals were approved:

T1-000119: CR to 34.121 on Idle mode test cases (test of performance requirements)

T1-000075: CR to 34.121 on Blind transport format detection

T1-000068: CR to 34.121 on Interpretation of measurement results

Mr Yokoyama explained that this is the current assumption of RAN4.

- One CR containing corrections was approved:

T1-000077: CR to 34.121 on Removal of Annex I "Open Items"

It was noted that not all the open issue are finished. This information will be keep within the T1/RF.

T1-000089: Handling of measurement uncertainty

CSELT/TIM presented this document proposing some changes to the core specifications and conformance test specifications regarding the measurement uncertainty. As this document is going to be presented at RAN4, it was decided not to start any discussion here until RAN4 has taken a decision. The document was noted.

• 34.122

T1-000097 contains the progress report for 34.122 v1.5.0. The completeness of the different clauses is:

| 5. Transmitter Characteristics | 85% |
|-----------------------------------|-----|
| 6. Receiver Characteristics | 90% |
| 7. Performance Requirements | 90% |
| Annexes | 80% |
| Requirements for Support of Radio | 0% |
| Resource Management (TDD) | |

T1-000098 contains 34.122 v1.5.0 for approval as version 2.0.0. The document was agreed.

• 34.109

T1-000108 contains 34.109 v1.2.2 for approval as v2.0.0 and the cover sheet for presentation.

The main open issues are:

- UE test loop capabilities for PDCP
- Test loops for TDD
- Electrical Man-Machine-Interface (EMMI). It was noted that this has no impact in the UE implementation, only in the system simulator
- Test loop operation to support blind transport format detection test case

Some editorial modifications were suggested to the note under the EMMI clause. The document was revised in **T1-000121** and agreed.

At the last SA meeting 34.109 was agreed to be transferred to RAN2 once it was approved. As T1 we will like to update the open issues it was agreed to keep 34.109 until September. A LS will be send to RAN2 in **T1-000122**.

Liaison statements

T1-000078: LS to RAN4 on DL power control dynamic range

T1/RF asks RAN4 to provide information about the assumed values of several parameters as used in the derivation of the required demodulation performance. The LS was agreed.

AP7.13: Ms Salmeron to send the LS in T1-000078.

T1-000079: LS to RAN4 on the Definition of Confidence Levels

T1/RF asks RAN4 for confirmation of T1/RF's responsibility to define confidence level for tests related to BLER measurements, detection time measurements, or power measurements during fading.

The LS was agreed.

AP7.14: Ms Salmeron to send the LS in T1-000079.

T1-000094: LS to T on Definition of UE loopback behaviour with regard to the USIM

T1 asks T to confirm that UE loopback behaviour is based entirely on commands sent from the SS, with no decision being made by the UE on whether to accept of reject commands based on USIM status.

Some discussion took place on the LS. It was not very clear the intention of the LS. Mr Fox said that the conclusion is that loopback shall operate in all states.

According to Mr Yokoyama, 34.109 only describes behaviour with the use of a test USIM. The expectation of T1 is that loopback shall work, at least, with a test USIM.

Nevertheless, Mr Nielsen noted that the guidance from T was very clear: loopback shall work with test USIM and with no USIM at all.

The meeting finally agreed to reject the LS in **T1-000094**. Instead, Mr Fox will write a CR to 34.109 to include the functionality in the case of no USIM at all, and also will write the corresponding LS to inform RAN2 about this.

AP7.15: Mr Fox to write CR and LS to RAN2 on addition of functionality with no USIM at all in 34.109.

Test cases will also have to be included in section 17 of 34.123-1 to test the new functionality.

T1-000122: LS to RAN2 on delay of transference of 34.109

Some editorial modifications were done on-line and the LS was finally agreed.

AP7.16: Ms Salmeron to send the LS in T1-000122.

8 Status of the List of priorities for SDO distribution

T1-000093: Update in the European regulatory situation

Ms Salmeron presented the document for information containing the list of test cases relevant for GSM in the European regulatory situation. The document was noted.

Mr West noted that there is a group actually working in the HS for IMT-2000 family in Europe.

Mr Yokoyama said that next week ARIB will prepare a draft version of the Japanese regulatory situation. If the draft is approved it will be presented in the T meeting in Düsseldorf.

9 Work methods and tasks

T1-000088 and T1-000099 contain the presentation of the R00 project plan and its subdivision in features, building blocks and work tasks. Both documents were noted.

It was agreed that Mr George will go to the IGC meeting 16th June if possible. Some involvement from T1 it is necessary.

AP7.17: Ms Salmeron to contact the convenor of IGC.

Mr West thinks that a feature should not be completed until the tests for that feature finished. Other issue to consider is how the maintenance of the different releases in going to be focused.

Mr Fox had some concerns about the boundary of the different releases, e.g. tests for multimedia and multicall shall be included in R99 or R00? Mr Hu clarified that test cases shall be included in the release where the features are defined, e.g. multimedia and multicall test shall be included in R99, even if they are late included.

T1-000057: LS from S1 on Request for feedback on TR22.976 Study on Release 2000 services and capabilities

This TR will be presented to TSG-SA#8 for approval. It identifies the Release 2000 services requirements.

The WG shall consider this document. The document was noted.

10 Status of the 'GSM Certification Forum'

Mr West introduced himself and presented **T1-000091** (**Presentation on GCF**). He explained that the GCF is a partnership between GSMA and terminal manufacturers to assure interoperability between terminals and networks. The GCF is voluntary and covers the GSM terminals; if requested, can be extended to 3G. This certification is done by the manufacturer signing a 'Declaration of conformity' after a set of test cases (published by ETSI)have been run and some field trial have been done in 5 networks.

Mr West clarified that GCF is formed by 100 operators, 20 manufacturers. Test used have to be published by ETSI, validated and implemented in test equipment.

Note: The validation is done by a group formed by test houses and test equipment manufactures. If some problems are found during the validation of test cases, a LS could be send to the responsible technical body.

Not all the test cases from 11.10 are included in GCF, mainly is formed by the type approval test plus some tests for supplementary services.

According to Mr West opinion, it would be very convenient to extend the GCF for 3G, especially if it is available at early stages of the introduction of 3G terminals. Taking into account that 3G terminals will be introduced in Europe by end of 2001, this means that terminal manufacturers would need test cases by the end of 2000.

T1 is open to inputs from other relevant groups and the participation of more operators is needed in the group. Resources from T1 are also needed in GSMA. This issue will be discussed in the next Terminals Working Group meeting and inputs will be sent to the next T1 meeting.

It was noted that for the moment the GCF has no coverage in Japan or Korea.

Mr Nielsen thinks that some co-ordination is needed between GCF and ISG. The relationship between these two groups is not very clear in T1,

Mr Sood asked if the ICS document will be used by the GCF. Mr West encouraged to produce the document since it will be used by the GCF.

Mr Georges commented that it would be very useful for us if the GCF could give some input to T1 regarding the regulatory situation in the different regions. Mr West though also convenient to contact the UMTS Forum.

11 Postponed issues

None.

12 Review of TSG-T1 status report to TSG-T

T1-000123 contains the draft report from the chairman to T. The document was revised on line as T1-000124.

13 Any other business

None.

13 Closing of the meeting

Mr Nielsen closed the meeting at 13.00 on Friday.

Annex A. List of participants.

| Surname, First Name | Company | Address | Telephone | Fax | E-mail |
|---------------------|--|--|--------------------------|-------------------|-----------------------------------|
| Afchar Ramin | CETECOM GmbH | Im Teelbruch 122, 45219 Essen, Germany | +49 2054 9519 977 | +49 2054 9519 21 | Ramin.Afchar@cetecom.de |
| Baker Matthew | Philips | Cross Oak Lane, Redhill, Surrey RH1 5HA | 01293 815287 | 01293 815493 | bakermp2@prl.research.philips.com |
| Bertolin Pierre | Mitsubishi Electric Telecom Europe | Trium Road, 11 rue du Close Courtel, 35703 Rennes, France | +33 2 99 27 47 70 | +33 2 99 27 23 99 | Pierre.bertolin@trium-rd.com |
| Bokinakere Sundresh | Motorola | Midpoint, Alencon Link, Basingstoke, RG21 7PL | 01256 790 790 | 01256 790190 | B.sundresh@Motorola.com |
| Bollea Loris | CSELT SpA | via Reiss Romoli 274, I10148 Torino, Italy | +39 011 228 7366 | +39 011 228 7369 | loris.bollea@cselt.it |
| Farber Dirk | Siemens AG | Grillparzerstr. 10-18, 81675 Munchen, Germany | +49 89 722 57665 | +49 89 722 46249 | dirk.faerber@mch.siemens.de |
| Fenn John | Samsung Electronics | Communications House, Staines TW18 4QE | 01784 428 600 | 01784 428 629 | JohnBFenn@aol.com |
| Field Debbie | Nokia UK Ltd | Nokia House, Summit Avenue, Farnborough, Hamps GU14 0NG | +44 1252 866248 | +44 1252 866301 | debbie.field@nokia.com |
| Foreman Chris | Racal Instruments Ltd | 480 Bath Road, Slough, Berks | 01628 604455 | 01753 791234 | Chris.foreman@racalinst.co.uk |
| Fox Dan | Antirsu Ltd | 200, Capability Green, Luton, UK | 01582433357 | | dan.fox@eu.anritsu.com |
| Fujimura Masuhisa | Sony Corporation | W Building 1-8-5, Konnan Minato-ku, Tokyo 1080075 | +81 3 5782 5195 | +81 3 5782 5213 | fujimura@wtlab.sony.co.jp |
| Georges Peter | Antirsu Ltd | 200, Capability Green, Luton, UK | 01582433212 | | peter.georges@eu.anritsu.com |
| Guillot Edgar | France Telecom/LIS | Rue Blaise Pascal 22300 Lannion, France | +33 2 96 05 78 55 | +33 2 96 05 77 27 | edgar.guillot@francetoelecom.fr |
| Hagiwara Seiji | NTT DoCoMo | 3-5 Hikarinooka, Yokosuka-shi, Kanagawa-ken 239-8536, Japan | +81 468 40 3100 | +81 468 40 3733 | hagisei@mlab.yrp.nttdocomo.co.jp |
| Hayashi Kazuo | Matsushita Communications Industrial Co. Ltd | 5-3, Hikarinooka, Yokosuka-shi, Kanagawa, 239-0847, JAPAN | +81 468 40 5240 | +81 468 40 5222 | Kazuo.Hayashi@yrp.mci.mei.co.jp |
| Hellsten Jarkko | TA Centre, NOKIA | PO Box 86 (Joensuunkatu 7E / Kiila 1B), FIN 24101 Salo, Finland | +358 50 515 1621 | +358 10 505 5220 | Jarkko.hellsten@nokia.com |
| Higuchi Kenji | Advantest Corporation | 1-16-1 Fujimi-cho, Gyoda, Saitama 361- 0021, Japan | +81 48 556 6500 ext 3520 | +81 48 556 7049 | higuchi@gytmi.advantest.co.jp |
| Honda Yusuke | Matsushita communication Sendai R&D Labs Co. Ltd | 2-5 Akedori, Izumi-ku, Sendai, 981-3206 Japan | +81 22 377 9604 | +81 22 377 9608 | honda@srd.mci.mei.co.jp |
| Hu Shicheng | ETSI | 650, Route des Lucioles, 06921 Sophia, France | +33 4 9294 4369 | +33 4 9294 4371 | shicheng.hu@etsi.fr |
| Matsumoto Masato | Denso Corporation | 1-1, Shouwa-cho, Kariya-shi, Aichi-ken, Japan | +81 566 25 9905 | +81 566 25 4751 | m_matsu@hcom.denso.co.jp |
| Mattisson Leif | Ericsson | NYA Vattentornet | +46 46 193365 | +46 70 615 6475 | Leif-Mattisson@ecs.ericsson.se |

| Surname, First Name | Company | Address | Telephone | Fax | E-mail |
|----------------------|--|--|---------------------|---------------------|---------------------------------------|
| Maucksch Thomas | Rohde & Schwarz | Germany | +49 89 4129 2124 | +49 89 4129 3443 | Thomas.Maucksch@rsd.rohde-schwarz.com |
| Myllyla Eeva | Nokia | Elektroniikkatie 10, 90540 Oulu, Finland | +358 40 504 4417 | +358 10 505 6663 | Eeva.myllyla@nokia.com |
| Nakagomi Hisashi | NTTDoCoMo | 3-5 Hikarinooka, Yokosuka-shi, Kanagawa 239-8536 | +81 468 40 3100 | +81 468 40 3733 | hisashi@cet.yrp.nttdocomo.co,jp |
| Nakamura Yasuhiko | NEC Corporation | 4035, Ikebe-Cho, Tsuzuki-Ku, Yokohama 224-8555 | +81 45 939 2316 | +81 45 939 2349 | y-nakamura@er.jp.nec.com |
| Nemoto Masaaki | Mitsubishi Electric Corp | 5-1-1 Ofuna, Kamakura, Kanagawa, Japan | +81 467 2886 | +81 467 2819 | masaaki@csc.melco.co.jp |
| Nielsen Bjarke | Qualcomm | Beerweg 3, D-81369 Munich, Germany | +49 89 607 69 841 | | Bnielsen@qualcomm.com |
| Niemi Janne | TA Center, NOKIA | Joensuunkatu 7e, FIN-24101 Salo, Finland | +358 50 551 4294 | +358 10 505 5220 | Janne.p.niemi@nokia.com |
| Saito Shinji | Matsushita Communication Industrial Co. Ltd | 4-3-1 Tsunashima-higashi, Kohoku-ku, Yokohama 223-8639 | +81 45 544 3680 | +81 45 544 3656 | saitos@pcd.mci.mei.co.jp |
| Salmeron Lidia | ETSI | 650, Route des Lucibe | +33 4 92 94 4349 | +33 4 92 38 5230 | Lidia.Salmeron@etsi.fr |
| Savolainen Juha | Nokia Mobile Phones | PO Box 68, FIN-33721 Tampere | +358 50 553 8373 | +358 10 505 6777 | Juha.t.savolainen@nokia.com |
| Schulze Hans-Joachim | Mannesmann Mobilfunk GmbH | Am Seestern 1, D-40547, Dusseldorf, Germany | +49 211 533 2240 | +49 211 533 3804 | Hajo.Schulze@D2mannesmann.de |
| Shimizu Toshihiro | Matsushita Communications Industrial Co. Ltd | c/o Daytona Drive, Colthrop, Thatcham, Berks RG19 4ZD | 01635 870466 | 01635 871345 | Toshi.shimizu@mci.co.uk |
| Shimokawara Yoichi | Sony Corporation | W Building, 1-8-15 Konan, Minato-ku, Tokyo 108-0075 Japan | +81 3 5782 5199 | +81 3 5782 5213 | shimo@wtlab.sony.co.jp |
| Sood Prem | Sharp Labs of America | 5750 NW Pacific Rim Blvd, Camas, WA 98607 USA | +360 834 8708 | +360 834 8696 | Pls@sharplabs.com |
| Susko Denis | CETECOM GmbH | Im Teelbruch 122, Essen 45219, GERMANY | 49(0) 2054 9519 947 | +49(0) 2054 9519 13 | Denis.susko@cetecom.de |
| Takami Tadao | NTTDoCoMo | 3-5 Hikarinooka, Yokosuka-shi, Kanagawa 239-8536 | +81 468 40 3100 | +81 468 40 3733 | takami@cet.yrp.nttdocomo.co,jp |
| Tan Poy Boon | Panasonic Singapore Laboratories Pte. Ltd | Blk 1022, Tai Seng Ind. Est, #04-3530, Singapore 534415 | +65 3815499 | +65 3815406 | pbtan@psl.com.sg |
| Tsukamoto Akira | Denso Corporation | 1-1, Showa-cho, Kariya-shi, Aichi-ken, Japan | +81 566 61 3653 | +81 566 25 4751 | a_tuka@hcom.denso.co.jp |
| Wakayama Shin-ichi | Fujitsu | 4-1-1 Kamikodanaka, Nakahara-ku, Kawasaki 211-8588, Japan | +81 44 754 3749 | +81 44 754 3879 | wakayama@mcws.ts.fujitsu.co.jp |
| West Jonathan | GSM Association | 53 Westbury Road, Northwood, Middx HA6 3DA | +44 1923 825 464 | +44 1923 825 464 | jwest@mvps.org |
| Yim Do Hyon | Samsung Electronics Co | Suwon PO Box 105, Kyungkido, Korea | +82 331 280 1686 | +82 331 280 1660 | ydhyon@khgw.info.samsung.co.kr |
| Yokoyama Mitsuru | Agilent Technologies Japan Ltd | 1-3-2 Murotani, Nishi-ku. Kobe, Japan 651-2241 | +81 78 993 2763 | +81 78 993 2683 | mitsuru_yokoyama@agilent.com |
| Yonekura Kunitoshi | Fujitsu | 4-1-1 Kamikodanaka, Nakahara-ku, Kawasaki, 211-8588 JAPAN | +81 44 754 3749 | +81 44 754 3883 | yonekura@mrt.ts.fujitsu.co.jp |

Annex B. List of documents

| Tdoc | Title | Source | Agenda item | Revised | Status |
|-----------|--|--------------|----------------|---------|-----------|
| T1-000047 | agenda | chairman | 2 | 95 | revised |
| T1-000048 | Draft report from T1#6 | ETSI MCC | 4 | | agreed |
| T1-000049 | LS from RAN4 on inter-RAT cell re-selection and handover performance requirements | RAN4 | 5 | | noted |
| T1-000050 | LS from RAN2 on Response to LS (T1-000025) on Clarification of UE behaviour on CRC error detection | RAN2 | 5 | | noted |
| T1-000051 | LS from RAN1 on Answer to liaison on UE behaviour at CRC error | RAN1 | 5 | | noted |
| T1-000052 | The typical radio parameter set v1.1 | NTT DoCoMo | 11 | 114 | withdrawn |
| T1-000053 | LS on Review and future ownership of TS 34.109 | RAN2 | 5 | | noted |
| T1-000054 | LS on Changes to TR-25.926 UE radio access capabilities | RAN2 | 5 | | noted |
| T1-000055 | Proposal for UE test loop modes in TS 34.109 | Ericsson | | | withdrawn |
| T1-000056 | CR to 34.124 on editorial changes | EMC subgroup | 8b | | agreed |
| T1-000057 | LS from S1 on Request for feedback on TR22.976 Study on Release 2000 services and capabilities | S1 | 10 | | noted |
| T1-000058 | LS from T2 on Future work of UE Capability Requirement TR21.904 | T2 | 8c | | noted |
| T1-000059 | CR to 34.121 on Editorial corrections to clauses 2, 3, 4 and 5.1 | RF subgroup | 8d | | agreed |
| T1-000060 | CR to 34.121 on Modifications to clause 5.4 "Output Power Dynamics in the Uplink" | RF subgroup | 8d | | agreed |
| T1-000061 | CR to 34.121 on Out-of-synchronisation handling of the UE | RF subgroup | 8d | | agreed |
| T1-000062 | CR to 34.121 on Modifications to clauses 5.8, 5.9, 5.10 and 5.11 | RF subgroup | 8d | | agreed |
| T1-000063 | CR to 34.121 on Modifications to Chapter 6 "Receiver Characteristics" | RF subgroup | 8d | | agreed |
| T1-000064 | CR to 34.121 on Blind transport format detection | RF subgroup | 8d | | withdrawn |
| T1-000065 | CR to 34.121 on Modifications to Chapter 8 "Requirements for support of RRM" | RF subgroup | 8d | 117 | revised |
| T1-000066 | CR to 34.121 on Modifications to Annex C "Measurement channels" | RF subgroup | 8d | 118 | revised |
| T1-000067 | CR to 34.121 on Modifications to Annex D, Annex E, Annex G and Annex H | RF subgroup | 8d | | agreed |
| T1-000068 | CR to 34.121 on Interpretation of measurement results | RF subgroup | 8d | | agreed |
| T1-000069 | CR to 34.121 on Modifications to clauses 5.5, 5.6 and 5.7 | RF subgroup | 8d | | agreed |
| T1-000070 | CR to 34.121 on Modifications to Chapter 7 "Performance requirements" | RF subgroup | 8d | | agreed |
| T1-000071 | CR to 34.121 on Modifications to test power control in downlink | RF subgroup | 8d | | agreed |
| T1-000072 | CR to 34.121 on Modifications to clause 5.13 "Transmit Modulation" | RF subgroup | 8d | | agreed |
| T1-000073 | CR to 34.121 on Modifications to test for inner loop power control in the uplink | RF subgroup | 8d | | agreed |
| T1-000074 | CR to 34.121 on Revision of Annex B: Global in-channel Tx test | RF subgroup | 8d | | agreed |
| T1-000075 | CR to 34.121 on Blind transport format detection | RF subgroup | 8d | | agreed |
| T1-000076 | CR to 34.121 on Idle mode test cases (test of performance requirements) | RF subgroup | 8d | 119 | revised |
| T1-000077 | CR to 34.121 on Removal of Annex I "Open Items" | RF subgroup | 8d | | agreed |
| T1-000078 | LS to RAN4 on DL power control dynamic range | RF subgroup | 8d | | agreed |
| T1-000079 | LS to RAN4 on the Definition of Confidence Levels | RF subgroup | 8d | | agreed |
| T1-000080 | Status report from T1/RF | RF subgroup | 8d | 80r2 | |
| T1-000081 | Not used | RF subgroup | | | - |
| T1-000082 | Not used | RF subgroup | | | - |
| T1-000083 | Presentation of TS 34.121 v3.1.0 for information | RF subgroup | 8d | | withdrawn |
| T1-000084 | LS from CN1 on usage of terms GSM, UMTS and GERAN | CN1 | 5 | | noted |

| Tdoc | Title | Source | Agenda item | Revised | Status |
|-----------|---|--------------------|----------------|----------|-------------|
| T1-000085 | LS from R2 on changes to TR 25.926 UE radio access capabilities for TDD | RAN2 | 5 | | noted |
| T1-000086 | Study of European Commission on automotive directive | ERM TG4 | 8b | | not treated |
| T1-000087 | Draft report from SMG | ETSI MCC | 8a | | noted |
| T1-000088 | Proposal for the Release 2000 Features, Building Blocks and Work Tasks Version 1.0 | ETSI MCC | 10 | | noted |
| T1-000089 | Handling of measurement uncertainty | CSELT/TIM | 8d | | noted |
| T1-000090 | Status report from Task Forces 160 and 161 | Mr Hu | 8c | | noted |
| T1-000091 | Presentation on GCF | GSMA | 11 | | noted |
| T1-000092 | Presentation of SMG7#25 report | ETSI MCC | 8a | | noted |
| T1-000093 | Update in the European regulatory situation | ETSI MCC | 9 | | noted |
| T1-000094 | LS to T on Definition of UE loopback behaviour with regard to the USIM | T1 | 8d | | rejected |
| T1-000095 | revison of 47 (revised agenda) | chairman | 2 | | agreed |
| T1-000096 | Proposed meeting schedule | chairman | 6 | 112 | revised |
| T1-000097 | Progress report on 34.122 | R&S | 8d | | noted |
| T1-000098 | TS 34.122 v1.5.0 for approval + cover sheet for presentation | R&S | 8d | | agreed |
| T1-000099 | Slide presentation for T1-000088 (Release 2000 Features, etc) | ETSI MCC | 10 | | agreed |
| T1-000100 | E-mail on change request procedure | ETSI MCC | 3 | | noted |
| T1-000101 | Problem with LS from RAN2 on changes to TR 25.926 (T1-000085) | RAN2 | 5 | | noted |
| T1-000102 | Report from T1/Sig | T1/Sig chairman | 8c | | agreed |
| T1-000103 | 34.123-1 v1.0.2 for approval | T1/Sig | 8c | | agreed |
| T1-000104 | 34.108 v1.0.3 for approval | T1/Sig | 8c | | agreed |
| T1-000105 | 34.123-2 v1.0.5 for information | ETSI MCC | 8c | | noted |
| T1-000106 | Development plan for 34.123-3 | T1/Sig chairman | 8c | | noted |
| T1-000107 | LS to RAN4 on low battery voltage testing | T1 | 8c | | agreed |
| T1-000108 | 34.109 v.1.2.2 for approval + cover sheet | T1/Sig | 8d | 121 | revised |
| T1-000109 | Report from T1/EMC | T1/EMC chairman | 8b | | agreed |
| T1-000110 | LS to RAN2 on response to T1-000054 | T1 | | | agreed |
| T1-000111 | CR to 34.124 on Adding End- user data besides BER and BLER for EMC data testing. | T1/EMC chairman | | 113 | revised |
| T1-000112 | Revision of 96 (meeting schedule) | chairman | | 120 | revised |
| T1-000113 | Revision of 111 | T1/EMC chairman | | | withdrawn |
| T1-000114 | Typical radio parameter sets document submission | GSMA ISG | | | noted |
| T1-000115 | Update of clause 6.10 "reference radio bearer configuration" in TS 34.108 | NTT DoCoMo | | | postponed |
| T1-000116 | Revision of 104 to incorporate changes in 115 | | | | withdrawn |
| T1-000117 | CR to 34.121 on Modifications to Chapter 8 "Requirements for support of RRM" | RF subgroup | | | agreed |
| T1-000118 | CR to 34.121 on Modifications to Annex C "Measurement channels" | RF subgroup | | <u> </u> | agreed |
| T1-000119 | CR to 34.121 on Idle mode test cases (test of performance requirements) | RF subgroup | | | agreed |
| T1-000120 | Revision of 112 | chairman | | <u> </u> | agreed |
| T1-000121 | Revision of 108 | T1/sig | | <u> </u> | agreed |
| T1-000122 | LS to RAN2 on delay of transference of 34.109 | T1 | | | agreed |
| T1-000123 | Report from chairman to T | chairman | | | revised |
| T1-000124 | Revision of 123 | chairman | | 123 | noted |

Annex C. Minutes from the joint meeting

C.1 Test USIM

T1R000188: Test USIM

This is the result of discussions at the last meeting.

It was noted that T recommendation was that loopback shall work with a test USIM or without any USIM at all, but not with a network USIM. Nevertheless, at the last joint meeting in Yokohama, the meeting agree that 34.109 shall only specify requirements for conformance testing, therefore the loopback shall work only with test SIM card. Operation in other cases is out of our scope.

This opinion shall be clearly indicated in the LS. The document will be revised and presented again during the T1 plenary under **T1-000094**.

C.2 TS34.108

T1R000186: TS 34.108 v1.0.2 (Anite)

The document was presented by Mr Chabali. He explained that all issues for the T1/Sig are solved, only the default message contents may need some modifications. Some areas may need some input from the T1/RF.

T1/EMC needs 34.108 to be approved as soon as possible since the EMC specification refers to it. EMC will present some input today.

The document was revised on line by the meeting. The cover sheet for presentation to T1 was filled in reflecting all the open areas. The introduction of the document was modified to reflect the fact that the values in this specification are used when no other values are specified in the test cases.

Mr Hu noted that ciphering shall be ON in the default messages. This is not solved for the moment in the document.

T1R000191: Proposal for test procedures for RF test in TS 34.108 (DoCoMo)

This document contains a proposal for inclusion in 34.108 the RF test procedure in order to establish the reference measurement channels necessary for RF tests.

It was questioned if the sentence "Special Test USIM" was right. The word "Special" shall be removed.

For the moment there are three different proposal for the states in the "hierarchical manner" (two from T1/Sig and one from T1/RF). These will have to be merged in a single one.

The proposal was accepted for inclusion in 34.108. Only the main headers of incomplete sections will be included in the documents, and it will be labelled as 'for further study'.

Mr Jensen noted that there is a table for idle mode test cases duplicated in 34.121 and 34.123-1 that could be included in 34.108 instead.

AP to Ericsson: To investigate to have one table in 34.108 instead of two identical tables in 34.121 and 34.123-1.

C.3 TS34.109 Terminal Logical Test Interface (FDD/TDD); Special conformance testing function

T1S000108/T1R000204: Status of TS 34.109 v1.2.1 (Ericsson)

Mr Mattisson presented the document and Mr Fox prepared the cover for presentation to T1 on-line.

It was agreed to delete the statement below 5.2.2.6 and 5.2.2.7.1 as it is not a special function.

Reference to 'reference measurement channels' are needed for conformance test

T1S000109/T1R000205: TS 34.109 v1.2.1

Mr Mattisson confirmed that all the comments received from RAN2 have been incorporated in this new version of the document.

AP to Ericsson to present CR to CN1 to 24.007 regarding the protocol discriminator, that for the moment is described for GSM and should refer to UE.

Some editorial comments were made. Mr Mattisson will include then in the new version.

C.4 T1 iWD-001 Combined testing areas for RF and Signaling; Idle mode operations, handover and measurement report

None.

C.5 TS 34.123-2 ICS

T1/Sig exposed its reasons to delay the approval of the spec.

The delay in the approval has to impact in T1/RF because the applicability of the RF test cases is not stable due to changes in RAN.

EMC is not involved.

The issue will be discussed again in the plenary.

History

| Date | Revision | Comments |
|----------|----------|-----------------------------------|
| 09/06/00 | 0 | Issued at the end of the meeting. |
| 12/06/00 | 1 | |
| 16/06/00 | 2 | Comments from Mr Fenn |

Comments on this report may be sent by e-mail to Lidia Salmeron

Lidia Salmeron

ETSI Mobile Competence Centre SMG7 & 3GPP TSG T1 Project Manager

> ETSI 650, Route des Lucioles F-06921 Sophia Antipolis Cedex France

Tel.: +33 (0)4 92 94 43 49 Fax.: +33 (0)4 93 65 28 17 E-mail: lidia.salmeron@etsi.fr