3GPP TSG RAN Meeting #28　　　　　　　　　**RP-050263**

Quebec, Canada, 1 - 3 June 2005

Title	**MCC TF 160 ToR**
Source	**TF 160 Leader**
Agenda Item	**7.6.2**

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TSG RAN WG5#27   **R5-050548**

25-29 Apr 05

Bath, England

Source: **RAN5 Chair/TF 160 Manager**
Title: **Update of MCC task 160 Description and ToR for 2005**
Document for: **Approval**

MCC task 160 Description

and

Terms of Reference for 2005

1.   Background

1.1   The MCC task 160 was setup in Jun 00 under the responsibility of 3GPP TSG-T WG1 (T1) for the development of TTCN test cases for R99. The team consists of the skilled protocol / TTCN experts coming from various companies of the 3GPP partners. Since then more than 900 TTCN test cases have been drafted for the UE conformance testing.

1.2   The funding of an expert team at the MCC has proved to be the most efficient and cost-effective way to develop the test specifications found in TS 34.123 parts 1 - 3. In order to stabilise and to maintain all the currently available TTCN Abstract Test Suites (ATS) and to continue developing new TTCN test cases for R99, Rel-4 and Rel-5, the MCC task 160 has been resourced, in part, by the PCG/OP. 58 man months (MM) was allocated by the OPs to cover the related tasks for 2005. The remaining funding for 2005 has been found from the Global Certification Forum (GCF), the TD SCDMA Industry Alliance (TDIA), the PCS Type Certification Review Board (PTCRB) and individual company contributions, in the form of both manpower and cash.

1.3   MCC task 160 continues to work primarily in accordance with the priorities identified by the GCF in support of the GCF's drive to introduce certification for 3G handsets in 2005, but increasingly it is meeting the requirements set by the TDIA (see 1.4 below).

1.4   There is a high interest in the development of Low Chip Rate (LCR) TDD conformance test from the CCSA and TDIA. PCG#13 confirmed that LCR TDD test development should be funded within the work of MCC task 160.

1.5   It is anticipated that there will be growing demand in the development of A-GPS and High Chip Rate (HCR) TDD conformance tests within the industry. Although no funding has been allocated for this purpose, MCC task 160 may be asked to provide superficial assistance, on a zero impact basis, in 2005.

2.   Consequences if not resourced

All test cases produced by MCC task 160 will mainly qualify an UE for worldwide roaming and interoperability with the 3GPP networks. Without such tests the UE interoperability cannot be guaranteed. Should MCC task 160 be discontinued, then the cohesive and unified approach to develop common TTCN modules will be lost. The system simulator manufacturers will subsequently deliver test platforms with different interpretations of the core specifications which will lead to variable results and general confusion as to what constitutes a conformant handset. Furthermore the broader implementation of R99, Rel4 and Rel5 networks would be delayed as potential issues, such as interoperability of handsets, are not resolved.

3. Detailed description

3.1 **Subject title:** 3GPP TTCN specifications for UE R99, Rel-4, Rel-5

3.2 **Reference Technical Body:** 3GPP TSG RAN WG5

3.3 **Other interested Technical Bodies:** 3GPP TSG RAN, RAN(2), TSG CT(1), TSG GERAN

3.4 **Target dates for the start of work:** Jan 05

3.5 **Target dates for the conclusion of the work:** Dec 05

3.6 **Resource requirement**

3.6.1 **Estimated man month requirement in 2005**

It was estimated in Oct 04 that the resource requirement, in terms of TTCN experts, for 2005 would be 90 man months; this could increase dependent on additional work via the GCF or other external industry requirements.

3.6.2 **Additional tasks requiring resources**

In addition to the TTCN development ETSI needs to host MCC task 160, as well as provide the task force's overall leadership, management, logistical and IT support.

3.6.3 **Qualification required, mix of skills**

The experts should have deep 3GPP protocol knowledge at the Uu and Um interfaces and good skill at writing of the TTCN test cases. This should include knowledge of LCR and HCR TDD as necessary.

3.7 **Release and Configuration Manager (RCM)**

In Jan 04, the RCM was appointed with specific duties to control the release of TTCN ATS as well as coordinate the verification activity between the test industry (verification teams) and MCC task 160. The continuation of the RCM in 2005 is continuing to provide great benefits to the test industry and now the RCM is an integral part of MCC task 160.

3.8 **Scope of Terms of Reference**

3.8.1 The technical areas of the MCC task 160 cover the conformance test specifications for UE signalling, protocols and radio access bearers interoperability in the FDD and TDD radio technologies. The UE handover and interoperability from 3G to 2G belong to the area.

3.8.2 The task force is responsible for the development and maintenance of NAS, SMS, RRC, MAC, RLC, RAB, PDCP, BMC, A-GPS and HSDPA ATS in R99, Rel 4 and Rel 5 according to the relevant 3GPP test specifications in prose. For the purposes of enabling early GCF certification of handsets, priority is given to the completion and maintenance of the R99 high priority test cases.

3.8.3 The task force is also responsible to implement the prose and TTCN CRs in TTCN, to integrate the verified TTCN test cases into the existing ATS and to deliver the 3GPP formally approved ATS releases and interim working ATS releases.

3.8.4 MCC task 160 consists of two teams; an FDD team and a TDD team. The FDD team concentrates on the FDD Abstract Test Suite (ATS) for R99 and Rel-5, while the TDD team concentrates on the LCR TDD ATS for Rel-4. The split of ATS according to the technologies will ensure the independency of the development and maintenance of these ATSs to facilitate deliveries and releases.

3.8.5 From 2005, MCC task 160 will provide assistance to those parties interested in developing A-GPS and HCR TDD on the condition that there are no resource implications to that approved by PCG#13 in Oct 04.

3.9 **Context of the tasks in relation to TS 34.123**

3.9.1   Part One. The first part of TS 34.123 specifies the test structure, test purposes and give each test case a prose description.

3.9.2   Part Two. The second part specifies necessary ICS questions for UE manufacturers on the UE capabilities and the test case applicability.

3.9.3   Part Three. The third part contains the ATS' themselves.

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

Changes in TS 51.010 GERAN 3 and the stability of the relevant core specifications of CT1 and RAN2, especially changes in TS 25.331, will have impact on the progress of the Task.

3.11   Base documents used

> TS 24.008: Mobile radio interface layer 3 specification, Core Network Protocols - Stage 3
> TS 25.321: MAC protocol specification
> TS 25.322: RLC protocol specification
> TS 25.331: RRC protocol specification
> TS 34.108: Common test environment for UE conformance testing
> TS 34.123-1: UE conformance specification part 1: protocol conformance specification
> TS 34.123-2: UE conformance specification, part 12: ICS Proforma specification
> TS51.010-1: Mobile station conformance specification

3.12   Relevant RAN5 Work items

> WI_T1-06_29
> WI_T1-06_30
> WI_T1-06_13

3.13   Expected Output

The outputs will be in the form of Abstract Test Suites (ATS) and will be delivered in accordance with the RAN5 approved programme. In essence, MCC task 160 will deliver 4 formal releases (at quarterly intervals) of the ATS containing those test cases that have been verified according to PRD R5-12. In between these releases, MCC task 160 will deliver a series of interim working documents that contain the entire suite of test cases i.e. including those that have yet to be verified. This enables the test industry to verify the outstanding test cases within the framework of the extant working ATS.