

ETSI TS 151 010-5 V10.0.0 (2012-03)



Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 5: Inter-Radio-Access-Technology (RAT) (GERAN /
UTRAN) interaction Abstract Test Suite (ATS)
(3GPP TS 51.010-5 version 10.0.0 Release 10)**



Reference

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Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <http://webapp.etsi.org/key/queryform.asp>.

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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The present document describes the technical characteristics and methods of test for Mobile Stations (MSs), operating in the different frequency bands within the digital cellular telecommunications system.

The present document corresponds to technical specification 3GPP TS 51.010-5, covering the Digital cellular telecommunications system (3GPP Release 99, Release 4, Release 5, Release 6, Release 7 and Release 8) version 8.x.x.

The present document, contains Tree and Tabular Combined Notation (TTCN) for Mobile Station (MS) Inter-RAT (GERAN to UTRAN) service conformity specifications, for which Mobile Stations, within the digital cellular telecommunications system (3GPP Release 99, Release 4, Release 5, Release 6, Release 7 and Release 8), are tested for compliance.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

Introduction

The present document describes the technical characteristics and methods of test for Mobile Stations (MSs) within the digital cellular telecommunications system.

The graphical form ATS

The electronic form of the graphical representation (TTCN.GR format) corresponding to the ATS for Layer 3, is contained in the Adobe Portable Document Format™ file IR_XXX.pdf where XXX corresponds to the current version.

The machine processable ATS

The electronic form of the machine processable file (TTCN.MP format) corresponding to the ATS for Layer 3, is contained in the file IR_XXX.mp where XXX corresponds to the current version.

The present document is part 5 of a multi-part 3GPP TS covering the digital cellular telecommunications system; Mobile Station (MS) conformance specification, as identified below:

- Part 1: Conformance specification
Reference: 3GPP TS 51.010-1.
- Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification.
Reference: 3GPP TS 51.010-2.

Part 3: Layer 3 (L3) Abstract Test Suite (ATS).
Reference: 3GPP TS 51.010-3.

Part 4: SIM Application Toolkit conformance specification
Reference: 3GPP TS 11.10-4.

Part 5: Inter-RAT (GERAN to UTRAN) Abstract Test Suite (ATS)
Reference: 3GPP TS 51.010-5.

Part 7: Location Services (LCS) test scenarios and assistance data.
Reference: 3GPP TS 51.010-7.

NOTE: At the present time, part 4 is 3GPP TS 11.10.

1 Scope

The present document specifies the Abstract Test Suites (ATS) and partial IXIT proforma for the Network Layer (Layer 3) at the mobile radio interface of the GSM/3GPP mobile stations (MS) conforming to the TSs for Layer 3, for the digital cellular telecommunications systems.

The present document is valid for MS implemented according to R99, 3GPP Release 4, Release 5, Release 6, Release 7 or Release 8.

The ISO standards for the methodology of conformance testing and the TTCN language are used as the basis for the test specifications.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 51.010-1: "Mobile Station (MS) conformance specification; Part 1: Conformance Specification".
- [2] 3GPP TS 51.010-2: "Mobile Station (MS) conformance specification; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ETSI TR 101 666 (V1.0.0): "Information technology; Open Systems Interconnection Conformance testing methodology and framework; The Tree and Tabular Combined Notation (TTCN) (Ed. 2++)".
- [4] 3GPP TS 34.123-3: "User Equipment (UE) conformance specification; Part 3: Abstract Test Suites (ATSs)".
- [5] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".
- [6] 3GPP TS 04.18: "Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol".
- [7] 3GPP TS 25.331: "Radio Resource Control (RRC) protocol specification"
- [8] 3GPP TS 34.108: "Common test environments for User Equipment (UE) conformance testing".
- [9] ISO/IEC 9646 (all parts): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework".
- [10] ISO/IEC 8824 (all parts): "Information technology - Abstract Syntax Notation One (ASN.1)".
- [11] ISO/IEC 8825 (all parts): "Information technology - ASN.1 encoding rules".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TS 34.123-3 [4] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TS 51.010-1 [1], 3GPP TS 24.008 [5], 3GPP TS 04.18 [6], 3GPP TS 25.331[7] and TR 101 666 [3] apply.

4 ATS Structure

The modular TTCN approach is used for the development of the 3GPP ATS specification work. Four modules, BasicM, RRC_M, M_RAT_HO_GERAN_M and L3M are installed. Please refer to 3GPP TS 34.123-3 [4] for details of the modular structure.

5 Abstract test method and test configurations

Please refer to 3GPP TS 34.123-3 [4].

6 Specific Test Suite Operations for InterRAT GERAN to UTRAN Handover testing

Table 1: TSO definitions for InterRAT GERAN to UTRAN testing

| TSO Name | Description |
|------------------------------|--|
| o_GSM_ToUTRANHO_PER_Encoding | <p>Type of the result: OCTETSTRING</p> <p>Parameters: p_Msg : HandoverToUTRANCommand p_Len : O1</p> <p>Description: It returns the aligned PER encoding of the input downlink message p_Msg (with "Encoder added (1-7) bits padding") of p_Len octets.</p> |
| o_LengthofHO_Cmd | <p>Type of the result: INTEGER</p> <p>Parameters: p_Msg : HandoverToUTRANCommand</p> <p>Description: it returns the no. of octets of the input downlink message p_Msg</p> |

Refer to 34.123-3 [4], clause 8.7 for test suite operations also used in UTRAN based testing.

7 Generic Procedures for GERAN/LTE testing

7.1 GPRS Attach

Refer to 34.123-3 [4], clause 6.10.2.7

7.2 PDP Context 2 Activated

Refer to 51.010-1, clause 40.4.3.15

7.3 U10 Active State

Refer to 51.010-1, clause 40.4.3.22

Annex A (normative): Abstract Test Suites (ATS)

This annex contains the approved ATS which has been produced using the Tree and Tabular Combined Notation (TTCN) according to TR 101 666 [3].

The ATS was developed on a separate TTCN software tool and therefore the TTCN tables are not completely referenced in the table of contents. The ATS contains a test suite overview part which provides additional information and references.

A.1 Version of specification

Table A.1 shows the version of the test specifications which the delivered ATS refers to:

Table A.1: Versions of the test and Core specifications

| | |
|----------------------------|-------------------------------|
| Core specifications | 3GPP TS 44.018 [6] (V9. 8.0) |
| | 3GPP TS 25.331 [7] (V9. 6.0) |
| Test specifications | 3GPP TS 51.010-1 [1] (V9.9.0) |
| | 3GPP TS 51.010-2 [2] (V9.9.0) |
| | 3GPP TS 34.123-3 [4] (V9.2.0) |
| | 3GPP TS 34.108 [8] (Va.0.0) |

A.2 IR_G ATS

The approved test cases are listed below.

Number of TC Executions

This column indicates the recommended number of TC executions. In case this recommended number is less than the number of TC executions imposed by the individual TC applicability, this column also indicates the preferred domain for testing. The different entries shall be read as follows:

- CS - TC is recommended to execute in CS domain
- CS+PS - TC is recommended to execute CS+PS with pc_CS and pc_PS set to TRUE
- PS - TC is recommended to execute in PS domain

Note: This definition is taken from 34.123-2, clause 4.

Table A.2: IR_G TTCN test cases

| Test case | Description | Number of TC Executions (informative) |
|--------------|---|---------------------------------------|
| 20.22.29 | Packet Measurement order procedure / Downlink transfer / Normal case/ 3G cell reselection dedicated parameters | 1 Execution: PS |
| 20.22.29a | Packet Measurement order procedure / Downlink transfer / Normal case/ 3G cell reselection dedicated parameters with GEA2 and UEA2 ciphering | 1 Execution: PS |
| 20.22.29b | Packet Measurement order procedure / Downlink transfer / Normal case/ 3G cell reselection dedicated parameters with GEA3 and UEA2 ciphering | 1 Execution: PS |
| 20.25.2 | Intersystem Cell Reselection/Idle Mode/FDD_Qmin | 1 Execution: CS |
| 20.25.3 | Intersystem Cell Reselection/Idle Mode/FDD_Qoffset | 1 Execution: CS |
| 20.25.4 | Intersystem Cell Reselection/Idle Mode/Qsearch_I | 1 Execution: CS |
| 26.6.11.3 | Classmark interrogation / UTRAN Classmark Change | 1 Execution: CS |
| 26.6.11.4 | Early UTRAN Classmark Sending | 1 Execution: CS |
| 41.5.1.1.1.4 | Uplink TBF establishment with no reallocation of CS resources / Abnormal cases / Inter System to UTRAN Handover Command | 1 Execution: CS + PS |
| 47.3.4.1 | Handover to UTRAN while in DTM / Downlink TBF | 1 Execution: CS + PS |
| 47.3.4.2 | Handover to UTRAN while in DTM / Uplink TBF | 1 Execution: CS + PS |
| 60.1 | Inter system handover to UTRAN/From GSM/Speech/Success | 1 Execution: CS |
| 60.1a | Inter system handover to UTRAN/From GSM/Speech/Success with A5/3 and UEA2/UIA2 ciphering | 1 Execution: CS |
| 60.2a | Inter system handover to UTRAN/From GSM/Data/Same data rate/Success | 1 Execution: CS |
| 60.3a | Inter system handover to UTRAN/From GSM/Data/Data rate upgrading/Success | 1 Execution: CS |
| 60.4 | Inter system handover to UTRAN/From GSM/SDCCH/CC Establishment/Success | 1 Execution: CS |
| 60.5 | Inter system handover to UTRAN/From GSM/Speech/Blind HO/Success | 1 Execution: CS |
| 60.6 | Inter system handover to UTRAN/From GSM/Speech/Failure | 1 Execution: CS |
| 60.10 | Inter system handover to UTRAN/From GSM/Integrity Protection Activation | 1 Execution: CS |

A.2.1 Void

A.2.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (IR_Gv990.MP) which accompanies the present document.

Annex B (normative): Partial IXIT proforma

| |
|---|
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|---|

B.0 Introduction

This partial IXIT proforma contained in the present document is provided for completion, when the related Abstract Test Suite is to be used against the Implementation Under Test (IUT).

Text in *italics* is comments for guidance for the production of a IXIT, and is not to be included in the actual IXIT.

The completed partial IXIT will normally be used in conjunction with the completed ICS, as it adds precision to the information provided by the ICS.

B.1 Parameter values

Refer to 34.123-3 [4], Annex B.

Annex C (normative): Additional information to IXIT

| |
|---|
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|---|

C.1 Identification Summary

Table C.1 is completed by the test laboratory. The item "Contract References" is optional.

Table C.1: Identification Summary

| | |
|----------------------------|--|
| IXIT Reference Number | |
| Test Laboratory Name | |
| Date of Issue | |
| Issued to (name of client) | |
| Contract References | |

C.2 Abstract Test Suite Summary

Table C.2 the test laboratory provides the version number of the protocol specification and the version number of ATS which are used in the conformance testing.

Table C.2: ATS Summary

| | |
|-----------------------------------|-------------------------|
| Protocol Specification | 3GPP TS 24.008 |
| Version of Protocol Specification | |
| TSS & TP Specification | 3GPP TS 51.010-1 |
| Version of TSS & TP Specification | |
| ATS Specification | 3GPP TS 51.010-5 |
| Version of ATS Specification | |
| Abstract Test Method | Distributed Test Method |

C.3 Test Laboratory

C.3.1 Test Laboratory Identification

The test laboratory provides the following information.

Table C.3: Test Laboratory Identification

| | |
|-------------------------|--|
| Name of Test Laboratory | |
| Postal Address | |
| Office address | |
| e-mail address | |
| Telephone Number | |
| FAX Number | |

C.3.2 Accreditation status of the test service

The test laboratory provides the following information.

Table C.4: Accreditation status of the test service

| | |
|-------------------------|--|
| Accreditation status | |
| Accreditation Reference | |

C.3.3 Manager of Test Laboratory

The test laboratory provides the information about the manager of test laboratory in table C.5.

Table C.5: Manager of Test Laboratory

| | |
|------------------------------------|--|
| Name of Manager of Test Laboratory | |
| e-mail address | |
| Telephone Number | |
| FAX Number | |
| E-mail Address | |

C.3.4 Contact person of Test Laboratory

The test laboratory provides the information about the contact person of test laboratory in table C.6.

Table C.6: Contact person of Test Laboratory

| | |
|------------------------------------|--|
| Name of Contact of Test Laboratory | |
| e-mail address | |
| Telephone Number | |
| FAX Number | |
| E-mail Address | |

C.3.5 Means of Testing

In table C.7, the test laboratory provides a statement of conformance of the Means Of Testing (MOT) to the reference standardized ATS, and identifies all restrictions for the test execution required by the MOT beyond those stated in the reference standardized ATS.

Table C.7: Means of Testing

| Means of Testing |
|------------------|
|------------------|

C.3.6 Instructions for Completion

In table C.8, the test laboratory provides any specific instructions necessary for completion and return of the proforma from the client.

Table C.8: Instruction for Completion

| Instructions for Completion |
|-----------------------------|
| |

C.4 Client

C.4.1 Client Identification

The client provides the identification in table C.9.

Table C.9: Client Identification

| | |
|------------------|--|
| Name of Client | |
| Postal Address | |
| Office Address | |
| Telephone Number | |
| FAX Number | |

C.4.2 Client Test Manager

In table C.10 the client provides information about the test manager.

Table C.10: Client Test Manager

| | |
|-----------------------------|--|
| Name of Client Test Manager | |
| Telephone Number | |
| FAX Number | |
| E-mail Address | |

C.4.3 Client Contact person

In table C.11 the client provides information about the test contact person.

Table C.11: Client Contact person

| | |
|-------------------------------|--|
| Name of Client contact person | |
| Telephone Number | |
| FAX Number | |
| E-mail Address | |

C.4.4 Test Facilities Required

In table C.12, the client records the particular facilities required for testing, if a range of facilities is provided by the test laboratory.

Table C.12: Test Facilities Required

| Test Facilities Required |
|--------------------------|
| |

C.5 System Under Test

C.5.1 SUT Information

The client provides information about the SUT in table C.13.

Table C.13: SUT Information

| | |
|---------------------------------|--|
| System Name | |
| System Version | |
| SCS Reference | |
| Machine Configuration | |
| Operating System Identification | |
| IUT Identification | |
| ICS Reference for the IUT | |

C.5.2 Limitations of the SUT

In table C.14, the client provides information explaining if any of the abstract tests cannot be executed.

Table C.14: Limitation of the SUT

| Limitations of the SUT |
|------------------------|
|------------------------|

C.5.3 Environmental Conditions

In table C.15 the client provides information about any tighter environmental conditions for the correct operation of the SUT.

Table C.15: Environmental Conditions

| Environmental Conditions |
|--------------------------|
|--------------------------|

C.6 Ancillary Protocols

This clause is completed by the client in conjunction with the test laboratory.

In the following tables, the client identifies relevant information concerning each ancillary protocol in the SUT other than the IUT itself. One table for one ancillary protocol.

Based on the MOT the test laboratory should create question proforma for each ancillary protocol in the blank space following each table. The information required is dependent on the MOT and the SUT, and covers all the addressing, parameter values, timer values and facilities (relevant to ENs) as defined by the ICS for the ancillary protocol.

C.6.1 Ancillary Protocols 1

Table C.16: Ancillary Protocol 1

| | |
|---------------------------|--------|
| Protocol Name | EN 300 |
| Version number | |
| ICS Reference (optional) | |
| IXIT Reference (optional) | |
| PCTR Reference (optional) | |

C.6.2 Ancillary Protocols 2

Table C.17: Ancillary Protocol 2

| | |
|---------------------------|--------|
| Protocol Name | EN 300 |
| Version number | |
| ICS Reference (optional) | |
| IXIT Reference (optional) | |
| PCTR Reference (optional) | |

C.7 Protocol Layer Information for L3 of Mobile Station

C.7.1 Information provided for test purposes by the MS supplier

Table C.18: Information provided for test purposes by the MS supplier

| Item | Description | Type/Allowed values | Supported Value | Release |
|------|-------------|---------------------|-----------------|---------|
| | | | | |

C.7.2 MMI information

This annex lists MMI command strings which are transmitted from specific GERAN test steps in the TTCN to the SS.

- Please trigger PDP Context Activation Type 2 in UE.
- Please trigger UE to send three SNDCCP PDUs of 500 bytes each on SAPI 11.

C.7.3 Test house specified parameters

Table C.19: Test house specified parameters

| Item | Description | Type/Allowed values | Value chosen | Release |
|------|-------------|---------------------|--------------|---------|
| | | | | |

Annex D (normative): PCTR Proforma

Please refer to 3GPP TS 34.123-3 [4].

Annex E (informative): Guidance on test execution

E.1 InterRAT test execution

The test purpose and the test method of the test cases [60.1 and 60.1a] and [20.22.29, 20.229a and 20.22.29b] are the same. The test cases differ from each other in the ciphering algorithms applied in the UTRAN and GERAN cell. The necessary test coverage is achieved by executing once according to the following:

60.1a, 20.22.29a and 20.22.29b for MS in Rel-7 or later,

60.1, 20.22.29 for MS in R99, Rel-4, Rel-5 and Rel-6.

Annex F (informative): Change history

| TSG # | TSG Doc | CR | Rev | Subject/Comment | Cat | Old | New | WG Doc | Work item |
|----------|-----------|------|-----|--|-----|-------|-------|---------------------------|-----------------------|
| 04/06/04 | | | | Creation of first draft | | | 0.0.0 | GP-041355 | |
| 15/09/04 | | | | Updated with comments | | 0.0.0 | 0.1.0 | - | |
| 26/10/04 | | | | Editorial changes to present to GERAN WG3 #22 | | 0.1.0 | 0.2.0 | GP-042335 | |
| 11/11/04 | | | | Raised to version 2.0.0 for presentation to GERAN #22 for approval | | 0.2.0 | 2.0.0 | GP-042795 | |
| 12/11/04 | | | | Approved at GERAN Plenary #22 | | 2.0.0 | 6.0.0 | | |
| GP-23 | GP-050008 | 0001 | - | Update of verified Test Cases for Inter-RAT | F | 6.0.0 | 6.1.0 | GP-050008 | ALTERE/Inter-RAT |
| GP-24 | GP-050758 | 0002 | - | Summary of regression errors for IR_G_wk09. | F | 6.1.0 | 6.2.0 | GP-050758 | N/A |
| GP-24 | GP-050759 | 0003 | - | Corrections to approved IR_G test cases 26.6.11.3 and 26.6.11.4. | F | 6.1.0 | 6.2.0 | GP-050759 | N/A |
| GP-24 | GP-050760 | 0004 | - | Corrections to approved IR_G test case 60.1 to handle the path for Handover To UTRAN for MS supporting GSM HR speech call. | F | 6.1.0 | 6.2.0 | GP-050760 | N/A |
| GP-24 | GP-050761 | 0005 | - | Addition of GCF P4 test cases 60.4 to IR_G ATS. | B | 6.1.0 | 6.2.0 | GP-050761 | N/A |
| GP-24 | GP-050762 | 0006 | - | Addition of WI-12 test case 60.10 to IR_G ATS. | B | 6.1.0 | 6.2.0 | GP-050762 | N/A |
| GP-24 | GP-050763 | 0007 | - | Addition of WI-12 test case 20.25.3 to IR_G ATS. | B | 6.1.0 | 6.2.0 | GP-050763 | N/A |
| GP-24 | GP-050764 | 0008 | - | Addition of WI-12 test cases 20.25.4 to IR_G ATS. | B | 6.1.0 | 6.2.0 | GP-050764 | N/A |
| GP-24 | GP-050888 | 0009 | - | Add new verified TTCN test cases in Annex A | F | 6.1.0 | 6.2.0 | GP-050888 | ALTERE/Inter-RAT |
| GP-25 | GP-051223 | 0010 | - | Addition of new verified TTCN test cases | F | 6.2.0 | 6.3.0 | GP-051223 | Inter_System_Handover |
| GP-25 | GP-051226 | 0011 | - | Addition of WI-12 test case 20.25.2 to IR_G ATS v5.0.0 | B | 6.2.0 | 6.3.0 | GP-051226 | Inter_System_Handover |
| GP-25 | GP-051227 | 0012 | - | Addition of WI-10 P4 test case 60.2a to IR_G ATS V3.8.0. | B | 6.2.0 | 6.3.0 | GP-051227 | Inter_System_Handover |
| GP-25 | GP-051228 | 0013 | - | Summary of regression errors in the IR_G wk09 ATS. | F | 6.2.0 | 6.3.0 | GP-051228 | Inter_System_Handover |
| GP-25 | GP-051229 | 0014 | - | Correction to retrieve correct frame number from G_CL1_ComingFN_REQ ASP | F | 6.2.0 | 6.3.0 | GP-051229 | Inter_System_Handover |
| GP-25 | GP-051230 | 0015 | - | Correction to enable ciphering for 2G to 3G handover for the test case 60.1 | F | 6.2.0 | 6.3.0 | GP-051230 | Inter_System_Handover |
| GP-25 | GP-051231 | 0016 | - | Correction to Approved RRC Package 4 TC 26.6.11.4 | F | 6.2.0 | 6.3.0 | GP-051231 | Inter_System_Handover |
| GP-25 | GP-051232 | 0017 | - | Summary of regression errors for IR_G_r3_wk17. | F | 6.2.0 | 6.3.0 | GP-051232 | Inter_System_Handover |
| GP-25 | GP-051233 | 0018 | - | Summary of regression errors in the IR_G wk17 ATS. | F | 6.2.0 | 6.3.0 | GP-051233 | Inter_System_Handover |
| GP-25 | GP-051234 | 0019 | - | Corrections to approved IR_G test cases 26.6.11.3 | F | 6.2.0 | 6.3.0 | GP-051234 | Inter_System_Handover |
| GP-25 | GP-051235 | 0020 | - | Correction to the approved IR_G test cases (60.x series and 20.xseries) | F | 6.2.0 | 6.3.0 | GP-051235 | Inter_System_Handover |
| GP-26 | GP-051859 | 0021 | - | Addition of new verified TTCN test cases | F | 6.3.0 | 6.4.0 | GP-051859 | Inter_System_Handover |
| GP-26 | GP-051862 | 0022 | - | Addition of WI-012 test case 20.22.29 to IR_G ATS 6.3.0. | B | 6.3.0 | 6.4.0 | GP-051862 | Inter_System_Handover |
| GP-26 | GP-051863 | 0023 | - | Additional changes to test case 60.3a | B | 6.3.0 | 6.4.0 | GP-051863 | Inter_System_Handover |

| TSG # | TSG Doc | CR | Rev | Subject/Comment | Cat | Old | New | WG Doc | Work item |
|-------|-----------|------|-----|--|-----|-------|-------|-----------|-----------------------|
| GP-27 | GP-052504 | 0024 | - | Update for latest version of TTCN | F | 6.4.0 | 6.5.0 | GP-052504 | Inter_System_Handover |
| GP-27 | GP-052506 | 0025 | - | Correction of approved WI-012 test case 20.22.29. | F | 6.4.0 | 6.5.0 | GP-052506 | TEI_Test |
| GP-27 | GP-052507 | 0026 | - | Corrections to approved GCF WI-10 P4 test cases 60.1 and 60.3a. | F | 6.4.0 | 6.5.0 | GP-052507 | TEI_Test |
| GP-27 | GP-052508 | 0027 | - | Corrections to approved IR_G test case 60.3a | F | 6.4.0 | 6.5.0 | GP-052508 | TEI_Test |
| GP-27 | GP-052509 | 0028 | - | Correction to the IR_G test case 60.6 | F | 6.4.0 | 6.5.0 | GP-052509 | TEI_Test |
| GP-27 | GP-052510 | 0029 | - | Summary of regression errors in the wk36 IR_G ATS. | F | 6.4.0 | 6.5.0 | GP-052510 | TEI_Test |
| GP-27 | GP-052511 | 0030 | - | Summary of regression results for wk36 version of IR_G ATS V6.3.0 | F | 6.4.0 | 6.5.0 | GP-052511 | TEI_Test |
| GP-27 | GP-052512 | 0031 | - | Summary of regression errors in the wk38 IR_G ATS | F | 6.4.0 | 6.5.0 | GP-052512 | TEI_Test |
| GP-27 | GP-052513 | 0032 | - | Summary of regression errors in the wk38 ATS. | F | 6.4.0 | 6.5.0 | GP-052513 | TEI_Test |
| GP-28 | GP-060152 | 0034 | - | Summary of regression errors in the wk42 ATS. | F | 6.5.0 | 6.6.0 | GP-060152 | Inter_System_Handover |
| GP-28 | GP-060153 | 0035 | - | Correction to IR_G_wk47 test case 60.1 | F | 6.5.0 | 6.6.0 | GP-060153 | Inter_System_Handover |
| GP-28 | GP-060184 | 0036 | - | Summary of regression errors in the IR_G_wk49 ATS | F | 6.5.0 | 6.6.0 | GP-060184 | Inter_System_Handover |
| GP-28 | GP-060423 | 0033 | 1 | Update for latest version of TTCN (convert to version 7) | F | 6.5.0 | 7.0.0 | GP-060423 | Inter_System_Handover |
| GP-29 | GP-060549 | 0037 | - | Update for latest version of TTCN | F | 7.0.0 | 7.1.0 | GP-060549 | Inter_System_Handover |
| GP-29 | GP-060551 | 0038 | - | Correction to approved GCF WI-12/1 test case 20.25.3 | F | 7.0.0 | 7.1.0 | GP-060551 | Inter_System_Handover |
| GP-29 | GP-060552 | 0039 | - | Summary of regression errors in wk03 IR_G ATS. | F | 7.0.0 | 7.1.0 | GP-060552 | Inter_System_Handover |
| GP-29 | GP-060553 | 0040 | - | Summary of regression errors in wk06 IR_G ATS. | F | 7.0.0 | 7.1.0 | GP-060553 | Inter_System_Handover |
| GP-30 | GP-061012 | 0041 | - | Update for the latest version of TTCN | F | 7.1.0 | 7.2.0 | GP-061012 | TEI |
| GP-30 | GP-061014 | 0042 | - | Correction to the IR_G test case 26.6.11.3 and 26.6.11.4 | F | 7.1.0 | 7.2.0 | GP-061014 | TEI |
| GP-30 | GP-061015 | 0043 | - | Correction of approved IR_G test cases 60.1 and 60.3a | F | 7.1.0 | 7.2.0 | GP-061015 | TEI |
| GP-30 | GP-061016 | 0044 | - | Correction to IR_G test case 20.22.29 | F | 7.1.0 | 7.2.0 | GP-061016 | TEI |
| GP-30 | GP-061017 | 0045 | - | Addition of GCF WI17 Inter-RAT Dual Transfer Mode test case 41.5.1.1.1.4 | B | 7.1.0 | 7.2.0 | GP-061017 | TEI |
| GP-31 | GP-061539 | 0046 | - | Update for the latest version of TTCN | F | 7.2.0 | 7.3.0 | GP-061539 | TEI |
| GP-31 | GP-061541 | 0047 | - | Correction to the IR_G test cases | F | 7.2.0 | 7.3.0 | GP-061541 | TEI |
| GP-31 | GP-061542 | 0048 | - | Summary of regression error in wk27 GCF WI-10 and GCF WI-12 IR_G ATS | F | 7.2.0 | 7.3.0 | GP-061542 | TEI |
| GP-31 | GP-061543 | 0049 | - | Correction to the IR_G test cases for the activation time of the UTRAN physical channels | F | 7.2.0 | 7.3.0 | GP-061543 | TEI |
| GP-31 | GP-061544 | 0050 | - | Correction to the IR_G test case 20.22.29 | F | 7.2.0 | 7.3.0 | GP-061544 | TEI |
| GP-32 | GP-062001 | 0051 | - | Update for the latest version of TTCN | F | 7.3.0 | 7.4.0 | GP-062001 | TEI |
| GP-32 | GP-062002 | 0052 | - | Corrections to approved GCF WI-17 DTM test case 41.5.1.1.1.4 in IR_G wk34 ATS | F | 7.3.0 | 7.4.0 | GP-062002 | TEI |
| GP-32 | GP-062003 | 0053 | - | Corrections to approved GCF WI-17 DTM test case 41.5.1.1.1.4 in IR_G wk38 ATS | F | 7.3.0 | 7.4.0 | GP-062003 | TEI |
| GP-32 | GP-062004 | 0054 | - | Correction to GCF WI-10 IR-G Test Case 60.1 | F | 7.3.0 | 7.4.0 | GP-062004 | TEI |
| GP-33 | GP-070023 | 0055 | - | Update for the latest version of TTCN | F | 7.4.0 | 7.5.0 | GP-070023 | TEI |
| GP-33 | GP-070025 | 0056 | - | Corrections to approved GCF WI-17 DTM test case 41.5.1.1.1.4 in IR_G wk47 ATS | F | 7.4.0 | 7.5.0 | GP-070025 | TEI |
| GP-33 | GP-070026 | 0057 | - | Addition of GCF WI17 test case 47.3.4.1 to IR_G ATS v 7.3.0 | B | 7.4.0 | 7.5.0 | GP-070026 | TEI |
| GP-33 | GP-070027 | 0058 | - | Addition of GCF WI17 Inter-RAT Dual Transfer Mode test case 47.3.4.2 to IR_G ATS v 7.3.0 | B | 7.4.0 | 7.5.0 | GP-070027 | TEI |
| GP-33 | GP-070028 | 0059 | - | Summary of regression error in wk49 IR_G ATS | F | 7.4.0 | 7.5.0 | GP-070028 | TEI |
| GP-33 | GP-070029 | 0060 | - | Correction to IR_G cell reselection test cases for SIB configuration | F | 7.4.0 | 7.5.0 | GP-070029 | TEI |
| GP-34 | GP-070578 | 0061 | - | Addition of TC Execution column and update for the latest version of TTCN | F | 7.5.0 | 7.6.0 | GP-070578 | TEI |
| GP-34 | GP-070581 | 0063 | - | Correction to IR_G test cases 26.6.11.3 and 26.6.11.4 | F | 7.5.0 | 7.6.0 | GP-070581 | TEI |
| GP-34 | GP-070582 | 0064 | - | Correction to IR_G test case 20.22.29 | F | 7.5.0 | 7.6.0 | GP-070582 | TEI |

| TSG # | TSG Doc | CR | Rev | Subject/Comment | Cat | Old | New | WG Doc | Work item |
|-------|---------------------------|------|-----|---|-----|--------|--------|---------------------------|-----------|
| GP-34 | GP-070583 | 0065 | - | Correction to the applicability of the IR_G test cases 60.2a and 60.3a | F | 7.5.0 | 7.6.0 | GP-070583 | TEI |
| GP-34 | GP-070584 | 0066 | - | Correction for GCF WI-10 InterSystem Test Cases 26.6.11.3 and 26.6.11.4 | F | 7.5.0 | 7.6.0 | GP-070584 | TEI |
| GP-34 | GP-070585 | 0067 | - | Correction to the IR_G DTM test cases 47.3.4.1 and 47.3.4.2. | F | 7.5.0 | 7.6.0 | GP-070585 | TEI |
| GP-34 | GP-070598 | 0068 | - | Correction to GCF IR_G test cases | F | 7.5.0 | 7.6.0 | GP-070598 | TEI |
| GP-35 | GP-071107 | 0069 | - | Add the word "informative" for TC executions and update for the latest version of TTCN | F | 7.6.0 | 7.7.0 | GP-071107 | TEI |
| GP-35 | GP-071109 | 0070 | - | Corrections to IR_G test cases | F | 7.6.0 | 7.7.0 | GP-071109 | TEI |
| GP-36 | GP-071589 | 0071 | - | Correction to a PIXIT and update for the latest version of TTCN | F | 7.7.0 | 7.8.0 | GP-071589 | TEI |
| GP-36 | GP-071591 | 0072 | - | TTCN Correction in IR_G test case 20.25.3 | F | 7.7.0 | 7.8.0 | GP-071591 | TEI |
| GP-37 | GP-080015 | 0073 | - | Update for the latest version of TTCN | F | 7.8.0 | 7.9.0 | GP-080015 | TEI |
| GP-38 | GP-080759 | 0074 | - | CR 51.010-5-0074 rev 1 Update for the latest version of TTCN (Rel-7) | F | 7.9.0 | 7.10.0 | GP-080759 | TEI |
| GP-38 | GP-080460 | 0075 | - | CR 51.010-5-0075 Summary of regression errors in wk10 IR_G ATS (Rel-7) | F | 7.9.0 | 7.10.0 | GP-080460 | TEI |
| GP-39 | GP-080977 | 0076 | - | CR 51.010-5-0076 Update for the latest version of TTCN (Rel-7) | F | 7.10.0 | 7.11.0 | GP-080977 | TEI |
| GP-39 | GP-080981 | 0077 | - | CR 51.010-5-0077 Correction to the preamble used for IR_G Test cases (Rel-7) | F | 7.10.0 | 7.11.0 | GP-080981 | TEI |
| GP-39 | GP-080982 | 0078 | - | CR 51.010-5-0078 Correction to IR_G Test case 60.6 (Rel-7) | F | 7.10.0 | 7.11.0 | GP-080982 | TEI |
| GP-40 | GP-081470 | 0079 | - | CR 51.010-5-0079 Update for the latest version of TTCN | F | 7.11.0 | 7.12.0 | GP-081470 | TEI |
| | | | | Upgraded to Rel-8 without tech change | | 7.12.0 | 8.0.0 | - | |
| | | | | TTCN and ASN.1 added | | 8.0.0 | 8.0.1 | - | |
| GP-41 | GP-090016 | 0081 | - | CR 51.010-5-0081 Update for the latest version of TTCN | B | 8.0.1 | 8.1.0 | GP-090016 | TEI |
| GP-41 | GP-090396 | 0080 | 1 | Update of TS 51.010-5-0080 from Rel-7 to Rel-8 (Release 7) | B | 8.0.1 | 8.1.0 | GP-090396 | TEI |
| GP-42 | GP-090579 | 0082 | - | CR 51.010-5-0082 Update for the latest version of TTCN | B | 8.1.0 | 8.2.0 | GP-090579 | TEI |
| GP-42 | GP-090581 | 0083 | - | CR 51.010-5-0083 Correction to the IR_G test cases 60.2a and 60.3a | B | 8.1.0 | 8.2.0 | GP-090581 | TEI |
| GP-43 | GP-091205 | 0084 | - | CR 51.010-5-0084 Update for the latest version of TTCN | B | 8.2.0 | 8.3.0 | GP-091205 | TEI8 |
| GP-43 | GP-091206 | 0085 | - | CR 51.010-5-0085 GCF WI-010: Adaptation to TSO o_P_CheckClassmark3 for Rel8 | B | 8.2.0 | 8.3.0 | GP-091206 | TEI8 |
| GP-44 | GP-091863 | 0086 | - | CR 51.010-5-0086 Update for the latest version of TTCN | F | 8.3.0 | 9.0.0 | GP-091863 | TEI |
| GP-44 | GP-091865 | 0087 | - | CR 51.010-5-0087 Correction to ciphering configuration for the IR_G test cases | F | 8.3.0 | 9.0.0 | GP-091865 | TEI |
| GP-44 | GP-091866 | 0088 | - | CR 51.010-5-0088 Correction to WK37 IR_G test cases (1) | F | 8.3.0 | 9.0.0 | GP-091866 | TEI |
| GP-44 | GP-091867 | 0089 | - | CR 51.010-5-0089 Correction to WK37 IR_G test cases (2) | F | 8.3.0 | 9.0.0 | GP-091867 | TEI |
| GP-44 | GP-091868 | 0090 | - | CR 51.010-5-0090 Addition of GCF WI 101 Rel-7 Snow 3G InterRAT test case 20.22.29b | B | 8.3.0 | 9.0.0 | GP-091868 | TEI7 |
| GP-44 | GP-091869 | 0091 | - | CR 51.010-5-0091 Addition of GCF WI 101 Rel-7 Snow 3G InterRAT test case 20.22.29a | B | 8.3.0 | 9.0.0 | GP-091869 | TEI7 |
| GP-44 | GP-091870 | 0092 | - | CR 51.010-5-0092 Addition of GCF WI 101 Rel-7 Snow 3G InterRAT test case 60.1a | B | 8.3.0 | 9.0.0 | GP-091870 | TEI7 |
| - | - | - | - | Correction in history table | - | 9.0.0 | 9.0.1 | - | - |
| GP-45 | GP-100500 | 0093 | 1 | CR 51.010-5-0093 Formal closing of 51.010-5 V8.3.0 | B | 9.0.1 | 9.1.0 | GP-100500 | TEI8 |
| GP-46 | GP-100651 | 0094 | - | CR 51.010-5-0094 Update for the latest version of TTCN | F | 9.1.0 | 9.2.0 | GP-100651 | TEI |
| GP-46 | GP-100655 | 0095 | - | CR 51.010-5-0095 Correction to TTCN for IR_G test cases 20.22.29a and 20.22.29b | F | 9.1.0 | 9.2.0 | GP-100655 | TEI |
| GP-46 | GP-100656 | 0096 | - | CR 51.010-5-0096 Adaptation to TSO o_P_CheckClassmark3 due to changes mentioned in prose CR GP-100534 | F | 9.1.0 | 9.2.0 | GP-100656 | TEI |
| GP-46 | GP-100657 | 0097 | - | CR 51.010-5-0097 Correction to WK10 | F | 9.1.0 | 9.2.0 | GP-100657 | TEI |

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|-------|-----------|------|-----|--|-----|-------|--------|-----------|----------------|
| | | | | IR_G test cases | | | | | |
| GP-46 | GP-100658 | 0098 | - | CR 51.010-5-0098 Correction to test case 60.1a | F | 9.1.0 | 9.2.0 | GP-100658 | TEI |
| GP-47 | GP-101097 | 0100 | - | CR 51.010-5-0100 Correction to GCF WI-010 IR_G test cases | F | 9.2.0 | 9.3.0 | GP-101097 | TEI_Test |
| GP-47 | GP-101098 | 0101 | - | CR 51.010-5-0101 Correction to the IR_G Test Suite | F | 9.2.0 | 9.3.0 | GP-101098 | TEI_Test |
| GP-47 | GP-101530 | 0099 | 1 | CR 51.010-5-0099 Update for the latest version of TTCN | F | 9.2.0 | 9.3.0 | GP-101530 | TEI_Test |
| GP-47 | GP-101574 | 0102 | 1 | CR 51.010-5-0102 Addition of Part 7 | F | 9.2.0 | 9.3.0 | GP-101574 | AGNSSTP-MStest |
| GP-48 | GP-101672 | 0103 | - | CR 51.010-5-0103 Update for the latest version of TTCN | F | 9.3.0 | 9.4.0 | GP-101672 | TEI_Test |
| GP-48 | GP-101673 | 0104 | - | CR 51.010-5-0104 Correction to test case 20.25.2, 20.25.3, 20.25.4 | F | 9.3.0 | 9.4.0 | GP-101673 | TEI_Test |
| GP-49 | GP-110058 | 0105 | - | CR 51.010-5-0105 Update for the latest version of TTCN | F | 9.4.0 | 9.5.0 | GP-110058 | TEI_Test |
| GP-49 | GP-110068 | 0106 | - | CR 51.010-5-0106 Correction to the IR_G Test Suite | F | 9.4.0 | 9.5.0 | GP-110068 | TEI_Test |
| GP-50 | GP-110838 | 0107 | 1 | CR 51.010-5-0107 Update for the latest version of TTCN | F | 9.5.0 | 9.6.0 | GP-110838 | TEI_Test |
| GP-51 | GP-111043 | 0108 | - | CR 51.010-5-0108 Update for the latest version of TTCN | F | 9.6.0 | 9.7.0 | GP-111043 | TEI_Test |
| GP-51 | GP-111044 | 0109 | - | CR 51.010-5-0109 Correction to the test cases 26.6.11.3 and 26.6.11.4 | F | 9.6.0 | 9.7.0 | GP-111044 | TEI_Test |
| GP-52 | GP-111501 | 0110 | | CR 51.010-5-0110 Update for the latest version of TTCN | F | 9.7.0 | 9.8.0 | GP-111501 | TEI_Test |
| GP-53 | GP-120029 | 0111 | - | CR 51.010-5-0111 Update for the latest version of TTCN | F | 9.8.0 | 9.9.0 | GP-120029 | TEI_Test |
| GP-53 | GP-120030 | 0112 | - | CR 51.010-5-0112 Correction to test case 26.6.11.3, 26.6.11.4 | F | 9.8.0 | 9.9.0 | GP-120030 | TEI_Test |
| GP-53 | - | - | - | Updated to Rel-10 with no change as a consequence of upgrade of 51.010-1 and 51.010-2 to Rel-10. | - | 9.9.0 | 10.0.0 | - | - |

History

| Document history | | |
|-------------------------|------------|-------------|
| V10.0.0 | March 2012 | Publication |
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