

# ETSI TS 151 010-5 V7.12.1 (2009-01)

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*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 7.12.1 Release 7)**

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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 3<sup>rd</sup> 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 and Release 7) version 7.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 and Release 7), 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.
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## 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.**

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

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# 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 or Release 7.

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

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# 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><b>Type of the result:</b> OCTETSTRING</p> <p><b>Parameters:</b>            p_Msg : HandoverToUTRANCommand            p_Len : O1</p> <p><b>Description:</b>            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_P_CheckClassmark3	<p><b>Type of the result:</b> BOOLEAN</p> <p><b>Parameters:</b>            p_FromUE : MSCLSMK3;            p_FDD, p_TDD, p_P_GSM_900_BAND, p_E_GSM_900_BAND: BOOLEAN            p_R_GSM_900_BAND, p_DCS_1800_BAND, p_PCS_1900_BAND: BOOLEAN            p_GSM_450_BAND, p_GSM_480_BAND, p_GSM_700_BAND: BOOLEAN            p_GSM_850_BAND, p_TypeGSMClass2, p_TypeGSMClass3 : BOOLEAN            p_TypeGSMClass4, p_TypeGSMClass5, p_TypeDCSClass1:BOOLEAN            p_TypeDCSClass2, p_TypeDCSClass3, p_TypePCSClass1: BOOLEAN            p_TypePCSClass2, p_TypePCSClass3, p_TypeGSM850Class2: BOOLEAN            p_TypeGSM850Class3, p_TypeGSM850Class4, p_TypeGSM850Class5, BOOLEAN            p_DTM_Multislotclass5, p_DTM_Multislotclass9, p_DTM_SingleSlotAllocation : BOOLEAN            p_EOTD_Assist, p_A_GPS_Assist, p_A_GPS_Based, p_Conv_GPS : BOOLEAN            p_EOTD_Based, p_GERANFeatPackage1, p_GERANFeatPackage2: BOOLEAN            p_GERANluMode, p_DTMEnhancCap, p_TAOffset : BOOLEAN            p_MultiSlotClass, p_EGPRS_MultiSlotClass : B5; p_SMS_Value, p_SM_Value : B4            p_GSM400_RadioCapability, p_T400_RadioCapability, p_710_RadioCapability,            p_T810_RadioCapability, p_T900_RadioCapability : B4</p>

p\_RGSM\_RadioCapability, p\_DTMGPRSHighMultiSlotClass : B3  
 p\_DTMEGPRSHighMultiSlotClass, p\_MultislotCapDIDualCarrier : B3  
 p\_DTM\_EGPRS\_MultiSlotSubClass, p\_EDGEPrCap1, p\_EDGEPrCap2 : B2  
 p\_ExtDTM\_MultiSlotClass, p\_ExtDTM\_EGPRS\_MultiSlotClass, p\_HighMultiSlotCap : B2  
 p\_GMSKPowerProfile, p\_8PSKPowerProfile, p\_TGSM400Support : B2  
 p\_DLAdvRxPerformance : B2  
 p\_MS\_ClsmkA5\_4, p\_MS\_ClsmkA5\_5, p\_MS\_ClsmkA5\_6, p\_MS\_ClsmkA5\_7 : B1  
 p\_CDMA2000, p\_ExtMeasCap, p\_ModulationCapability, p\_UCS2Treatment : B1  
 p\_RptACCHCap, p\_CipherModeSetDTM, p\_AddPositionCap : B1

**Description**

This is used when UE sends the MSCLSMK3 PDU in CLASSMARK CHANGE

To check each bit of the received octetstring from the UE against the CSN.1 format constraint.

Please Note: Due to the shared radio frequency channel numbers between DCS 1800 and PCS 1900, even if both p\_DCS\_1800\_BAND and p\_PCS\_1900\_BAND are set to TRUE, the UE can only ever indicate support for one of these bands.

The format of the Classmark3 IE is as follows:

```

<Classmark 3 Value part> ::=
  < spare bit >
  {
    < Multiband supported : { 000 } >
      < A5 bits >
  |
    < Multiband supported : { 101 | 110 } >
      < A5 bits >
      < Associated Radio Capability 2 : bit(4) >
      < Associated Radio Capability 1 : bit(4) >
  |
    < Multiband supported : { 001 | 010 | 100 } >
      < A5 bits >
      < spare bit >(4)
      < Associated Radio Capability 1 : bit(4) > }
  { 0 | 1 < R Support > }
  { 0 | 1 < HSCSD Multi Slot Capability > }
  < UCS2 treatment: bit >
  < Extended Measurement Capability : bit >
  { 0 | 1 < MS measurement capability > }
  { 0 | 1 < MS Positioning Method Capability > }
  { 0 | 1 < ECSD Multi Slot Capability > }
  { 0 | 1 < 8-PSK Struct > }
  { 0 | 1 < GSM 400 Bands Supported : { 01 | 10 | 11 } >
    < GSM 400 Associated Radio Capability: bit(4) > }

  { 0 | 1 <GSM 850 Associated Radio Capability : bit(4) > }
  { 0 | 1 <GSM 1900 Associated Radio Capability : bit(4) > }
  < UMTS FDD Radio Access Technology Capability : bit >
  < UMTS 3.84 Mcps TDD Radio Access Technology Capability : bit >
  < CDMA 2000 Radio Access Technology Capability : bit >

  { 0 | 1
    < DTM GPRS Multi Slot Class : bit(2) >
      < Single Slot DTM : bit >
      {0 | 1 < DTM EGPRS Multi Slot Class : bit(2) > } }
  { 0 | 1 < Single Band Support > } -- Release 4 starts
here:
  { 0 | 1 <GSM 750 Associated Radio Capability : bit(4)>}

  < UMTS 1.28 Mcps TDD Radio Access Technology Capability : bit >
  < GERAN Feature Package 1 : bit >

  { 0 | 1 < Extended DTM GPRS Multi Slot Class : bit(2) >
    < Extended DTM EGPRS Multi Slot Class : bit(2) > }

  { 0 | 1 < High Multislot Capability : bit(2) > } ---Release
5 starts here.

  { 0 | 1 < GERAN lu Mode Capabilities > } -- '1' also means support of GERAN
lu mode
  < GERAN Feature Package 2 : bit >
  
```

	<pre> &lt; GSMK Multislot Power Profile : bit (2) &gt; &lt; 8-PSK Multislot Power Profile : bit (2) &gt;  { 0   1 &lt; T-GSM 400 Bands Supported : { 01   10   11 } &gt;    -- Release 6 starts here.                 &lt; T-GSM 400 Associated Radio Capability: bit(4) &gt; }  { 0   1 &lt; T-GSM 900 Associated Radio Capability: bit(4) &gt; } &lt; Downlink Advanced Receiver Performance : bit (2)&gt;  &lt; DTM Enhancements Capability : bit &gt;  { 0   1    &lt; DTM GPRS High Multi Slot Class : bit(3) &gt;                 &lt; Offset required : bit&gt;                 { 0   1 &lt; DTM EGPRS High Multi Slot Class : bit(3) &gt; } }      &lt; Repeated ACCH Capability: bit &gt; { 0   1 &lt;GSM 710 Associated Radio Capability : bit(4)&gt;}    -- Release 7 starts here. { 0   1 &lt;T-GSM 810 Associated Radio Capability : bit(4)&gt;} &lt; Ciphering Mode Setting Capability : bit &gt;  &lt; Additional Positioning Capabilities : bit &gt;      &lt; spare bits &gt; ;  &lt; A5 bits &gt; ::=     &lt; A5/7 : bit &gt; &lt; A5/6 : bit &gt; &lt; A5/5 : bit &gt; &lt; A5/4 : bit &gt; ;  &lt;R Support&gt;::=     &lt; R-GSM band Associated Radio Capability : bit(3) &gt; ;  &lt; HSCSD Multi Slot Capability &gt; ::=     &lt; HSCSD Multi Slot Class : bit(5) &gt; ;  &lt; MS Measurement capability &gt; ::=     &lt; SMS_VALUE : bit (4) &gt;     &lt; SM_VALUE : bit (4) &gt; ;  &lt; MS Positioning Method Capability &gt; ::=     &lt; MS Positioning Method : bit(5) &gt; ;  &lt; ECSD Multi Slot Capability &gt; ::=     &lt; ECSD Multi Slot Class : bit(5) &gt; ;  &lt; 8-PSK Struct&gt; ::=     &lt; Modulation Capability : bit &gt;     { 0   1 &lt; 8-PSK RF Power Capability 1: bit(2) &gt; }     { 0   1 &lt; 8-PSK RF Power Capability 2: bit(2) &gt; }  &lt; Single Band Support &gt; ::=     &lt; GSM Band : bit (4) &gt; ;  &lt; GERAN lu Mode Capabilities &gt; ::=     &lt; Length : bit (4) &gt;    -- length in bits of lu mode only capabilities and spare bits -- Additions in release 6     &lt; FLO lu Capability : bit &gt;     &lt; spare bits&gt;** ;    -- expands to the indicated length                         -- may be used for future enhancements </pre>
o_LengthofHO_Cmd	<p><b>Type of the result:</b> INTEGER</p> <p><b>Parameters:</b> p_Msg : HandoverToUTRANCommand</p> <p><b>Description:</b> it returns the no. of octets of the input downlink message p_Msg</p>

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## 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**

<b>Core specifications</b>	3GPP TS 44.018 [6] (V7.c.0)
	3GPP TS 25.331 [7] (V7.8.0)
<b>Test specifications</b>	3GPP TS 51.010-1 [1] (V7.c.0)
	3GPP TS 51.010-2 [2] (V7.c.0)
	3GPP TS 34.123-3 [4] (V7.2.0)
	3GPP TS 34.108 [8] (V8.4.0)

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### 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 / Normalcase/ 3G cell reselection dedicated parameters	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
60.2a	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\_Gv7c0.MP) which accompanies the present document.

## Annex B (normative): Partial IXIT proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, 3GPP Organizational Partners grant that users of the present document may freely reproduce the partial IXIT proforma in this annex so that it can be used for its intended purposes and may further publish the completed partial IXIT.

### 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

These parameters are used in the IR\_G ATS.

**Table B.1: IR\_G PIXIT**

Parameter Name	Description	Type	Default Value	Supported Value
px_AddPositionCap	used in classmark3	B1		
px_CDMA2000	UE support of CDMA2000, used in classmark3	B1	'0'B	
px_CipherModeSetDTM	used in classmark3	B3		
px_DLAdvRxPerformance	used in classmark3	B2	'00'B	
px_DTMEGPRSHighMultiSlotClass	used in classmark3	B3		
px_DTMGPRSHighMultiSlotClass	used in classmark3	B3		
px_DTM_EGPRS_MultiSlotSubClass	indicates DTM EGPRS capabilities of the UE, used in classmark3	B2		
px_EDGE PwrCap1	EDGE Power Class used in classmark3	B2		
px_EDGE PwrCap2	EDGE Power Class used in classmark3	B2		
px_EGPRS_MultiSlotClass	used in classmark3 to define the EGPRS multislottclass supported by the UE	B5		
px_EOTD_Based	Support of MS based EOTD used in classmark3	BOOLEAN	FALSE	
px_ExtDTM_MultislottClass	Used in Classmark 3	B2		
px_ExtDTM_EGPRS_MultislottClass	Used in Classmark 3	B2		
px_ExtMeasCap	UE support of Extended Measurements used	B1	'0'B	

	in classmark3			
px_8PSKPowerProfile	Used in classmark3	B2		
px_GMSKPowerProfile	Used in classmark3	B2		
px_GSM400_RadioCapability	Used in classmark3	B4		
px_HighMultiSlotCap	Used in Classmark 3	B2		
px_ModulationCapability	Used in classmark3 to specify supported modulation schemes other than GMSK	B1		0 = 8PSK supported for downlink only, 1 = 8PSK supported for uplink and downlink
px_MultislotCapDIDualCarrier	Used in classmark3	B1		
px_MultiSlotClass	used in classmark3 to define the HSCSD multislotclass supported by the UE	B5		
px_RGSM_RadioCapability	Used in classmark3	B3		
px_RptACCHCap	used in classmark3	B1	'0'B	0 - UE does not support repeated SACCH 1 - UE supports repeated SACCH and repeated dl FACCH note: a UE that supports only repeated dl FACCH should set this field to '0'
px_SM_Value	indicates the time needed for the UE to switch from one radio channel to another and perform a neighbour cell power measurement, used in classmark3	B4		Switch-Measure Value
px_SMS_Value	indicates the time needed for the UE to switch from one radio channel to another, perform a neighbour cell power measurement and then switch from that radio channel to another radio channel, used in classmark3	B4		Switch-Measure-Switch Value
px_T400_RadioCapability	Used in classmark3	B4		
px_710_RadioCapability	Used in classmark3	B4		
px_T810_RadioCapability	Used in classmark3	B4		
px_T900_RadioCapability	Used in classmark3	B4		
px_TGSM400Support	used in classmark3	B2		Bit 1 - TGSM 380 supported Bit 2 - TGSM 410 supported

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## Annex C (normative): Additional information to IXIT

Notwithstanding the provisions of the copyright clause related to the text of the present document, 3GPP Organizational Partners grant that users of the present document may freely reproduce the PIXIT proforma in this annex so that it can be used for its intended purposes and may further publish the completed PIXIT.
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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
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## 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

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 SMDCP PDUs of 500 bytes each on SAPI 11.

### C.7.3 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].

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## 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

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_H andover
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_H andover
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_H andover
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_H andover
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_H andover
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_H andover
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_H andover
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_H andover
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_H andover
GP-25	GP-051234	0019	-	Corrections to approved IR_G test cases 26.6.11.3	F	6.2.0	6.3.0	<a href="#">GP-051234</a>	Inter_System_H andover
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	<a href="#">GP-051235</a>	Inter_System_H andover
GP-26	GP-051859	0021	-	Addition of new verified TTCN test cases	F	6.3.0	6.4.0	GP-051859	Inter_System_H andover
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_H andover
GP-26	GP-051863	0023	-	Additional changes to test case 60.3a	B	6.3.0	6.4.0	GP-051863	Inter_System_H andover

Change history									
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 ver 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 testcases 26.6.11.3 and 26.6.11.4	F	7.5.0	7.6.0	GP-070581	TEI

Change history									
TSG #	TSG Doc	CR	Rev	Subject/Comment	Cat	Old	New	WG Doc	Work item
GP-34	GP-070582	0064	-	Correction to IR_G testcase 20.22.29	F	7.5.0	7.6.0	GP-070582	TEI
GP-34	GP-070583	0065	-	Correction to the applicability of the IR_G testcases 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 testcases 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 testcase 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	<a href="#">GP-080759</a>	0074	-	CR 51.010-5-0074 rev 1 Update for the latest version of TTCN (Rel-7)	F	7.9.0	7.10.0	<a href="#">GP-080759</a>	TEI
GP-38	<a href="#">GP-080460</a>	0075	-	CR 51.010-5-0075 Summary of regression errors in wk10 IR_G ATS (Rel-7)	F	7.9.0	7.10.0	<a href="#">GP-080460</a>	TEI
GP-39	<a href="#">GP-080977</a>	0076	-	CR 51.010-5-0076 Update for the latest version of TTCN (Rel-7)	F	7.10.0	7.11.0	<a href="#">GP-080977</a>	TEI
GP-39	<a href="#">GP-080981</a>	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	<a href="#">GP-080981</a>	TEI
GP-39	<a href="#">GP-080982</a>	0078	-	CR 51.010-5-0078 Correction to IR_G Test case 60.6 (Rel-7)	F	7.10.0	7.11.0	<a href="#">GP-080982</a>	TEI
GP-40	<a href="#">GP-081470</a>	0079	-	CR 51.010-5-0079 Update for the latest version of TTCN	F	7.11.0	7.12.0	<a href="#">GP-081470</a>	TEI
				Added TTCN and ASN files		7.12.0	7.12.1		

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## History

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V7.0.0	January 2006	Publication
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