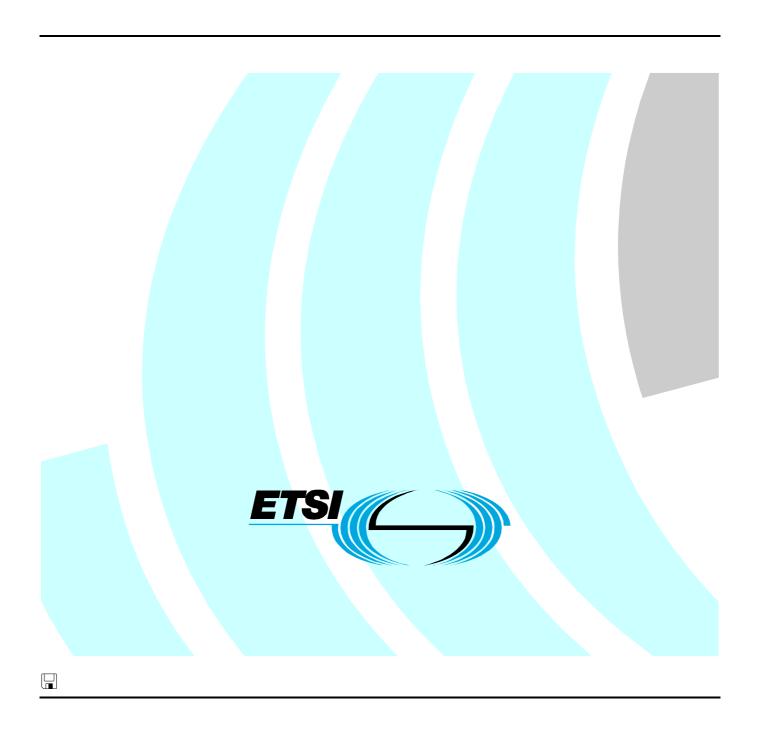
# ETSI TR 101 560 V1.1.1 (2011-06)

Technical Report

# IMS Network Testing (INT); IMS NNI Interworking Test Scripts for RCS Release 2.0



## Reference DTR/INT-00036

Keywords

IMS, interworking, NNI, ATS, testing

#### **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

Individual copies of the present document can be downloaded from: <a href="http://www.etsi.org">http://www.etsi.org</a>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the 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

<a href="http://portal.etsi.org/tb/status/status.asp">http://portal.etsi.org/tb/status/status.asp</a>

If you find errors in the present document, please send your comment to one of the following services: http://portal.etsi.org/chaircor/ETSI\_support.asp

#### **Copyright Notification**

No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2011. All rights reserved.

**DECT**<sup>TM</sup>, **PLUGTESTS**<sup>TM</sup>, **UMTS**<sup>TM</sup> and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP**<sup>TM</sup> and **LTE**<sup>TM</sup> 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.

## Contents

Intelle	ectual Property Rights	.4		
Forev	vord	.4		
1	Scope	.5		
2 2.1 2.2	References	5		
3	Abbreviations			
4	Overview	.6		
5	Test configuration	.6		
6	Test design6			
7	Test system	.6		
8	Test execution	.6		
Anne	x A: Zip file with TTCN-3 code	.7		
A.1	The ATS in TTCN-3 core (text) format	.7		
Anne	x B: Bibliography	.8		
Histo	ry			

## 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 (http://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 Report (TR) has been produced by ETSI Technical Committee IMS Network Testing (INT).

### 1 Scope

The present document describes the Abstract Test Suite (ATS) to test interoperability at IMS NNI for IP multimedia call control protocol based on TS 124 229 [i.1] including Rich Communication Suite (RCS) release 2.0. The ATS has been specified on the basis of the Test Descriptions for IMS NNI interoperability testing for RCS presented in TS 102 901 [i.2] and extents TS 186 011-3 [i.3]. It defines a TTCN-3 framework as well as codec and adapter requirements for analysing interoperability test execution traces generated from the manual or automatic execution of IMS interoperability tests.

The scope of this ATS is not to cover all requirements specified in TS 124 229 [i.1]. It only assesses requirements that are observable at the NNI between two IMS core network implementations specified in TS 102 901 [i.2].

#### 2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <a href="http://docbox.etsi.org/Reference">http://docbox.etsi.org/Reference</a>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

#### 2.1 Normative references

The following referenced documents are necessary for the application of the present document.

Not applicable.

#### 2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 124 229: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (3GPP TS 24.229 version 8.10.0 Release 8)"."
- [i.2] ETSI TS 102 901 (V3.1.1): "IMS Network Testing (INT); IMS NNI Interoperability Test Specifications; IMS NNI & ISC interoperability test descriptions for RCS".
- [i.3] ETSI TS 186 011-3 (V2.3.1): "Technical Committee for IMS Network Testing (INT); IMS NNI Interworking Test Specifications; Part 3: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT)".
- [i.4] ETSI ES 201 873-1: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 1: TTCN-3 Core Language".

### 3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

ATS Abstract Test Suite
IMS IP Multimedia Subsystem

IP Internet Protocol

NNI Network to Network Interface RCS Rich Communication Suite SIP Session Initiation Protocol

TD Test Description

TTCN-3 Testing and Test Control Notation 3

#### 4 Overview

A detailed overview of the ATS is specified in TS 186 011-3 [i.3].

## 5 Test configuration

The test configuration is described in detail in TS 102 901 [i.2]. An Illustration of the test configuration can be found in TS 186 011-3 [i.3].

## 6 Test design

TS 186 011-3 [i.3], clause 6 defines guidelines and design patterns used in the Abstract Test Suite (ATS).

## 7 Test system

The test system specified by this ATS (Abstract Test Suite) is described in detail in TS 186 011-3 [i.3].

### 8 Test execution

Please refer to TS 186 011-3 [i.3] for an explanation of the test execution aspects of the Abstract Test Suite (ATS).

# Annex A: Zip file with TTCN-3 code

## A.1 The ATS in TTCN-3 core (text) format

This ATS has been produced using the Testing and Test Control Notation (TTCN) according to ES 201 873-1 [i.4].

The TTCN-3 core (text) representation corresponding to this ATS is contained in an ASCII file (IMS\_TestSystem.ttcn3 contained in archive tr\_101560v01010p0.zip) which accompanies the present document.

The TTCN-2 graphical (tabular) representation of this ATS is contained

Where an ETSI Abstract Test Suite (in TTCN-3) is published in both core and tabular format these two forms are be considered equivalent. In the event that there appears to be syntactical or semantic differences between the two then the problem will be resolved and the erroneous format (whichever it is) will be corrected.

## Annex B: Bibliography

• ETSI EG 202 568: "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT); Testing: Methodology and Framework".

# History

Document history			
V1.1.1	June 2011	Publication	