

# TSG T WG1 Conformance Test Specifications Status Report to T#22 in Hawaii

Phil Brown, 3

T1 Chairman

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A G L O B A L I N I T I A T I V E

TP-030298



### General update since – T#21

- T1#21 was held in Budapest, Hungary 3 7 Nov 03
- Hosted by European Friends of 3GPP and attended by 59 delegates
- Approximately 390 documents processed during the Plenary resulting in approximately 140 docs submitted for approval
- TTCN now formally base-lined to Mar 03 core specs
- As at Thu 4 Dec 03, 2 new TTCN test case approved by email since T#21

The draft report can be found in TP-030277 for information



### T1 Leadership Team Updatê

T1 Chair Phil Brown, 3

T1 Vice Chairs Dan Fox, Anritsu

Hisashi Nakagomi, NTT DoCoMo

RF Functional Area

Convener: Carolyn Taylor, Motorola

Assistant: Mike Page-Jones, Siemens AG

Sig Functional Area

Convener: Dan Fox, Anritsu

Assistant: Kazuo Hayashi, Panasonic PMC

ETSI Support Alain Sultan



### RF Group Update

- Main topics to be covered:
  - RRM Progress
  - 800MHz Testing
  - Routine Maintenance
  - TS 34.122 Single Release
  - Status of RF specifications
  - Versions of RF specifications





### RRM Progress

- TR 34.902: Derivation of test tolerances for multi-cell RRM conformance tests has been drafted for initial approval. The rapporteur is from Racal Instruments Wireless Solutions
- Analysis in the TR gives rise to the addition of test tolerances in 6 more RRM test cases
- The proportion of complete RRM tests is approximately 24%
- Outstanding RRM test cases is still a cause for concern in T1 as completion within 9 months is necessary for subsequent validation/ approval by GCF before the end of 2004
- RF Convener is putting into place a strategic plan to cover the work but more offers of assistance are always welcome
- Situation will be reviewed after T1#22

TR 34.902 v1.0.0: Derivation of test tolerances for multi-cell RRM conformance tests presented in TP-030289



### 800 MHz Testing

- CRs to TS 34.121 introduced testing to the 800MHz band
- Rapid contributions made in time for approval at T#22 in order to meet Japanese Regulatory conditions for the introduction of DS CDMA for the testing of band VI frequencies



### Routine Maintenance

- Follow up database maintained by Nokia
- 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 34.122 Single Release

- Single Release of TS 34.122 has been prepared for approval as a result of a T1 study into the best method of a maintaining a single release document based on Rel5 to cover R99 & Rel4 & Rel5
- It has been made clear to the customer where the specs refer to the different core spec releases
- Work led by Siemens AG
- Updated versions of the R99 & Rel4 docs (for approval) contain pointers to the new (Rel5) Single Release specification

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### Status of RF Specifications

#### TS 34,121

- Sect 5 100%
- Sect 6 100%
- Sect 7 98%
- Sect 8 (RRM) 24%\*

#### • TS 34.122

- Sect 5 90%
- Sect 6 90%
- Sect 7 85%
- Sect 8 (RRM) nil\*

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### Version of RF Specifications

	Current	For Approval
TS 34.121 Rel5	5.1.1	5.2.0
TS 34.122 R99	3.12.0	5.0.0
TS 34.122 Rel4	4.9.0	5.0.0
TS 34.122 Rel5		5.0.0

CRs for 34.121 (Rel5), presented in TP-030280 & T1-030296 for approval

CRs for 34.122 (R99 & Rel4) presented in TP-030281 for approval



### Signalling Group Update

- TS 34.108 Common Test Environment for UE Conformance Tests
- TS 34.123 1 Prose test specifications
- TS 34.123 2 Applicability Statement
- TS 34.123 3 TTCN Test Specification
- Release and Configuration Manager for MCC 160

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### TS 34.108

- Rel 5 RAB 'parked'
- Routine Maintenance mainly minor corrections

CRs for 34.108 (R99 & Rel4) are presented in TP-030279 for approval



### TS 34.123 - 1

- Corrections to prose test cases coming from issues found during the verification of the TTCN
- Recommendation to GCF to re-consider 5 PLMN and inter-RAT cell selection/ re-selection test cases from Batch 2 for calculation of completion purposes, as core specs not yet stable in CN
- Internal review of necessary tests has led to removal and addition to this spec based on gathering experience and identification of gaps

CRs for 34.123-1, presented in TP-030282 for approval



### TS34.123 - 2

Updated to reflect changes in TS34.123 – 1

CRs for 34.123-2, presented in TP-030283 for approval

### TS34.123 - 3 (TTCN)...(1)



- TTCN has now moved to Mar 03 baseline
- Major effort by industry to re-verify all test cases to new baseline completed in late Oct
- Approved test cases will be published in version 3.4.0
- 83 P1 test cases verified by T1 to Mar 03
- 22 P2 test cases verified by T1 to Mar 03
- Motorola has verified internally 92 P1, 74 P2 and 43 P3 test cases against the Sep 02 base line which has given rise to many corrections to the 'live' suite
- Decision made to verify on both CS & PS paths (where applicable)
- All merging changes to fix code during merging to be approved by T1 and T retrospectively for full visibility and audit trail of TTCN releases

CRs for 34.123-3 are presented in TP-030284 for approval





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

 Another 37 test cases have been submitted against the recently T1 approved delivery v3.4.0

 MCC 160 now using an automated configuration management tool and has recently procured a merging tool to assist in the delivery process

 Many (painful) lessons learnt about the challenges of regression testing an expanding ATS with each release

 Thorough review of the TTCN approval procedure (PRD T1-12) completed and includes a generic plan for regression testing in 2004

 Identified need for a specific release and configuration manager within MCC160



The TTCN project team report is presented in TP-030278 for approval



### Release and Configuration Manager (RCM) for MCC 160...

 Experience of the recent transition and regression testing demonstrated that MCC 160 would benefit from having a dedicated person to drive TTCN release and configuration management, especially as the situation is the effort of regression testing is going to increase dramatically with each new batch of verified test cases

- This conclusion was reached during the (cross-industry) GCF Progress Blockers Workshop held on 9 Oct 03.
   This was conveyed to the GCF Steering Group who sent a formal recommendation to T1 and ETSI to recruit someone to cover the proposed post in 2004
- The GCF offered to co-fund the post (up to the equivalent of 6 man-months) against certain conditions. The remaining funding is to be found from the allocation of 58 man-months already approved for MCC160; the revised break down of resources is shown in the MCC160 report

### ...RCM Continued



T1 has accepted the recommendation and the GCF offer and now wants
to start the process of recruiting someone to start in January 2004

 T1 has already developed a detailed phased regression testing and release plan to which the RCM is fundamental

- It is anticipated that the RCM will free up the TTCN staff to concentrate on bug fixing whilst at the same time ensuring greater coord between contributors
- Also more frequent releases will allow more manageable regression testing and quicker turn around times
- Actually 11 weeks reduced to 4 days
- T1 seeks T Plenary approval to the re-allocation of resources

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### **HSDPA**

- Joint RF/Sig session held at T1#21 to trigger activity
- Responding to questions from RAN1 and RAN2
- T1 has adopted RAN proposed RB configurations as working assumption for HS-DSCH
  - One U/L PS configuration for 64 kbps
  - One U/L PS configuration for 384 kbps
  - Physical channel parameters specified per UE category
- Further guidance sought from RAN2 on need for testing of alternatives specified for RLC payload sizes and the number of HARQ processes for different UE categories
- Internal work plan agreed & HSDPA convener may be appointed



### Work Item Update

- Review of WI progress including support for Rel 4 & Rel 5 Work Tasks
- Introduction of one WID to cover Conformance Testing A-GPS Rel 6 Minimum Performance Requirements

WI documents presented in TP-030287 & TP-030288 for approval



### General Issues...(1)

- Revision of PRDs to reflect verification optimisation effort
  - Harmonised Email Approval Procedure
  - TTCN Approval Procedure
- Introduction of doc completion PRD to assist new delegates and improve internal administrative efficiency
- Presentation by DaTang Mobile on TDD LCR situation in China followed by preliminary discussions to develop a 2004 strategy
- Five day workshop to be held at ETSI in early Jan 04 to develop the T1 strategy of incorporating TDD LCR into the current FDD programme with minimum impact. It is anticipated that up to 4 engineers (voluntary contributions) from CCSA could work with MCC 160 in 2004



### General Issues...(2)

- Work plans submitted for:
  - Rel 5, HSDPA (identification of new test cases based on changes to core specs
  - R99, A-GPS (identification of new test cases based on existing core specs)
  - LS submitted to T and GERAN to consider maintenance of Inter RAT test cases
- Advisory LS sent to GCF UAG on use of TTCN releases for validation purposes

## The Way Ahead – T1 Chair's 3 56 Month Aspirations @ Sep 03 Results @ T#22



- Support to GCF for TTCN verified test cases
  - Deliver minimum 95% of package 1 by late Nov 03 Outcome: 83%
  - Deliver minimum 80% of package 2 by late Nov 03 Outcome: 21%
  - Deliver minimum 20% of package 3 by late Nov 03 Outcome: nil%
- Introduce Test Tolerance to at least 4 more of the outstanding RRM test cases Outcome: 6 more RRM test cases were completed
- **Develop a single release doc for TS 34.122** Outcome: Completed and to be presented in T#22
- Introduce a TR to cover work on test tolerance analysis Outcome: Completed and TR 34.902 v1.1.0 is being presented in T#22



### T1: External Objectives Update since T#21

- More active liaison with RAN 4
  - Investigate the expansion of the scope of current test suite
  - To co-locate T1 #23 with RAN4 in May 04
- Maintain close liaison with the GCF
  - T1 updates presented to GCF UAG #5 & SG #17
  - Re-verification of TTCN programme undertaken following move to Mar 03 core spec baseline as requested by GCF
  - Co-funding of Release and Configuration Manager for 2004
- Develop strategy for inclusion of TDD TTCN test cases (new)



### The Way Ahead – T1 Chair's 3 ...... Month Aspirations @ Dec 03

- Support to GCF for TTCN verified test cases
  - Deliver minimum 95% of package 1 by mid Mar 04
  - Deliver minimum 80% of package 2 by mid Mar 04
  - Deliver minimum 40% of package 3 by mid Mar 04
- Introduce Test Tolerance to at least 6 more of the outstanding RRM test cases
- Select RCM for MCC 160 (to start work in late Jan 04)
- Develop strategy to include TDD LCR conformance testing into the current TTCN programme (workshop Jan 04)



### T1 - Areas of Concern

#### Slow progress in completion of RRM test cases

 This will hold up the ability of GCF companies to implement solutions thereby delaying GCF certification

#### Multi-tasking of T1 secretary

 Inevitably this has slowed down the reaction time between T1 delegates and the ETSI secretariat. T1 is under a lot of pressure to deliver test cases so this is becoming serious

### Misalignment of inter RAT test cases between T1 and GERAN

- GERAN has responsibility for GERAN TO UTRAN HO prose tests but T1/ETSI MCC 160 is responsible for the TTCN development thus creating problems of TTCN & Prose mis-alignment
- GERAN is reviewing its approval process and T1 will liaise closely to provide assistance as required



### Future Meeting Schedule

Meeting	Dates	Location/Host
T1 #22	2 – 6 Feb 04	Hyderabad, India (Motorola)
T1 #23	10 – 14 May 04	Beijing, (DaTang Mobile)
T1 #24	26 – 30 Jul 04	Vancouver, (NA F of 3GPP)
T1 #25	25 – 29 Oct 04	Europe (E F of 3GPP) tbc



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### Summary of Input Docs

T1 Status Report
T1 Minutes of T1 meeting#21
ETSI MCC TF 160 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 (All) Updated WID Document WI Sheet for new WT (A-GPS) TR 34.902 v1.0.0 TP-030276 Presentation TP-030277 Information TP-030278 Approval TP-030279 Approval TP-030280 Approval TP-030296 Approval TP-030281 Approval TP-030282 Approval TP-030283 Approval TP-030284 Approval TP-030287 Approval TP-030288 Approval TP-030289 Information