## Technical Specification Group Services and System Aspects TSGS#6(99)616 Meeting #6, Nice, France, 15-17 December 1999

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

### **Content** *Last saved: 15/12/99 13:32*

Status ove	erview of TSG-T deliverables for R99 (Dec 99)	2
	Mobile Terminal Conformance Testing	
	Mobile Terminal Services and Capability	
WG T3 U	USIM	2
TR 21.904	4 UE Capability Requirements	3
TR 21.910	Multi-mode UE issues	4
TS 23.140	Multimedia Message Service (TS 23.038, TS 23.040)	5
TS 31.101	UICC-Terminal Interface; Physical and Logical Characteristics	6
TS 31.102	Characteristics of the USIM Application	7
TS 31.110	Numbering system for telecommunication IC card applications	8
TS 31.111	USIM Application Toolkit (USAT)	9
TS 34.108	Common Test Environments for UE Conformance Testing	10
TS 34.109	Terminal Logical Test Interface; Special conformance testing functions	11
TS 34.121	Terminal Conformance Specification; Radio transmission and reception (FDD)	12
TS 34.122	Terminal Conformance Specifications; Radio transmission and reception (TDD)	13
TS 34.123	UE conformance specification. Part 1: Protocol conformance specification	14
TS 34.123	UE conformance specification; Part 2: ICS proforma specification	15
TS 34.123	UE conformance specification. Part 3: Abstract test suite	16
TS 34.124	Electro-Magnetic Compatibility (EMC) for Terminal equipment	17

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

### WG T1 Mobile Terminal Conformance Testing

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

### WG T2 Mobile Terminal Services and Capability

Reference	Title	Under	R99	Submission
		Change Control	completion date	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	Yes		n.a.
	Short Message Entities (SMEs)			
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;	Yes		n.a.
	Stage 2			
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	R99 Completion	Submission Form
		Control	date	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	No.
TS 31.121	UICC Test Specification	No	06-2000	No.

### TR 21.904 UE Capability Requirements

		UE Capab	ility Requirements			
Work Area	/ Item:					
Affects:	UE/MS: Yes	CN: No	UTRAN: No	Compatibility Issues:	Yes:	No:
Expected C	Completion Date:	15 March '	00			
Services in	pacted:	None				
Specification	ons affected:	Completion		Requirements", bile Station Conformance Spec Statement) may be affected.	cification, P	art 2 ICS
Tasks with	in work which are	not complete	Implementa of - FAX	rehensive requirements for Tention Capability should be addeded to the command, MMS etc.		
Consequen	ces if not included	in Release 1	-	of TS34.123-2 Mobile Station on, Part 2 ICS (Implementation layed.		
Accepted b	y TSG#	for late inclu	ısion in Release 199	99:		

### TR 21.910 Multi-mode UE issues

Work Area	a / Item:	Multi-mod	e UE				
Affects:	UE/MS: Yes	CN: Yes	UTRAN:		<b>Compatibility Issues:</b>	Yes:	No:
Expected (	Completion Date:	March 200	0		L		
Services in	npacted:	None					
Specificati	ons affected:	As a result		comp inves	sues", leted report, changes to stigated what specification		
Tasks with	in work which are	e not complete	completio	n of so	nd evaluation of ongoing ome scenarios. Cadditional work to be d		
Consequer	l in Release 19	the scenar A summa	The ideas for an efficient usage of multi-mode UEs, collected in the scenarios, will be delayed even longer.  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.				
Accepted b	by TSG#	for late inclu	sion in Release 19	99:			

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

Work Area	/ Item:	MMS (Mul	MMS (Multimedia Messaging Service)							
Affects:	UE/MS: X	CN: X	UTRAN:	Compatibility Issues:	Yes: X	No:				
Expected C	ompletion Date:	March 200	0	l .						
Services im	pacted:	MMS								
Specificatio	ns affected:	3G TS 23.1	40, 3G TS 23.038, 3	3G TS 23.040						
Tasks withi	n work which are	not complete								
			- Set of s	upported media formats						
			- MMS a	ddressing scheme						
			- Interfa	ce: MMS Relay – MMS Serv	ver er					
			- Interwo	orking between MMS Relays	5					
			- Availab	oility of the MMS User Agen	t					
				er latest comments on compa and on service and implemen						
			3G TS 23.03	38 and 3G TS 23.040:						
			- SMS en	nhanced message content						
Consequen	ces if not included	in Release 19	Early introdimpossible;	Early introduction and fast acceptance of MMS almost impossible;						
			Inclusion of SERG#36	f 3G TS 23.140 in Release 99	) is requeste	d e.g. from				
Accepted by	y TSG#	for late inclu	sion in Release 199	9:						

# TS 31.101 UICC-Terminal Interface; Physical and Logical Characteristics

Work Area	/ Item:	31.101 UICC	-Terminal Interfac	ninal Interface; Physical and Logical Characteristics					
Affects:	UE/MS:yes	CN:no	UTRAN:no	Compatibility Issues:	Yes: X	No:			
Expected C	Completion Date:	March 2000							
Services im	pacted:								
Specification	ons affected:	31.102, 31.11	11						
Tasks with	in work which are	e not complete:	2 USAT in 3 Coding o	attributes need to be finalised. corporation f some File Contol Information n of application session initial	on (FCI).	nation			
Consequen	ces if not included	l in Release 199	9: potential in	potential interoperability problems					
Accepted by TSG: T #6 for late inclusion in Release 1999:									

### TS 31.102 Characteristics of the USIM Application

Work Area	/ Item:	3G TS 31.102	Characte	aracteristics of the USIM Application				
Affects:	UE/MS:Yes	CN:	UTRAN	N: Compatibility Issues: Yes: X No:				
Expected C	Completion Date:	March 2000		I				
Services im	pacted:							
Specification	ons affected:	31.111						
	in work which are		1. 2. - - 3. 4. 5. 6. 7. 8.	FDN /BDN Definition of EFs and procedures depending on precise service requirements  Phone Book Procedures finalisation of procedures E-mail addresses. The EF and the procedures have to be added to the phone book description. Storage of network related parameters depending on definition by RAN2 Introduction of a 2G specific access control class file depending on service requirements of S1. Network Selection Issues (2 HPLMN lists) Depending on service requirements of S1 Usage, coding and location of CCP depending requirements of N1 Incorporate security attributes from 31.101 Review of SFI (Short File Identifiers)				
Consequen	ces if not included	l in Release 1999	9: Sev	veral R99 services will not be able to be supported.				
Accepto	ed by TSG: T #6	for late inclu	sion in R	Release 1999:				

# TS 31.110 Numbering system for telecommunication IC card applications

Work Area	/ Item:	Numbering s	ystem for tele	communic	cation IC card application	s - 3G TS	31.110			
Affects:	UE/MS: Yes	CN:	UTRAN:	TRAN: Compatibility Issues: Yes: X No:						
Expected Co	ompletion Date:	March 2000								
Services imp	pacted:	USIM and U	ICC Applicati	on selecti	on					
Specification	ns affected:	3G TS 31.110	O, 3G TS 31.1	01, 3G T	TS 31.102, 3G TS 31.111					
Tasks within	n 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 id applications, and so is not able and a Release 2000.					so is not able to distingu					
Accepted	d by TSG: T #6	for late inclu	sion in Relea	se 1999:						

### TS 31.111 USIM Application Toolkit (USAT)

Work Area	/ Item:	USAT (3G T	S 31.111)					
Affects:	UE/MS: YES	CN:	UTRAN:	C	Compatibility Issues:	Yes: X	No:	
Expected C	ompletion Date:	March 2000						
Services im	pacted:	USAT						
Specificatio	ns affected:							
Tasks withi	n work which are	not complete:	2.	This relies on FDN and BDN Define TLVs for Provide Local Bring 31.111 to the second state of the second st	eraction between Call Country the specification of serval mechanisms.  For 3G radio-based para Information command.  The purple to date with latest GS bebruary (currently 31.11)	rice requirent meters. This SM 11.14 rel	affects the ease 99 when	
Consequences if not included in Release 1999:				Call Control does not fully meet service requirement.  Location-based USAT services not available on UTRAN.				
			3.	Transfer from	GSM not complete.			
Accepte	ed by TSG: T #6	for late inclu	sion in Re	lease 1999:				

## TS 34.108 Common Test Environments for UE Conformance Testing

#### **Release 1999 Submission form**

Work Area / Item:		UE Test specification						
		3G TS 34.10 Common Te		ironments for Use	er Equipment (UE) Confo	ormance Te	sting	
Affects:	UE/MS: Yes	CN: No	UTR	RAN: No	Compatibility Issues:	Yes:	No: X	
Expected C	ompletion Date:	June 2000						
Services impacted: None								
Specificatio	ns affected:	TS 34.121,	TS 34.1	123-1, TS 34.122,	TS 34.124			
Tasks withi	n work which are	not complete	:	First draft not available yet. Work item proposal presented at this meeting.				
Consequences if not included in Release 1999:					erform conformance tests 4.123-1 and TS 34.124.	s as specifie	ed in TS 34.121,	
Accepted by	y TSG# 6	for late inclu	sion 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 spe		cification	ication						
		3G TS 34.10 Terminal Lo		rface; Sp	ecial conformance testing	g functions			
Affects:	UE/MS: Yes	CN: No	UTRAN: No	UTRAN: No Compatibility Issues: Yes:					
Expected C	Completion Date:	June 2000			1				
Services impacted: None									
Specification	ons affected:	TS 34.121,	ΓS 34.123-1, T	4.123-1, TS 34.122					
Tasks with	not complete	: Further	Further work is mainly necessary in:						
			sig	<ul> <li>Identifying and specifying special testing functions for signalling tests</li> <li>Test loop definition (to be further detailed)</li> </ul>					
			- TD	- 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 b	by TSG# 6	for late inclu	sion in Release	1999:					

#### **Abstract of document:**

The present document specifies for User Equipment (UE), for 3<sup>rd</sup> 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**

ork Area / Item:		UE Test specification							
		TS 34.121 Terminal Con	nformance Specifi	cation; Radio transmission and	l reception (	(FDD)			
Affects:	UE/MS: Yes	CN:	UTRAN:	Compatibility Issues:	Yes:	No: X			
Expected Completion Date: March '00			1						
Services im	pacted:	None	one						
Specificatio	ns affected:	None							
Tasks within work which are not complete:			1. Transı	1. Transmitter Characteristics (open issues)					
			2. Perfor	mance Requirements					
Consequence	ces if not included in	n Release 1999	Some RF co	onformance tests will not be av	ailable.				
Accepted by	y TSG 6	for late inclus	ion in Release 199	99:					

#### **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 spec	UE Test specification							
		TS 34.122								
		Terminal Cor	nformance	Specification	ns; Radio transmission an	d reception	(TDD)			
Affects:	UE/MS: Yes	CN:	UTRAN:		Compatibility Issues:	Yes:	No: X			
Expected Co	ompletion Date:	June '00	1		<u> </u>					
Services impacted: None										
Specification	ns affected:	None								
Tasks within	n work which are	not complete:	1.	Performanc	e Requirements					
			2.	Cell selections specification	on & reselection testing, ons	coverage of	25.123 core			
Consequences if not included in Release 1999:				Some RF conformance tests will not be available.						
Accepted by	TSG 6	for late inclusi	on in Rele	ease 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 User Equipm		E) conformance sp	ecification. Part 1: Protocol co	onformance s	specification		
Affects:	UE/MS: YES	CN: NO	UTF	RAN: NO	<b>Compatibility Issues:</b>	Yes:	No: X		
<b>Expected Completion Date:</b>		June 2000	June 2000						
Services im	pacted:	None							
Specificatio	Specifications affected: TS 34.1			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	y TSG# 6	for late inclu	sion 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 3<sup>rd</sup> 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:	TS 34.123-2	UE Test Specification TS 34.123-2 User Equipment (UE) conformance specification. Part 2: ICS proforma specification						
Affects:	UE/MS: Yes	CN: No	UTRA	N: No	Compati	bility Issues:	Yes:	No: X	
Expected Co	ompletion Date:	June 00			l				
Services impacted: None									
Specification	s affected:	None							
Tasks within	n work which are	e not complete	- - Ti	Service of Service in this work will	lity table will	n capabilities done followin		in TR 21.904. formation from	
Consequence	es if not included	l in Release 19	99: In	Interoperability of User equipment.					
Accepted by	TSG# 6	for late inclu	sion in R	elease 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 UTF			UTRAN: NO	Compatibility Issues:	Yes:	No: X			
<b>Expected Completion Date:</b>		March 200	March 2001						
Services impacted:		None							
Specificati	ons affected:	None							
Tasks within work which are not complete:			e: Work not s	Work not started.					
Consequences if not included in Release 1999:			999: Interopera	Interoperability of User Equipment					
Accepted b	oy TSG# 6	for late inclu	usion in Release 199	99:					

#### **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 3<sup>rd</sup> 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-Magr	netic Compatibil	ity (EMO	C) for Terminal equipme	ent			
Affects:	UE/MS: Yes	CN:	UTRAN:	(	Compatibility Issues:	Yes:	No: X		
Expected Completion Date: March			Iarch 2000						
Services imp	pacted:	None	None						
Specification	ns affected:	Not known							
Tasks within	n work which are	not complete:	Editing, u	pdating t	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:			9: ?						
Accepted by	TSG# 6	for late inclusi	on in Release 1	999:					

Abstract	of	docum	ent
----------	----	-------	-----

EMC testing of terminals.

**Contentious Issues:** 

Not known