

ETSI TS 186 015-2 V2.1.1 (2009-07)

Technical Specification

Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services: Explicit Communication Transfer (ECT); Part 2: Test Suite Structure and Test Purposes (TSS&TP)

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 2 Test Suite Structure and Test Purposes (TSS&TP) of the Explicit Communication transfer (ECT) simulation service, based on stage one and two of the ISDN ECT supplementary service. Within the Next Generation Network (NGN) the stage 3 description is specified using the IP-Multimedia Communication Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) as described below:

Part 1: "Protocol Implementation Conformance Statement (PICS)";

Part 2: "Test Suite Structure and Test Purposes (TSS&TP)"

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1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) of the Explicit Communication transfer (ECT) simulation service, based on stage one and two of the ISDN ECT supplementary service. Within the Next Generation Network (NGN) the stage 3 description is specified using the IP-Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP), TS 183 029 [1].

A further part of the present document specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document.

Within the TISPAN NGN, the stage 3 description is specified using the IP-Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP).

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document,
 - for informative references.

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

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 indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- [1] ETSI TS 183 029: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services: Explicit Communication Transfer (ECT); Protocol specification".
- [2] ETSI TS 186 015-1: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); PSTN/ISDN simulation services: Explicit Communication Transfer (ECT); Part 1: Protocol Implementation conformance Statement (PICS)".

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Not applicable.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions specified in [1] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations specified in [1] apply.

4 Test Suite Structure (TSS) and configuration

Netw	TransferorAS	ECT_N01_xxx
	TransfereeAS	ECT_N02_xxx
User	Transferor	ECT_U01_xxx
	Transferee	ECT_U02_xxx
	TransferTarget	ECT_U03_xxx
Interaction	OIR	ECT_N03_xxx
	ACR-CB	ECT_N04_xxx
	CONF	ECT_N05_xxx
	ECT	ECT_N06_xxx

Figure 1: Test suite structure

4.1 Configuration

The scope of the current specification is to test the signalling and procedural aspects of the stage 3 requirements as described in [1]. The stage 3 description respects the requirements to several network entities and also to requirements regarding to end devices. Therefore several interfaces (reference points) are addressed to satisfy the test of the different entities.

Therefore to test the appropriate entities the configurations below are applicable:

Testing of the Application Server: This entity is responsible to perform the service. Hence the ISC interface is the appropriate access point. Figure 2 points to this.

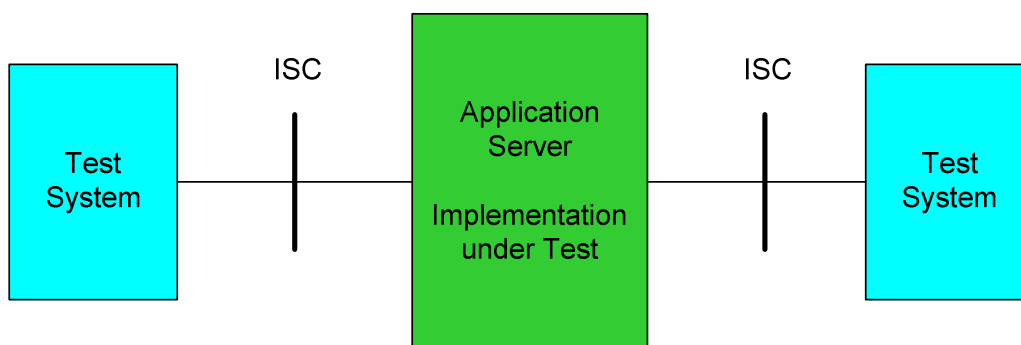


Figure 2: Applicable interface to test AS functionalities

If the ISC interface is not accessible it is also applicable to perform the test of the AS using any NNI (Mw, Mg, Mx) interface (consider figure 3). In case only the Gm interface is accessible this shall be used instead. In this case, be aware that the verification of several requirements is impeded.

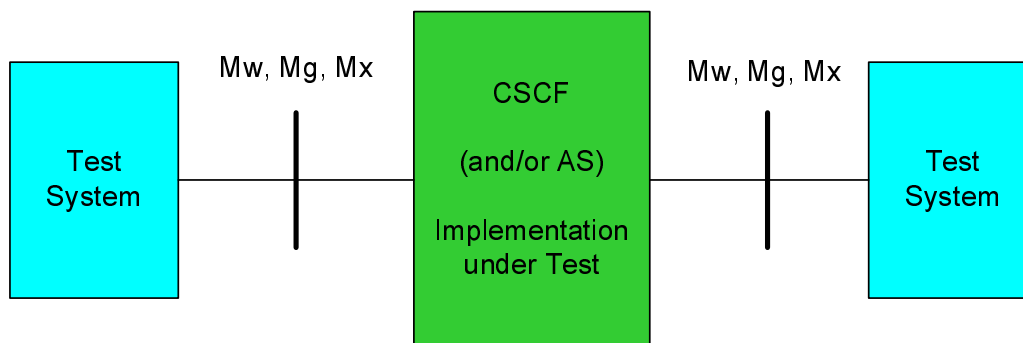


Figure 3: Applicable interfaces to test using the (generic) NNI interface

Figure 4 illustrates the usage of any NNI interface.

Testing of User Equipment: There are several requirements regarding to the end devices. Therefore a special configuration appears.

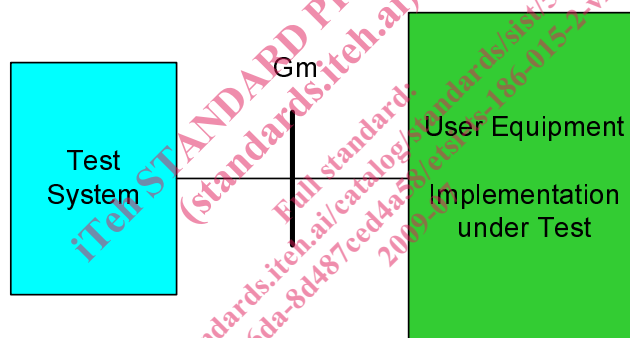


Figure 4: Applicable configuration to test the User Equipment

5 Test Purposes (TP)

5.1 Introduction

For each test requirement a TP is defined.

5.1.1 TP naming convention

Tps are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see table 1).

Table 1: TP identifier naming convention scheme

Identifier: <ss>_<iut><group>_<nnn>							
<ss>	=	supplementary service: e.g. "ECT"					
<iut>	=	type of IUT:	<table> <tr> <td>U</td> <td>User</td> </tr> <tr> <td>N</td> <td>Network</td> </tr> </table>	U	User	N	Network
U	User						
N	Network						
<group>	=	group	2 digit field representing group reference according to TSS				
<nnn>	=	sequential number	(001-999)				

5.1.2 Test strategy

As the base standard TS 183 029 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification TS 186 015-1 [2].

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5.2 Signalling requirements

5.2.1 Actions at the Transferor AS

TSS	TP	Reference	Selection expression																																																																																																																																								
Netw/TransferorAS	ECT_N01_001	4.5.2.4 [1]	PICS 1/2 1 AND NOT (PICS 1/4 OR PICS 1/5)																																																																																																																																								
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<p>Test purpose</p> <p><i>Communication transfer: Consultative transfer. Transferor was originator of the originating call.</i></p> <p>Ensure that a Transferor can successfully transfer the communication with the transferee set on hold before and the Transferor is notified about the processing. The Transferor has a session with Transferee and the Transfer target set on hold. The Transferor refers the Transferee to establish a session to the Transfer target. After the successful session between Transferee and Transfer target, the sessions of the Transferor are released by the Transferor. The Transferor was the initiator of the originating communication.</p>																																																																																																																																															
<p>SIP header values:</p> <p>REFER 1: Require=replaces; Refer-To contains ISC#3 URI?Replaces=call-id1%3B to-tag=S1%3Bfrom-tag=S1; method=invite Referred-By contains ISC#1 URI</p> <p>REFER 2: Require=replaces; Refer-To contains ECT Session Identifier URI?Replaces=call-id1%3B to-tag=S1%3Bfrom-tag=S1; method=invite Referred-By contains ISC#1 URI</p> <p>INVITE 3: Request URI = ECT Session Identifier URI; Replaces=call-id1;to-tag=S1; from-tag=S1</p> <p>INVITE 4: Request URI = ISC#3 URI; Replaces=call-id1;to-tag=S1;from-tag=S1</p> <p>NOTIFY(100):Event contains refer; message/sipfrag contains SIP/2.0 100 Trying</p> <p>NOTIFY(200):Event contains refer; message/sipfrag contains SIP/2.0 200 OK</p>																																																																																																																																															
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