

**Source: TSG GERAN**

**Title: Terms of Reference for Task 172**

**Agenda item: 8.2**

**Document for:**

Decision	X
Discussion	
Information	

## **O Introduction**

The Terms of Reference included in this document have been prepared by TSG GERAN (as GP-041943) and are now submitted for PCG approval.

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# **MCC TASK 172 Terms of Reference**

**For 2004/2005**

## **Producing TTCN GERAN to UTRAN Abstract Test Suite (ATS)**

### **1. Reasons for proposing the Task**

1.1 The MCC task 172 comes under the responsibility of 3GPP TSG GERAN for the maintenance and further development of TTCN GERAN to UTRAN Abstract Test Suite (ATS). The team consists of the skilled protocol / TTCN experts.

1.2 The Global Certification Forum (GCF), a partnership between network operators and terminal manufacturers, identifies the test cases required and the priority in terms of batches. Some of these inter-RAT test cases are included in Batch #4 of the GCF priority list for certification of UMTS terminals. One of the dependencies for GCF validation of test cases is the availability of 3GPP approved test cases. As GCF validation is about to start on Batch #3 test cases it is important an approval process is defined for these inter-RAT test cases in Batch #4.

1.3. The task will include the implementing of the CRs into the TTCN after each GERAN meeting and co-ordination of any UTRAN prose changes affecting these test cases. This work will need to be done by a dedicated STF (Specialist Task Force). ETSI MCC will provide the management and the leadership of such STF.

1.4 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 51..010-5. 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 xxx needs resourcing.

## 2. Consequences if not agreed

All test cases produced by MCC task 172 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 172 not be approved, 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 and test 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 GERAN to UTRAN Abstract Test Suite (ATS).

**3.2 Reference Technical Body:** 3GPP TSG GERAN

**3.3 Other interested Technical Bodies:** 3GPP TSG GERAN WG3, 3GPP TSG-T WG1

**3.4 Target dates for the start of work:** Sept 04

**3.5 Target dates for the conclusion of the work:** Dec 06

### 3.6 Resources required

#### 3.6.1 Necessary manpower

It is estimated that the resource requirement, in terms of TTCN experts, over the period 2004 – 2006 will be 7.5 man months with the following spread:

Year	Resource	Status
2004	2,5 man-month	Required immediately
2005	3 man-months	To be factored into the 3GPP budget
2006	2 man-months	Anticipated but to be reviewed in 2005

#### 3.6.2 Estimated costs, additional to the manpower

ETSI hosts the task xxx, takes the leadership of the task force and provide management, logistic 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 and shall have a strong knowledge of the existing GERAN to UTRAN TTCN test cases.

#### 3.6.4 Release and Configuration Manager (RCM)

An RCM role is need with specific duties to control the release of GERAN to UTRAN TTCN ATS as well as coordinate the verification activity between the test industry and MCC TASK xxx.

Based on the close co-operation required between GERAN and T1, it is anticipated that the role of an RCM will shared between STF 172 and STF 160.

### **3.7 Scope of Terms of Reference**

**3.7.1** The technical areas of the MCC task 172 cover the conformance test specifications for GERAN to UTRAN Abstract Test Suite (ATS). The UE handover and interoperability between 2G to 3G belong to the area.

The task force is responsible for the development and maintenance of GERAN to UTRAN 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 R99.

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.

In addition, the task force is responsible to implement UTRAN prose changes affecting these test cases; basically do simple updating because of updating of the UTRAN test library.

### **3.8 Context of the tasks in relation to TS 51.010**

**3.8.1** Part One. The first part of TS 51.010 specifies the test structure, test purposes and give each test case a prose description.

**3.8.2** Part Two. The second part specifies Protocol Implementation Conformance Statement (PICS) proforma for Global System for Mobile Stations (MSs), operating in the 450 MHz, 480 MHz, 700 MHz, 750 MHz, 850 MHz, 900 MHz, 1 800 MHz and 1 900 MHz frequency band (GSM 400, GSM 700, GSM 750, GSM 850, GSM 900, DCS 1 800 and PCS 1 900) within the European digital cellular telecommunications system, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [3] and ETS 300 406 [1].

**3.8.3** Part Five. The fifth part contains the ATS' themselves.

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

Changes in TS 34.123-3 TSG-T WG1 and the stability of the relevant core specifications of TWG GERAN WG1 and WG2 will have impact on the progress of the Task.

### **3.10 Base documents and their availability**

TS 34.123-3: User Equipment (UE) conformance specification; Part 3: Abstract Test Suite (ATS),  
TS 51.010-1: Mobile station conformance specification

### **3.11 Work items of the 3GPP Work Programme for which the Task is required**

### **3.12 Expected Output**

Outputs will be delivered in accordance with the GERAN approved programme. In essence, MCC task

172 will deliver 5 formal releases (at regular intervals) of the ATS' containing those test cases that have been verified. This enables the test industry to verify the outstanding test cases within the framework of the extant working ATs. A summary of the expected formal deliveries is shown below:

TS 51.010-5: GERAN to UTRAN Abstract Test Suite (ATS)