

# TSG-T1 Conformance Test Specifications Status Report to T#20 in Hameenlinna, Finland

Phil Brown, 3 T1 Chairman



#### Update since – T#19

- T1#19 was held in Seoul, Korea, 12 16 May 03
- Hosted by Samsung and attended by 41 delegates
- Preceded by joint RAN4/T1 RF experts meeting 6 7 May
- Approximately 300 documents processed between the SWGs (detailed inputs to TSG T#20 on slide 24)
- 50 new TTCN test case approved by email since T1#18

The draft report can be found in TP-030096- for information



#### T1#19 Continued

- One Meeting Option adopted
  - Reduced documentation overheads
  - Effective Informal workshop sessions
- Convener & Support Assistant positions adopted for each of the two functional areas
- New ETSI Secretariat support for the meeting





#### T1 Leadership Update

T1 Chair Phil Brown, 3

T1 Vice Chairs Dan Fox, Anritsu

Hisashi Nakagomi, NTT DoCoMo

**RF Functional Area** 

Convener: Carolyn Taylor, Motorola

Assistant: Narinder Dulai, Racal Instruments

**Sig Functional Area** 

Convener: Dan Fox, Anritsu

Assistant: To be confirmed

ETSI Support Alain Sultan



#### RF test status

- Main topics covered:
  - RRM Test Progress
  - Joint RAN4/RF meeting
  - Maintenance of R99 specifications
  - Status of specifications and outstanding issues
  - Production of Test Time Optimisation Technical Report
  - First Rel5 CR in 34.121 triggering the creation of Rel5 Spec



#### RRM Background Analysis

- Considerable effort between meetings\* to evaluate the method of error analysis to determine the test tolerance for Cell Reselection in CELL\_FACH test cases in TS 34.121 (8.3.5.1 & 8.3.5.1)
- Relative worst case scenario and statistical approach both deemed acceptable and further analysis is ongoing, with early results promising
- Parameters agreed for single freq test (8.3.5.1)
- RAN4 guidelines requested for two freq test (8.3.5.2)
- Encouraging progress to be expected at T#21

<sup>\*</sup>Agilent, Anritsu, Racal Instruments, Rohde & Schwarz



## Completeness of RRM Tests

Document	Test Spec.	Core Spec.
TS 34.121 R99	90%>90%	100%
TS 34.122 R99	91%>91%	100%
TS 34.122 Rel4	60%> <mark>70</mark> %	100%



## Joint RAN4/RF Meeting

- 6 − 7 May 03 in Lund, Sweden.
- Instigated by Agilent and thanks to Ericsson for hosting
- Companies involved: Agilent, Motorola, Nokia, Ericsson, Mitsubishi, Rohde & Schwarz
- Review RRM specs (TS 25.133 & TS 34.121)
  - To check test case descriptions and priorities
  - To review certain critical test parameters to understand better how test tolerances could be applied without altering the original test purpose
- Resulting in 7 CRs to RAN4 meeting
- Valuable recognition of disparity of thought
- No plans for another, but possibility kept open



# Maintenance of R99 Specifications

- Follow up database maintained
- Provides assistance in tracking the changes to core specifications that are not covered by relevant test specification CRs
- Updates made in accordance with the latest core specifications



#### TS 34.121 Rel5

- One Rel5 CR\* has triggered the creation of the Rel 5 spec
- T1 investigating the best method of a maintaining a single Release document (Rel5) to cover R99 & Rel4 & Rel5 such that it is clear to the customer where the specs refer to the different core spec releases
- The intention is to seek agreement to maintain only a single version of this TS
- \* Addition of clarification for modulation accuracy requirement in clause 5.13 in response to a Rel 5 CR in TS 25.101
- CR to create TS 34.121 v5.0.0 included in TP-030099 for approval



#### Total Test Time

- Drafting of TR34.901 v2.0.0 "Test Time Optimisation based on statistical approaches" now completed,
- Version requested for approval at this plenary

 TR 34.901 presented in TP-030105 for approval (direct request, no previous version has been presented)



# Status of RF Specifications

Document	Current	For Approval
TS 34.121 R99	3.12.0	3.13.0
TS 34.121 Rel5	Nil	5.0.0
TS 34.122 R99	3.11.0	
TS 34.122 Rel4	4.7.0	4.8.0

- 7 CRs for 34.121 (R99, Rel5), presented in TP-030099 for approval
- 6 CRs for 34.122 (Rel4) presented in TP-030100 for approval



# Status of Signalling Specifications

- CRs to
  - TS 34.108, Common test conditions
  - TS 34.123 1, Prose test specifications
  - TS 34.123 2, Applicability Statement
  - TS 34.123 3, TTCN Test Specification



#### TS34.108 v3.11.0 and 4.6.0

- Maintenance of default message contents and procedures in line with Mar 03 Core specification
- Introduction and removal of RAB combinations in line with RAN LSs

16 CRs for 34.108 (R99, Rel4) are presented in TP-030098 for approval



#### TS34.123 - 1 v5.3.0 Status

- Addition of Inter RAT test cases
- Updated in line with Mar 03 core specifications
- Removal of redundant RAB test cases considered to have no coverage impact
- Removal of redundant state transition test cases considered to have no coverage impact
- Inclusion of test cases for RRC Measurement Control and Report: Inter-frequency measurement and Traffic Volume (TDD)

56 CRs for 34.123-1, presented in TP-030101, TP-030102 and TP-030109 for approval



#### TS34.123 - 2

Updated to reflect changes in TS34.123 – 1

11 CRs for 34.123-2, presented in TP-030103 for approval





60 TTCN test cases now verified by T1 to Mar 02 baseline.

Another 11 expected in the next 2 weeks by email

Over 90 P1 & 48 P2 TTCN test cases have now been verified by Motorola against the Jun 02 baseline. Although these will still need to be reviewed by T1, it prepares the way for a smooth transition to update the test cases against a later version of core specifications in accordance with the GCF certification criteria



## TS34.123 - 3 TTCN ... (2)

- Strategy agreed for conversion to Mar 03 baseline:
  - Up to end Jul 03, P1 & P2 verified test cases available as Mar 02
  - Between T1#20 and T#21 all existing tests subject to regression testing using Mar 03 baseline
  - At T#21 approval will be sought for P1 & P2 test cases against Mar 03. Thereafter only CRs received will reflect Mar 03 baseline or later
- Approved test cases will be published in v 3.2.0
- The general status of the TTCN project team is presented in TP-030097 for approval. 53 CRs for 34.123-3 are presented in TP-030104 and TP-030110 for approval



#### Work Item Update

 New WI 53 to cover CRs to Terminal Conformance Specification of Radio Transmission and Reception for DS-CDMA Introduction in the 800 MHz Band

Updated WI document documents presented in TP-030106 for approval



# Enabler Conformance Testing Discussion

- As a result of a white paper generated by Vodafone, circulated within the GCF, the issue of enabler conformance testing was considered by T1 delegates to establish whether it could or should assist OMA to develop test specs
- Unanimous agreement that development of test specs had to be done by someone, somewhere
- No overall consensus that T1 was best placed to contribute to the work at this time and a concern was raised that there was already enough to do meeting the current GCF requirement
- T1 could consider Rel 6 features if 3GPP thought it a requirement in the future
- Advice is sought from the T Plenary



# The Way Ahead – Update since T#19

- More active liaison with RAN 4:
  - Joint meeting of RAN4/T1 RF experts 6-7 May 03, progressing 'grey area' issues
  - No immediate plans to reconvene but possibility left open now precedence has been set
- Maintain close liaison with the GCF:
  - Increased throughput of TTCN verified test cases to the industry for validation in accordance with the GCF
  - Re-verification programme prepared to move existing TTCN tests (Mar 02) to later core spec baseline (Mar 03) as requested by the GCF
  - GCF UAG Chair and T1 Chair exchange post meeting updates
- Establish working relationship with OMA IOP WG
  - Tentative progress only, but T1 Chair participating in IOP WG conference calls

# The Way Ahead – T1 Chair's Aspirations for the next 3 months

- Support to GCF for TTCN verified test cases
  - Deliver minimum 80% of package 1 to Mar 02 by late Jun 03
  - Deliver minimum 40% of package 2 to Mar 02 by late Aug 03
  - Initiate and complete baseline conversion of package 1 & 2 to Mar 03 for T#21 approval
- Agree approach to determine tolerance measurements and complete at least 2 of the outstanding RRM test cases



# Future Meeting Schedule

Meeting	Dates	Location/Host
T1 # 20	28 Jul – 1 Aug 03	Munich, Rohde & Schwarz
T1 # 21	3 – 7 Nov 03	Budapest, (EF of 3GPP)
T1 # 22	9 – 13 Feb 04	TBD
T1 # 23	10 – 14 May 04	TBD

# Input documents to TSG-T



T1 Status report (this report)
T1 minutes of T1 meeting#19

**TTCN** report

**CRs to 34.108** 

CRs to 34.121

**CRs to 34.122** 

CRs to 34.123-1

CRs to 34.123-2

CRs to 34.123-3

Creation of TR 34.901

**Updated WID document** 

Call for experts for MCC Task 160

**CRs from email approval** 

CRs to 34.123-1

CR to 34.123-3

**TP-030095 Presentation** 

TP-030096 Information

TP-030097 Approval

TP-030098 Approval

TP-030099 Approval

TP-030100 Approval

TP-030101 Approval

TP-030102 Approval

TP-030103 Approval

TP-030104 Approval

TP-030105 Approval

TP-030106 Approval

**TP-030107 Information** 

TP-030108 Approval

TP-030109 Approval

TP-030110 Approval