

Source: **T Secretary**
Title: **TSG-T contributions to SA#6**
Document for: **Information**

Technical Specification Group Services and System Aspects
Meeting #6, Nice, France, 15-17 December 1999

TSGS#6(99)xxx

SP-99621

Source: **TSG-T Chairman**
Title: **Report from TSG-T**
Agenda Item: **6.3.1**

SP-99612

Source: **TSG-T**
Title: **TTCN Task team Terms of Reference**
Agenda Item: **6.3.2**

SP-99613

Source: **TSG-T**
Title: **TTCN Task team project plan**
Agenda Item: **6.3.2**

SP-99614

Source: **TSG-T**
Title: **Test case Task team project plan and ToR**
Agenda Item: **6.3.2**

SP-99615

Source: **TSG-T**
Title: **Summary of project funding requests from TSG-T**
Agenda Item: **6.3.2**

SP-99626

Source: **TSG-T**
Title: **Content of Release 1999 from TSG-Terminals**
Agenda Item: **6.3.4**

TSG-T

Progress Report

TSG-T Chairman:
Sang-Keun Park
(Samsung Electronics, TTA)

Objectives of TSG-T#6

- To **finalise** the R99 deliverables of TSG-T.
- To identify **WHAT** from R99 **CANNOT** be completed or delivered as version 3.0.0 in December 1999.
- For identified R99 delays, to propose **rescheduled targets** for completion(or achieving version 3.0.0)
- To identify the exact **status** of the TSG-T deliverables for R99

Contents

- **Progress Report**
 - T1: **Conformance Testing**
 - T2: **Services and Capabilities**
 - T3: **USIM**
- **Issues in TSG-T**
- **Documents to be discussed in SA**
- **Future Meeting Schedule**

T1 Conformance Testing (1)

- Approval of A New Work Item
 - 3G TS 34.108: Common Test Environments for User Equipment (UE) Conformance Testing (TP-99246)
 - Contents: Definition for reference conditions and test signals, default parameters, reference Radio Bearer configurations, common requirements for test equipment and generic set-up procedures for use in UE.
 - Targets
 - March 2000: Version 1.0.0
 - June 2000: Version 3.0.0 for R99

T1 Conformance Testing (2)

- **New Target Dates of R99 Specification**
 - 3G TS 34.121 (V.1.4.0)
 - Terminal Conformance Specification: Radio Transmission & Reception (FDD)
 - Delay due to substantial changes in core specification in RAN
 - **New Target: completion on March 2000 (3 Month Delay)**
 - 3G TS 34.122 (V 1.0.0)
 - Terminal Conformance Specification: Radio Transmission and Reception (TDD)
 - Approved to be part of R99
 - **New Target: completion on June 2000 (6 months schedule advancement)**
 - Voluntary resources needed to fulfill above target
 - V 1.0.0 available for information (**TP-99247**)

T1 Conformance Testing (3)

- TTCN Task Team Terms of Reference Approval
 - SP-99612, SP-99613 (TP-99258, TP-99259)
 - 3G TS 34.123-3
 - Mobile Station Conformance Specification (Part 3): Abstract Test Suites
 - Targets at risk due to delay in the release of funding
 - V 1.0.0 on Sept. 2000 (T#9), V 3.0.0 on March 2001 (T#11)
 - Asking SA#6 for endorsement and PCG#3 for approval
- Identification of Test Requirements for regulatory purposes in different / countries (3G TR 34.910: **Not for R99!**)
 - Targets: Version 1.0.0 on March 2000, Version 3.0.0 on March 2001

T1 Conformance Testing (4)

- Task Team for 3G UE Test Description
 - SP-99614 (TP-99267)
 - Producing test purposes & test descriptions for UE supporting Packet Data Service
 - Discussed & Supported in T#5, SA#5 (SP-99420)
 - Requests: 9 Man-Month
 - Asking SA#6 for endorsement and PCG#3 for final approval and fund allocation

T1 Conformance Testing (5)

- Deliverables submitted to T #6
 - Approved as V 3.0.0
 - None
 - For Information
 - 3G TS 34.122 (V 1.0.0): Terminal Conformance Specification, Radio Transmission and Reception (TDD) (TP-99247)
 - 3G TS 34.123-1 (V 1.0.0): User Equipment (UE) conformance specification, Part 1: Protocol Conformance Specification (TP-99248)
 - 3G TS 34.123-2 (V 1.0.0): User Equipment (UE) conformance specification, Part 2: ICS proforma specification (TP-99249)

T2 Services & Capability (1)

- Execution Environment : MExE R99
 - MExE R99 completed: 3G TS 23.057 MExE stage 2/3 (TP-99242)
 - On-going discussion on WAP
 - Moving to R2000
- External Interfaces
 - Physical Interfaces
 - ✓ Approved: 3G TR 27.901 Report on Terminal Interfaces- Overview (TP-99238)
 - AT commands
 - ✓ 7 CRs on 3G, 2 CRs on 2G AT commands approved (TP-99237, 99236)
 - Some tidying up on AT commands for GPRS
 - Discussion in PCG regarding working with IrDA

T2 Services & Capability (2)

- Messaging

- Agreed on MMS stage 1 (3G TS 22.140) with S1
- MMS stage 2 (3G TS 23.140) was presented for information (TP-99241)
 - New Target Date for completion: March 2000 (T#7) as R99
- SMS Enhanced Messaging agreed as late addition to R99 on March 2000 (T#7)
 - On-going discussion in T2 on CRs for implementation (3G TS 23.038, 23.040)
- CR approval
 - To update messaging specifications for UMTS
 - ✓ Approved for 3G TS 23.038, 23.040, 23.041, 23.042, 27.005

T2 Services & Capability (3)

- **Multi-mode UEs**
 - Title change: 3G TR 21.910 “Multi-mode UE Issues”
 - Narrowed scope includes only UMTS & GSM as possible modes
 - Feedback from S2 will be reflected
 - V 1.3.2 was presented for information (TP-99240)
 - New target to be completed on March 2000 for R99.
- **UE capabilities**
 - Title change: 3G TR 21.904 “UE Capability Requirements”
 - Submitted for information (TP-99239)
 - New target to complete on March 2000 for R99.

T2 Services & Capability (4)

- Deliverables / CRs submitted to T #6
 - ✓ Approved
 - 3G TS 23.057 (V 2.0.0): Mobile Station Application Environment (MExE); Functional Description; Stage 2 (TP-99242)
 - 3G TR 27.901 (V 2.0.0): Report on Terminal Interfaces - An Overview (TP-99238)
 - CRs on 2G (TP-99236)
 - CRs on 3G (TP-99237)

T2 Services & Capability (5)

– Documents presented for Information

- 3G TR 21.904 (V 1.1.0): UE Capability Requirements (TP-99239)
- 3G TR 21.910 (V 1.3.2): Report on Multi-Mode UE issues (TP-99240)
- 3G TS 23.140 (V 1.0.0): Multimedia Messaging Services (TP-99241)

T3 USIM

- Deliverables submitted to T #6
 - ✓ **Approved T3 Specifications**
 - 3G TS 21.111 USIM and IC Card Requirements (V 3.0.0)
 - Was completed in June 1999
 - 3G TS 31.101 UICC - Terminal Interface; Physical & Logical characteristics
 - TP-99251 (Some R99 CRs expected in March 2000)
 - 3G TS 31.102 Characteristics of the USIM Application
 - TP-99254 (Some R99 CRs expected in March 2000)
 - 3G TS 31.110 Numbering System for telecommunication IC card Application
 - TP-99256 (One R99 CR expected in March 2000)
 - For Information
 - 3G TS 31.111 USIM Application Toolkit (USAT): **TP-99254**
 - All open issues will completed by March 2000

Issues in TSG-T (1)

- T1 (Conformance Testing)
 - Delay of Test Specification delivery due to unstable core specification & Funding availability (SP-99615)
- T2 (Services & Capabilities)
 - Discussion of full MMS
 - Discussion on Terminology (TP-99229)
 - Mandatory, Optional, Essential Conditional/Unconditional
 - LS has been sent to SA1
 - MExE and Messaging (TP-99268, TP-99272)
 - Discussion on Framework and implementation to include non-WAP dependent IP technologies

Issues in TSG-T (2)

- T3 (USIM)
 - Harmonization of IC Card Work (TP-99257)
 - Official Meeting in Austin on November 1, 1999
 - 15 members of 2G / 3G SIM, USIM and R-UIM groups
 - Recommendation: SMG9 to become the central point and manage common aspects of mobile telecom smart card
 - LS from ITU-T
 - “Prepared to support efforts in development of standards to avoid any duplication of work”

Documents to be discussed in SA

- ✓ SP-99612: TTCN Task Team terms of References
- ✓ SP-99613: TTCN Task Team Project Plan
- ✓ SP-99614: Test Case Task Team Project Plan / ToR
- ✓ SP-99615: Summary of Project Funding Requests
- ✓ SP-99616: Content of Release 1999 from TSG-T

Future Meeting Schedule

Meeting No.	Date	Location	Host
Year 1999			
TSG-T#6	13-15 Dec	Nice	ETSI
Year 2000			
TSG-T#7	13-15 Mar	Madrid	Telefonica
TSG-T#8	19-21 Jun	Dusseldorf	Mannesmann
TSG-T#9	25-27 Sep	Japan (tbc)	ARIB/TTC (tbc)
TSG-T#10	11-13 Dec	USA (tbc)	T1P1

Source: TSG-T
Title: Summary of project funding requests from TSG-T
Document for: Discussion
Agenda Item: 6.3.2

Table: Summary of project funding requests from TSG-T

Description	Requested Amount	Rationale	ToR & Project Plan	Status
USIM test specifications	156K Euro (9-12 MM)	SP-99277 PCG2-16	ToR & Project Plan will be available in early 2000.	<ul style="list-style-type: none"> Approved at T#4, S#4 , and PCG #2 in July. 100% of requested fund has been allocated, however, the fund is not available yet. Work delayed by 3 (three) months because of missing funds.
3G TTCN for MS interoperability	1,014K Euro (6.5 man-year)	SP-99278 PCG2-17	TP-99259 (ToR) TP-99258 (PP)	<ul style="list-style-type: none"> Approved at T#4, S#4 , and PCG #2 in July. 10%(101K) of requested fund has been allocated, however, the fund is not available yet. Work delayed by 3 (three) months because of missing funds.
3G UE Test Description for R99"	9MM	SP-99420	TP-99267 (PP & ToR)	<ul style="list-style-type: none"> Discussed and supported at T#5 and SA#5. Approved at T#6 Will be presented to SA #6

Enclosures:

- TP-99259 TTCN Task team ToR
TP-99258 TTCN Task team project plan
TP-99267 Test case Task team project plan and ToR

Source: TSG-T
Title: TTCN Task team Terms of Reference
Document for: Information, Discussion
Agenda Item: 6.3.2

Summary

Discussions continue between the 3GPP organisation Partners on the necessary 3GPP funding for creation of an MCC Task developing 3GPP test specifications for UE. Not all of the Partners have signalled their agreement to contribute to this work. The activities cannot proceed until funding has been agreed.

On the assumption that the Task is agreed, the financial liability will be equally split among the Organisational Partners. The total budget required for this task is 1 014 kEuro. The 3G TTCN Task will be spread over 3 years so more than one third of that budget is required in year 2000. ETSI GA34 approved the ETSI MCC budget for 2000 including the ETSI contribution to the Task.

1. A ToR for the intended MCC Task is proposed for TSG-T approval.

2. It is requested to forward the ToR

- **to the TSG-SA meeting for endorsement and**
- **to PCG for the final approval / agreement.**

The intention is that as soon as the 3G Partners agree on the funding matters the Task IK on the 3G TTCN specification can be immediately launched. The information provided in ToR can hopefully help the 3G Partners to reach the funding agreement.

Terms of Reference

For MCC Task IK

Producing 3GPP ATs / PIXIT/ for UE R99

1. Reasons for proposing the Task

The 3GPP Release 99 for the core specifications will be delivered in January 2000. The 3G protocol and signalling conformance test specifications for UE in R99 are expected to be delivered within 2000.

3GPP T1 had a common workshop with ETSI MTS and PEX to examine the requirements from a large spectrum of viewpoints and to introduce the latest experiences gained from the deployment of the methodologies and new TTCN features by ETSI. The majority of the 3G mobile manufacturers prefer to have a TTCN specification with a high quality. A number of 3G tester vendors gave the commitment to implement the TTCN specification being developed.

Writing a TTCN specification needs skilled specialists. Voluntary contributions are so far very limited. In order to boost and accelerate the 3G ATs development, a specific MCC Task needs to be created.

2. Consequences if not agreed

All test cases being produced by the Task will mainly qualify an UE for world-wide roaming and interoperability with the 3G networks. Without such tests the interoperability of 3G UE cannot be guaranteed. Should the Task not be installed in a timely manner, a delay of the 3G conformance test specifications in Release 99 by at least one year (i.e. end of 2001) would be accounted. Such a delay is unacceptable by the 3G market.

3. Detailed description

3.1 Subject title: 3G TTCN specifications for UE R99

3.2 Reference Technical Body: 3GPP TSG T(1)

3.3 Other interested Technical Bodies: 3GPP TSG RAN(2), TSG CN(1), ETSI SMG(7), MTS

3.4 Target dates for the start of work: March 2000

3.5 Target dates for the conclusion of the work: March 2001

3.6 Resources required

3.6.1 Necessary manpower

The total resources required for the Task are 35 mm, split as follow:

- for drafting of deliverables: 30 MM
- for assisting and updating of test descriptions and ICS documents: 1 MM
- for travelling and attending TSG T1 and TSG T1 SIG meetings: 2 MM
- for management, co-ordination and quality assurance: 2 MM.

3.6.2 Estimated costs, additional to the manpower

- Expected travels within Europe: 10
- Expected intercontinental travels: 7

3.6.3 Qualification required, mix of skills

Required are three TTCN specialists. Their experience in production of TTCN is essential for the success of the Task. Two of them should have the knowledge on the 3G access protocols over the radio interface. The other one needs to have the detailed knowledge on GSM Layer 3 protocols. The major tasks are to produce TTCN test cases based on the test structure and test purposes provided and approved by TSG-T1 for R99 and to produce a main ATS document including PIXIT pro-forma. The three specialists should be available preferably full time and will approximately require 30 MM. It is expected that an ETSI PEX member will be the Task leader, and will manage the resources, give general technical support, quality checking and participate at the TSG T1, TSG T1 SIG and the Task team meetings. The approximate amount of efforts for the PEX is 5 MM.

3.7 Scope of Terms of Reference

The technical areas of the Task cover the conformance test specifications for UE both at the radio access for MAC, RLC, RRC layers and for non-access L3 protocols MM and CC. The TTCN being developed should meet the UE requirements supporting voice call, Emergency call, SMS, Fax, CS data up to 64 kb/s services. Among these are:

- Development of MAC, RLC ATS,
- Development of RRC ATS,
- Development of test cases for auto-calling restrictions and multiple radio access system (GSM/3G) cell selection/re-selection and hand-over,
- Modification and migration of the existing GSM Idle mode, MM, CC and SMS test cases,
- Drafting an ATS design document describing the test model, interfaces, styles and specifying PIXIT pro-forma,
- Project co-ordination management and quality assurance,
- Assisting the updating test descriptions and ICS.

3.8 Context of the tasks

3G TSG T1 are developing two TS which should be a starting point for the Task.

- 3G TS 34.123-1: (MS) Protocol conformance specification, R99 (June 2000)
- 3G TS 34.123-2: ICS pro-forma (June 2000)

The first TS specifies the test structure, test purposes and give each test case a short description. The second one specifies necessary ICS questions for UE manufacturers on baseline and service implementation capabilities.

An ATS design document will be produced firstly by the Task team. An intensive discussion (probably by e-mail) with TSG T1-SIG is needed at the Task starting phase. It is also worthwhile that the discussion for the skeleton of the design document can be already started at the beginning of year 2000 within TSG T1 SIG. Once a first draft of the design document is available, the three main tasks for the TTCN development can be started in parallel. The TTCN test cases will be designed manually for R99.

Whenever the draft version 1.0.0 of the intended deliverable is available the validation of the 3G test cases should be started by the TSG T1 members. The validation through implementation of test cases is a key issue for the quality of ATS. The test cases should be produced in a manner that allows all of them to be validated by March 2001.

3.9 Related activity in other bodies and necessary co-ordination of schedules

Changes in GSM 11.10 of SMG7 and the stability of the relevant core specifications in R99 of CN1 and RAN2 will have impact on the progress of the Task.

3.10 Base documents and their availability

- 3G TS 23.022: Functions related to Mobile Station (MS) in idle mode and group receive mode, R99
- 3G TS 24.008: Mobile radio interface layer 3 specification, Core Network Protocols - Stage 3, R99
- 3G TS 25.321: MAC protocol specification, R99
- 3G TS 25.322: RLC protocol specification, R99
- 3G TS 25.331: RRC protocol specification, R99
- GSM 11.10-1: Mobile station conformance specification, R98
- GSM 11.10-2: PICS pro-forma, R96
- GSM 11.10-3: L3 Abstract Test Suites, R96

3.11 Work item from the ETSI Work Programme for which the Task is required

DTS/TSGT-0134123-3U

3.12 Expected output(s)

3G TS 34.123-3: Abstract Test Suites

- Version 1.0.0: September, 2000
- Version 3.0.0 (R99): March 2001

Source: TSG-T
Title: TTCN Task team project plan
Document for: Information, Discussion
Agenda Item: 6.3.2

Summary

The TSG-T1 Signalling subworking group has been asked to provide an abstract test suite in TTCN for testing conformance of 3GPP user equipment. This document proposes an outline work-plan for assembling this test suite during 2000. The proposal assumes that a team of TTCN experts funded by 3GPP will be in place early in 2000 to provide key parts of the test suite. It also assumes that voluntary contributions will be provided to complete the work.

Description of the schedule

Milestone	Meeting	Target date (2000)
◆ Define and agree funded team structure and scope	T1/SIG #7	10 Dec
◆ Get T1/T approvals for team structure, and scope (term of reference)	T #6	13-15 Dec
◆ Get agreement on uniform coding style to be used by funded team and all voluntary contributions ◆ Agree text for "call for experts"	T1/SIG #8	24-25 Jan
◆ Complete migration of GSM prose from 11.10 (only items scheduled for R99) ◆ Evaluation of work involved in transferring test cases from the GSM ATS ◆ Define and agree test suite architecture	T1/SIG #9	21-23 Feb
◆ Provisionally select team	T1 #6	24-25 Feb
◆ Notify selection of team to TSG-T	T#7	15-17 Mar

<ul style="list-style-type: none"> ◆ TTCN framework completed (declarations section, common test steps etc.) ◆ Plan for migration of GSM test cases agreed ◆ First drafts of L2 and RRC tests approved by T1/SIG 	T1/SIG #10	29-31 May
<ul style="list-style-type: none"> ◆ TTCN 34.123-3 framework with example test cases presented to T1/T for information ◆ TS 34.123-1 approved by TSG-T (key dependency) 	T#8	19-21 Jun
<ul style="list-style-type: none"> ◆ L2 and RRC tests filled, validated and approved by T1/SIG ◆ First drafts of migrated GSM test cases approved by T1/SIG 	T1/SIG #11	4-6 Sep
<ul style="list-style-type: none"> ◆ Revised date for proposal of 34.123-3 to T1/T for information (version 1.0.0) 	T#9	25-27 Sep
<ul style="list-style-type: none"> ◆ Migrated speech related GSM test cases and other speech related R99 test cases filled, validated and approved by T1/SIG 	T1/SIG #12	20-22 Nov
<ul style="list-style-type: none"> ◆ Migrated GSM test cases and other remaining R99 test cases filled, validated and approved by T1/SIG 	T1/SIG #13	Feb '01
<ul style="list-style-type: none"> ◆ TTCN 34.123-3 presented to T1 for approval 	T1 #10	Feb '01
<ul style="list-style-type: none"> ◆ TTCN 34.123-3 presented to T for approval (version 3.0.0) 	T #11	Mar '01

Role of the funded team

This schedule assumes that the funded TTCN team will adopt the following roles:

- Generation of the TTCN framework, including common sections that could be used by T1/SIG members to provide voluntary contributions
- Generation of a core set of test cases, possibly including, or focussing on migration of GSM ATS
- Adaptation of voluntary contributions to ensure that they integrate with the other test cases into a single test suite

It is assumed that the team will not be capable of validating test cases, and this will be left to T1/SIG members to perform.

This schedule assumes the resource planned in Tdoc T1S-99079. If more resource is available, items planned for implementation after the end of 2000 may be completed earlier.

Source: TSG-T
Title: Test case Task team project plan and ToR
Document for: Information, Discussion
Agenda Item: 6.3.2

Summary

In order to provide necessary resources to TSG T1 at the production of the UE test description in prose and to shorten the delay between a Release of 3G core specifications and the same Release of UE test specification, TSG T was asked by TSG SA#5 to make a proposal on **installation of a Task team**. The requested Task team is in addition to the requests already made for resources of Task teams for TTCN and SIM testing.

The requested team should have three specialists. Each of them works three months in the team. The total cost is 9 MM. The companies having the willingness to accelerate the completion of test description for R99 and R00 are encouraged to send their signalling specialists to ETSI for a certain working periods. The major task is to produce test purposes and test descriptions for UE supporting packet data service. If time permits, the team should continue to work on the inclusion of other items into TS 34.123-1 that are part of R99 core specs, but are not currently resourced.

Attached is a ToR for the intended MCC Task. TSG T1 requests **TSG-T to approve** the proposed task team and to forward the ToR

- **to the TSG-SA#6 for endorsement,**
- **to PCG for the final approval and decision for funding.**

As soon as PCG approves the Task IM the Task team can be immediately launched.

Terms of Reference

For MCC Task IM

3G UE Test Description for R99

1. Reasons for proposing the Task

A lack of resources for the production of test description in prose is responsible for the delays to the finalisation of the documents and resulting in late availability of test specifications on the signalling and protocol test for R99.

With the current available resources TSG T1 SIG working group is concentrating on a minimum set of test cases which allow to test UE supporting circuit-switched voice and data services for R99.

An installation of a Task team to produce the test description for packet services will extend the test coverage of R99 and ensure that the total UE test specification can reach a similar level as the functionality defined in core specifications of R99..

2. Consequences if not agreed

Should the Task team not be installed, The test coverage of R99 would be restricted to the minimum test set. The all UE packet service tests would move to R00. One year delay of the availability of these tests must be taken into consideration.

3. Detailed description

3.1 Subject title: 3G UE test description on packet services for R99

3.2 Reference Technical Body: 3GPP TSG T(1)

3.3 Other interested Technical Bodies: 3GPP TSG RAN(2), TSG CN(1), ETSI SMG(7)

3.4 Target dates for the start of work: March 2000

3.5 Target dates for the conclusion of the work: June 2000

3.6 Resources required

3.6.1 Necessary manpower

The total resources required for the Task are 9 MM, split as follow:

- for drafting RLC/MAC tests for the packet services: 3 MM
- for drafting RRC tests for the packet services: 3 MM
- Migrating and drafting GMM, SM, PDCP tests: 3MM

3.6.2 Estimated costs, additional to the manpower

- Expected travels within Europe: max 6

▪

3.6.3 Qualification required, mix of skills

Required are 3 signalling specialists whose experience in signalling and protocol testing is essential. It is expected that an ETSI PEX member will be the Task leader, and will manage the resources, give general technical co-ordination and support.

The technical areas of the Task cover the conformance test specifications for UE both at the radio access for MAC, RLC, RRC layers and for non-access L3 protocols GMM, SM. The test description being specified should cover the conformance requirements of the packet services in the relevant core specification of R99. Among these are:

- Development of MAC, RLC test description,
- Development of RRC test description,
- Migration of GMM SM
- Assisting the update of ICS for the packet services.

If time permits, the team should continue to work on the inclusion of other items into TS 34.123-1 that are part of R99 core specs, but are not currently resourced.

3.7 Context of the tasks

3G TSG T1 SIG is developing a set of conformance test specification for CS services

- TS 34.123-1: UE conformance test
- TS 34.123-2: ICS pro-forma
- TS 34.123-3: UE ATSS

The proposed Task team should produce a test description for UE supporting packet services. The test description is a higher level test specification which contain the test structure, test purposes and a short test specification in prose for each test case. The test description is used as basis for the further detailed TTCN specification. From its nature the test description is compact and more readable, and belong to the first part of the UE test specification.

3.8 Related activity in other bodies and necessary co-ordination of schedules

The stability of the relevant core specifications of CN1 and RAN2 will have direct impact on the progress of the Task. The test description in GSM 11.10-1 for GPRS L3 tests can be migrated.

3.10 Base documents and their availability

- 3G TS 24.008: Mobile radio interface layer 3 specification, Core Network Protocols - Stage 3, R99
- 3G TS 25.321: MAC protocol specification, R99
- 3G TS 25.322: RLC protocol specification, R99
- 3G TS 25.331: RRC protocol specification, R99
- GSM 11.10-1: Mobile station conformance specification, R98
- 3G TS 25.323: Description of the Packet Data Convergence Protocol (PDCP), R99

3.11 Work item from the ETSI Work Programme for which the Task is required

DTS/TSGT-0134123-1U

3.12 Expected output(s)

3G TS 34.123-1: UE conformance test specification

- R99, Version 3.0.0: June, 2000

Source: TSG-T
Title: Content of Release 1999 from TSG-Terminals
Document for: Information, Discussion
Agenda Item: 6.3.4

The present document contains:

- Status overview of the TSG-T deliverables for Release 99 after TSG-T#6 in December 1999
- Release 99 Submission forms

NOTE: This document replaces SP-99616. It only adds the Preliminary Release 99 Submission forms for the T3's deliverables TS 31.120, TS 31.121 on "UICC related testing"

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Status overview of TSG-T deliverables for R99 (Dec 99)

WG T1 Mobile Terminal Conformance Testing

Reference	Title	Under Change Control	R99 Completion date	Submission Form attached
TS 34.108	Common Test Environments for User Equipment (UE) Conformance Testing	No	06-2000	Yes
TS 34.109	Terminal Logical Test Interface	No	06-2000	Yes
TS 34.121	Terminal Conformance Specification, Radio Transmission and Reception (FDD)	No	03-2000	Yes
TS 34.122	Terminal Conformance Specification, Radio Transmission and Reception (TDD)	No	06-2000	Yes
TS 34.123-1	Mobile Station (MS) protocol conformance specification; Part 1: Protocol conformance specification (3G TS 34.123-1)	No	06-2000	Yes
TS 34.123-2	Mobile Station (MS) Protocol/RF/EMC conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification (3G TS 34.123-2)	No	06-2000	Yes
TS 34.123-3	Mobile Station (MS) protocol conformance specification; Part 3: Abstract Test Suites (ATS) (3G TS 34.123-3)	No	03-2001	Yes
TR 34.124	Electro-Magnetic Compatibility (EMC) for terminal equipment	No	03-2000	Yes

WG T2 Mobile Terminal Services and Capability

Reference	Title	Under Change Control	R99 completion date	Submission Form attached
	Advanced Cell Broadcast	No	little input	No
	Alternatives to AT commands	No	no input	No
TR 21.904	UE Capability Requirements	No	03-2000	Yes
TR 21.910	Multi-mode UE issues	No	03-2000	Yes
TS 23.140	Multimedia Messaging Service; stage 2/3	No	03-2000	Yes
TR 22.945	Study on provisioning of fax in GSM and UMTS	Yes		n.a.
TS 23.038	Alphabets and language-specific information	Yes	03-2000	Yes
TS 23.039	Interface protocols for the connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs)	Yes		n.a.
TS 23.040	Technical realization of the Short Message Service (SMS)	Yes	03-2000	Yes
TS 23.041	Technical realisation of Cell Broadcast Service (CBS)	Yes	03-2000	No
TS 23.042	Compression algorithm for text messaging services	Yes		n.a.
TS 23.057	Mobile Station Application Execution Environment (MExE); Functional description; Stage 2	Yes		n.a.
TS 27.005	Use of Data Terminal Equipment - Data Circuit terminating; Equipment (DTE-DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	Yes		n.a.
TS 27.007	AT command set for 3GPP User Equipment (UE)	Yes	03-2000	No
TS 27.010	Terminal Equipment to Mobile Station (TE-MS) multiplexer protocol	Yes	03-2000	No
TS 27.103	Wide Area Network Synchronisation	Yes		n.a.
TR 27.901	Report on Terminal Interfaces - An Overview	Yes		n.a.
TR 27.903	Discussion of Synchronisation Standards	Yes		n.a.
TR 34.907	Report on electrical safety requirements and regulations	Yes		n.a.
TR 34.925	Specific Absorption Rate (SAR)	Yes		n.a.

WG T3 USIM

Reference	Title	Under Change Control	R99 Completion date	Submission Form attached
TS 21.111	USIM and IC Card Requirements	Yes		n.a.
TS 31.101	UICC-Terminal Interface; Physical and Logical Characteristics	Yes	03-2000	Yes
TS 31.102	Characteristics of the USIM Application	Yes	03-2000	Yes
TS 31.110	UICC Application Identifiers	Yes	03-2000	Yes
TS 31.111	USIM Application Toolkit (USAT)	No	03-2000	Yes
TS 31.120	Terminal tests for the UICC Interface	No	06-2000	Yes
TS 31.121	UICC Test Specification	No	06-2000	Yes

TR 21.904 UE Capability Requirements

Release 1999 Submission form

Work Area / Item:		UE Capability Requirements			
Affects:	UE/MS: Yes	CN: No	UTRAN: No	Compatibility Issues:	Yes: No:
Expected Completion Date:	15 March '00				
Services impacted:	None				
Specifications affected:	3G TR 21.904 "UE Capability Requirements", Completion of TS34.123-2 Mobile Station Conformance Specification, Part 2 ICS (Implementation Conformance Statement) may be affected.				
Tasks within work which are not complete:		<p>More comprehensive requirements for Terminal Service Implementation Capability should be added. It includes those areas of</p> <ul style="list-style-type: none"> - FAX - MeXE, AT command, MMS etc. - Security 			
Consequences if not included in Release 1999:		Completion of TS34.123-2 Mobile Station Conformance Specification, Part 2 ICS (Implementation Conformance Statement) could be delayed.			
Accepted by TSG#		for late inclusion in Release 1999:			

TR 21.910 Multi-mode UE issues

Release 1999 Submission form

Work Area / Item:		Multi-mode UE			
Affects:	UE/MS: Yes	CN: Yes	UTRAN:	Compatibility Issues: Yes:	No:
Expected Completion Date:		March 2000			
Services impacted:		None			
Specifications affected:		<p>3G TR 21.910 "Multi-mode UE issues",</p> <p>As a result/conclusion of the completed report, changes to other specifications may be required. It has still to be investigated what specifications should be altered and what the changes have to be.</p>			
Tasks within work which are not complete:			<p>Identification and evaluation of ongoing work and the completion of some scenarios.</p> <p>Identification of additional work to be done within 3GPP.</p>		
Consequences if not included in Release 1999:			<p>The ideas for an efficient usage of multi-mode UEs, collected in the scenarios, will be delayed even longer.</p> <p>A summary of all work ongoing in this area will not be available which will make it even more difficult to finalise the work in time.</p>		
Accepted by TSG#		for late inclusion in Release 1999:			

TS 23.140 Multimedia Message Service (TS 23.038, TS 23.040)

Release 1999 Submission form

Work Area / Item:		MMS (Multimedia Messaging Service)			
Affects:	UE/MS: X	CN: X	UTRAN:	Compatibility Issues:	Yes: X No:
Expected Completion Date:		March 2000			
Services impacted:		MMS			
Specifications affected:		3G TS 23.140, 3G TS 23.038, 3G TS 23.040			
Tasks within work which are not complete:		<p>3G TS 23.140:</p> <ul style="list-style-type: none"> - Set of supported media formats - MMS addressing scheme - Interface: MMS Relay – MMS Server - Interworking between MMS Relays - Availability of the MMS User Agent - Consider latest comments on compatibility with Internet world and on service and implementation flexibility (TP-99266) <p>3G TS 23.038 and 3G TS 23.040:</p> <ul style="list-style-type: none"> - SMS enhanced message content 			
Consequences if not included in Release 1999:		<p>Early introduction and fast acceptance of MMS almost impossible;</p> <p>Inclusion of 3G TS 23.140 in Release 99 is requested e.g. from SERG#36</p>			
Accepted by TSG#		for late inclusion in Release 1999:			

TS 31.101 UICC-Terminal Interface; Physical and Logical Characteristics

Release 1999 Submission form

Work Area / Item:		31.101 UICC-Terminal Interface; Physical and Logical Characteristics		
Affects:	UE/MS:yes	CN:no	UTRAN:no	Compatibility Issues: Yes: X No:
Expected Completion Date:		March 2000		
Services impacted:				
Specifications affected:		31.102, 31.111		
Tasks within work which are not complete:		<ol style="list-style-type: none"> 1 Security attributes need to be finalised. 2 USAT incorporation 3 Coding of some File Control Information (FCI). 4 Definition of application session initialisation / termination procedure 		
Consequences if not included in Release 1999:		potential interoperability problems		
Accepted by TSG: T #6		for late inclusion in Release 1999:		

TS 31.102 Characteristics of the USIM Application

Release 1999 Submission form

Work Area / Item:		3G TS 31.102 Characteristics of the USIM Application		
Affects:	UE/MS: Yes	CN:	UTRAN:	Compatibility Issues: Yes: X No:
Expected Completion Date:		March 2000		
Services impacted:				
Specifications affected:		31.111		
Tasks within work which are not complete:		<ol style="list-style-type: none"> 1. FDN /BDN Definition of EFs and procedures depending on precise service requirements 2. Phone Book Procedures <ul style="list-style-type: none"> - finalisation of procedures - E-mail addresses. The EF and the procedures have to be added to the phone book description. 3. Storage of network related parameters depending on definition by RAN2 4. Introduction of a 2G specific access control class file depending on service requirements of S1. 5. Network Selection Issues (2 HPLMN lists) Depending on service requirements of S1 6. Usage, coding and location of CCP depending requirements of N1 7. Incorporate security attributes from 31.101 8. Review of SFI (Short File Identifiers) 		
Consequences if not included in Release 1999:		Several R99 services will not be able to be supported.		
Accepted by TSG: T #6		for late inclusion in Release 1999:		

TS 31.110 Numbering system for telecommunication IC card applications

Release 1999 Submission form

Work Area / Item:	Numbering system for telecommunication IC card applications - 3G TS 31.110				
Affects:	UE/MS: Yes	CN:	UTRAN:	Compatibility Issues:	Yes: X No:
Expected Completion Date:	March 2000				
Services impacted:	USIM and UICC Application selection				
Specifications affected:	3G TS 31.110, 3G TS 31.101, 3G TS 31.102, 3G TS 31.111				
Tasks within work which are not complete:	Definition of the Application provider field coding for the UICC, USIM and Toolkit Application identifier.				
Consequences if not included in Release 1999:	The ME will not be able to identify the version of the USIM applications, and so is not able to distinguish between a Release 1999 and a Release 2000.				
Accepted by TSG: T #6			for late inclusion in Release 1999:		

TS 31.111 USIM Application Toolkit (USAT)

Release 1999 Submission form

Work Area / Item:		USAT (3G TS 31.111)			
Affects:	UE/MS: YES	CN:	UTRAN:	Compatibility Issues:	Yes: X No:
Expected Completion Date:		March 2000			
Services impacted:		USAT			
Specifications affected:					
Tasks within work which are not complete:		<ol style="list-style-type: none"> 1. Define the interaction between Call Control and FDN/BDN. This relies on the specification of service requirements for the FDN and BDN mechanisms. 2. Define TLVs for 3G radio-based parameters. This affects the Provide Local Information command. 3. Bring 31.111 up to date with latest GSM 11.14 release 99 when available in February (currently 31.111 is aligned with version 8.1.0). 			
Consequences if not included in Release 1999:		<ol style="list-style-type: none"> 1. Call Control does not fully meet service requirement. 2. Location-based USAT services not available on UTRAN. 3. Transfer from GSM not complete. 			
Accepted by TSG: T #6		for late inclusion in Release 1999:			

TS 31.120, TS 31.121 UICC related testing

Preliminary

Release 1999 Submission form

Work Area / Item:	Testing for the UICC and the UICC/Terminal interface.				
Affects:	UE/MS:	CN:	UTRAN:	Compatibility Issues:	Yes: No:
Expected Completion Date:	June 2000				
Services impacted:					
Specifications affected:	TS 31.120 and 31.121				
Tasks within work which are not complete:	Work on these specifications has not yet started because funding for the project team has not yet been finalised. The scope of the work is: - to create a test specification for the UICC. It will be based on the tests currently contained in GSM 11.17. - to create a test specification for the UICC/terminal interface. It will be based on the tests currently contained in GSM 11.10-1 section 27				
Consequences if not included in Release 1999:	.				
Accepted by TSG: T #6			for late inclusion in Release 1999:		

TS 34.108 Common Test Environments for UE Conformance Testing

Release 1999 Submission form

Work Area / Item:		UE Test specification 3G TS 34.108 Common Test Environments for User Equipment (UE) Conformance Testing			
Affects:	UE/MS: Yes	CN: No	UTRAN: No	Compatibility Issues:	Yes: No: X
Expected Completion Date:		June 2000			
Services impacted:		None			
Specifications affected:		TS 34.121, TS 34.123-1, TS 34.122, TS 34.124			
Tasks within work which are not complete:			First draft not available yet. Work item proposal presented at this meeting.		
Consequences if not included in Release 1999:			Not possible to perform conformance tests as specified in TS 34.121, TS 34.122, TS 34.123-1 and TS 34.124.		
Accepted by TSG# 6		for late inclusion in Release 1999:			

Abstract of document:

TS 34.108 will contain definitions of reference conditions and test signals, default parameters, reference Radio Bearer configurations, common requirements for test equipment and generic set-up procedures for use in UE conformance tests.

Contentious Issues:

The content of this specification is directly related to common contents in RF and Signalling tests. (TS 34.123-1, TS 34.121 and TS 34.122).

TS 34.109 Terminal Logical Test Interface; Special conformance testing functions

Release 1999 Submission form

Work Area / Item:		UE Test specification 3G TS 34.109 Terminal Logical Test Interface; Special conformance testing functions			
Affects:	UE/MS: Yes	CN: No	UTRAN: No	Compatibility Issues:	Yes: No: X
Expected Completion Date:		June 2000			
Services impacted:		None			
Specifications affected:		TS 34.121, TS 34.123-1, TS 34.122			
Tasks within work which are not complete:			Further work is mainly necessary in:		
			<ul style="list-style-type: none"> - Identifying and specifying special testing functions for signalling tests - Test loop definition (to be further detailed) - TDD test loop needs to be defined 		
Consequences if not included in Release 1999:			Not possible to perform conformance tests as specified in TS 34.121, TS 34.122 and TS 34.123-1.		
Accepted by TSG# 6		for late inclusion in Release 1999:			

Abstract of document:

The present document specifies for User Equipment (UE), for 3rd Generation WCDMA system, those ME functions which are required for conformance testing purposes (e.g. test loops). These functions are activated via the radio interface.

Contentious Issues:

The content of this specification is directly related to which testing functions are needed by RF and Signalling tests. (TS 34.123-1, TS 34.121 and TS 34.122).

No contributions have been submitted for TDD test functions.

TS 34.121 Terminal Conformance Specification; Radio transmission and reception (FDD)

Release 1999 Submission form

Work Area / Item:		UE Test specification TS 34.121 Terminal Conformance Specification; Radio transmission and reception (FDD)				
Affects:	UE/MS: Yes	CN:	UTRAN:	Compatibility Issues:	Yes:	No: X
Expected Completion Date:	March '00					
Services impacted:	None					
Specifications affected:	None					
Tasks within work which are not complete:			1. Transmitter Characteristics (open issues) 2. Performance Requirements			
Consequences if not included in Release 1999:			Some RF conformance tests will not be available.			
Accepted by TSG	6	for late inclusion in Release 1999:				

Abstract of document:

Containing test specifications about

- 1) Transmitter Characteristics
- 2) Receiver Characteristics
- 3) Performance Requirements

Core specification for this document:

- 1) TS 25.101 UE Radio transmission and Reception (FDD)
- 2) TS 25.103 RF Parameters in Support of Radio Resource Management

Contentious Issues:

- 1) Core specification for RRM is unstable. RAN WG4 decided the replacement of TS 25.103 with TS 25.133(new). The scope of TS 25.133 and its impact for TS 34.121 is unclear.

TS 34.122 Terminal Conformance Specifications; Radio transmission and reception (TDD)

Release 1999 Submission form

Work Area / Item:		UE Test specification TS 34.122 Terminal Conformance Specifications; Radio transmission and reception (TDD)				
Affects:	UE/MS: Yes	CN:	UTRAN:	Compatibility Issues:	Yes:	No: X
Expected Completion Date:		June '00				
Services impacted:		None				
Specifications affected:		None				
Tasks within work which are not complete:			<ol style="list-style-type: none"> 1. Performance Requirements 2. Cell selection & reselection testing, coverage of 25.123 core specifications 			
Consequences if not included in Release 1999:			Some RF conformance tests will not be available.			
Accepted by TSG	6	for late inclusion in Release 1999:				

Abstract of document:

Terminal Conformance Specifications; Radio transmission and reception (TDD)

Containing test specifications about

- Transmitter Characteristics
- Receiver Characteristics
- Performance Requirements

Core specification for this document are:

- TS25.102 (UTRA (UE) Radio Transmission and Reception)
- TS 25.123 (Requirements for Support of Radio Resource Management (TDD))

Serving specifications for this document are:

- TS34.109 (Terminal logical test interface (FDD/TDD))
- TS 34.108 (Common Test Environment)

Peer specifications with respect to this document are:

- TS 34.121 (Terminal Conformance Specifications; Radio Transmission and Reception (FDD))
- TS 25.142 (Base Station Conformance Testing (TDD))
- TS 25.141 (Base Station Conformance Testing (FDD))

Contentious Issues:

No serious contention issues are known.

The scope of the document, currently comprising

Transmitter Characteristics, Receiver Characteristics and Performance Requirements will be extended in future due to acceptance of TS 25.123 as a core specification.

TS 34.123-1 UE conformance specification. Part 1: Protocol conformance specification

Release 1999 Submission form

Work Area / Item:		UE Test specification TS 34.123-1 V1.0.0 User Equipment (UE) conformance specification. Part 1: Protocol conformance specification			
Affects:	UE/MS: YES	CN: NO	UTRAN: NO	Compatibility Issues:	Yes: No: X
Expected Completion Date:		June 2000			
Services impacted:		None			
Specifications affected:		TS 34.123-2			
Tasks within work which are not complete:			Tasks are in various stages of completion. Detailed status report is attached		
Consequences if not included in Release 1999:			Interoperability of User Equipment		
Accepted by TSG# 6 for late inclusion in Release 1999:					

Abstract of document:

This specification is the first part of a multi-part specification describing in prose a suite of conformance tests for 3rd Generation User Equipment (UE). The tests are intended to ensure that User Equipment for 3GPP systems conform to the relevant 3GPP Technical Specifications.

The other parts of the multi-part specification are TS 34.123-2, which contains a pro-forma for the Implementation Conformance Statement (ICS), and TS 34.123-3, which contains a detailed and executable description of the test cases written in a standard testing language, TTCN.

Contentious Issues:

Timely completion of this specification depends upon the availability of the core specifications for which it provides conformance tests.

Specifications with the largest impact are TS 24.008, TS 24.331, TS 24.321 and TS 24.322.

TS 34.123-2 UE conformance specification; Part 2: ICS proforma specification

Release 1999 Submission form

Work Area / Item:	UE Test Specification TS 34.123-2 User Equipment (UE) conformance specification. Part 2: ICS proforma specification			
Affects:	UE/MS: Yes	CN: No	UTRAN: No	Compatibility Issues: Yes: No: X
Expected Completion Date:	June 00			
Services impacted:	None			
Specifications affected:	None			
Tasks within work which are not complete:	Further work is mainly necessary in: - Service capabilities - Service implementation capabilities This work will be basically done following the work in TR 21.904. The applicability table will be also completed with information from other T1 specifications.			
Consequences if not included in Release 1999:	Interoperability of User equipment.			
Accepted by TSG# 6	for late inclusion in Release 1999:			

Abstract of document:

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called an Implementation Conformance Statement (ICS).

The objective of TS 34.123-2 is to provide the ICS proforma for 3G User Equipment. This ICS is to be used for RF, protocol and EMC testing.

This TS directly depends on TR 21.904 that is being elaborated by TSG T WG2.

Contentious Issues:

The content of this specifications is directly related to the content and stability of TR 21.904.

TS 34.123-3 UE conformance specification. Part 3: Abstract test suite

Release 1999 Submission form

Work Area / Item:	UE Test Specification TS 34.123-3 User Equipment (UE) conformance specification. Part 3: Abstract test suite			
Affects:	UE/MS: YES	CN: NO	UTRAN: NO	Compatibility Issues: Yes: No: X
Expected Completion Date:	March 2001			
Services impacted:	None			
Specifications affected:	None			
Tasks within work which are not complete:	Work not started.			
Consequences if not included in Release 1999:	Interoperability of User Equipment			
Accepted by TSG#	6	for late inclusion in Release 1999:		

Abstract of document:

This specification is the third part of a multi-part specification containing abstract test suites (ATS), written in a standard testing language, TTCN, for conformance tests for 3rd Generation User Equipment (UE). The tests are intended to ensure that User Equipment for 3GPP systems conform to the relevant 3GPP Technical Specifications.

The other parts of the multi-part specification are TS 34.123-1, which contains a prose description of each test case, and TS 34.123-2, which contains a pro-forma for the Implementation Conformance Statement (ICS).

Contentious Issues:

Timely completion of this specification depends upon the availability of a funded team to provide key parts of the TTCN abstract test suite early in 2000.

TS 34.124 Electro-Magnetic Compatibility (EMC) for Terminal equipment

Release 1999 Submission form

Work Area / Item:		UE Test Specification TS 34.124 Electro-Magnetic Compatibility (EMC) for Terminal equipment				
Affects:	UE/MS: Yes	CN:	UTRAN:	Compatibility Issues:	Yes:	No: X
Expected Completion Date:		March 2000				
Services impacted:		None				
Specifications affected:		Not known				
Tasks within work which are not complete:			Editing, updating terminology, references etc. Referencing to generic call set-up procedures and changes in the document for alignment with TS 34.108.			
Consequences if not included in Release 1999:			?			
Accepted by TSG# 6			for late inclusion in Release 1999:			

Abstract of document:

EMC testing of terminals.

Contentious Issues:

Not known