ETSI TS 132 321 V13.0.0 (2016-02)



Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE;

Telecommunication management;
Test management Integration Reference Point (IRP);
Requirements

(3GPP TS 32.321 version 13.0.0 Release 13)





Reference RTS/TSGS-0532321vd00 Keywords GSM,LTE,UMTS

ETSI

650 Route des Lucioles F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from: http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

http://portal.etsi.org/tb/status/status.asp

If you find errors in the present document, please send your comment to one of the following services: https://portal.etsi.org/People/CommiteeSupportStaff.aspx

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2016.
All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP**TM and **LTE**TM are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (https://ipr.etsi.org/).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

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.

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the <u>ETSI Drafting Rules</u> (Verbal forms for the expression of provisions).

"must" and "must not" are NOT allowed in ETSI deliverables except when used in direct citation.

Contents

Intelle	ectual Property Rights	2	
Foreword			
Modal verbs terminology2			
Foreword			
Introduction			
1	Scope	5	
2	References	5	
3	Definitions and abbreviations	6	
3.1 3.2	Definitions		
	Purpose		
	•		
5	Requirements		
5.1	Overview		
5.2	Test		
5.2.1	Test Initiation		
5.2.2	Test Termination		
5.2.2.1	— I		
5.2.2.2	r		
5.2.3 5.2.4	Test Monitoring		
5.2. 4 5.3	Test Result Reporting Test States		
5.3 5.4	Test Categories		
5.4.1	Resource Self Test		
5.4.2	Connection Test		
5.4.3	Loopback Test		
Annes	x A (informative): Change history	.11	
	y		
LIISTOL	ү	.12	

Foreword

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

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 is part of a TS-family covering the 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; as identified below:

32.321:	"Test management Integration Reference Point (IRP): Requirements";
32.322:	"Test management Integration Reference Point (IRP): Information Service (IS)";
32.326:	"Test management Integration Reference Point (IRP): Solution Set (SS) definitions".

A 3G telecommunication network is composed of a multitude of different network elements (NE). For a successful operation of the network the operator must be provided with mechanisms allowing him to manage the network. These management activities can be grouped into several areas: configuration management, fault management, performance management, accounting management and security management.

A management function assisting in different high level management areas such as fault management and performance management is test management. The purpose of testing is to get information about the functionality and performance of the 3G managed network subject to the test.

The present document is part of a set of technical specifications defining the telecommunication management (TM) of 3G systems. The TM principles are described in 3GPP TS 32.101 [5]. The TM architecture is described in 3GPP TS 32.102 [6]. The other specifications define the interface (ITf-N) between the managing system (manager), which is in general the network manager (NM) and the managed system (agent), which is either an element manager (EM) or the managed NE itself. The Itf-N is composed of a number of integration reference points (IRPs) defining the information in the agent that is visible for the manager, the operations that the manager may perform on this information and the notifications that are sent from the agent to the manager. One of these IRPs is the Test Management IRP.

Each IRP is specified by a set of TSs: Requirements, Information Service, CORBA SS, etc.

1 Scope

The present document describes, in addition to the requirements defined in [1] and [2], the requirements for the Test Management IRP.

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 32.101: "Telecommunication management; Principles and high level requirements".
- [2] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [3] ITU-T Recommendation X.745: "Information technology Open Systems Interconnection Systems Management: Test management function".
- [4] 3GPP TS 32.301: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Requirements".
- [5] Void
- [6] ITU-T Recommendation X.737: "Information technology Open Systems Interconnection; Systems Management: Confidence and diagnostic test categories".
- [7] IETF RFC2679: "A One-way Delay Metric for IPPM".
- [8] IETF RFC3393: "IP Packet Delay Variation Metric for IP Performance Metrics (IPPM)".
- [9] IETF RFC2680: "A One-way Packet Loss Metric for IPPM".
- [10] IETF RFC2681: "A Round-trip Delay Metric for IPPM".