

# ETSI TS 186 015-1 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 1: Protocol Implementation conformance  
Statement (PICS)**

---



---

Reference

DTS/TISPAN-06032-1-NGN-R2

---

Keywords

ECT, IMS, PICS, 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:

<http://www.etsi.org>

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

<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:

[http://portal.etsi.org/chaicor/ETSI\\_support.asp](http://portal.etsi.org/chaicor/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 2009.  
All rights reserved.

**DECT™**, **PLUGTESTS™**, **UMTS™**, **TIPHON™**, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

**3GPP™** is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

**LTE™** is a Trade Mark of ETSI currently being 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

Intellectual Property Rights .....	4
Foreword.....	4
Introduction .....	4
1 Scope .....	5
2 References .....	5
2.1 Normative references .....	5
2.2 Informative references.....	6
3 Definitions and abbreviations.....	6
3.1 Definitions .....	6
3.2 Abbreviations .....	6
4 Protocol Implementation Conformance Statement proforma.....	6
4.1 Instructions for completing the PICS proforma.....	6
4.1.1 More detailed instructions are given at the beginning of the different subclauses of the PICS proforma. ....	6
4.1.1.1 Purposes and structure.....	6
4.1.2 Abbreviations and conventions.....	7
4.2 Identification of the implementation .....	7
4.2.1 Date of the statement .....	8
4.2.2 Implementation Under Test (IUT) identification.....	8
4.2.3 System Under Test (SUT) identification .....	8
4.2.4 Product supplier .....	8
4.2.5 Client .....	8
4.2.6 PICS contact person.....	8
4.3 PICS proforma tables .....	8
4.3.1 Global statement of conformance .....	8
4.3.2 Terminal and network capabilities.....	9
History .....	10

---

## 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://webapp.etsi.org/IPR/home.asp>).

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 Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 1 Protocol Conformance Implementation Statement 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).

---

## Introduction

The Explicit Communication transfer (ECT) service provides a party involved in a communication to transfer that communication to a third party.

There are three actors active in a transfer, they are acting in the following roles: *transferor*, the party that initiates the transfer of the active communication that it has with the transferee. *transferee*, the party which stays in the communication which is transferred. *transfer target*, the party which the communication is transferred to and which replaces the transferor in the communication.

---

# 1 Scope

The present document specifies the Protocol conformance Implementation Statement 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) based on TS 183 029 [1].

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

Within the TISPAN NGN Release 2 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).

The service provides a party involved in a communication to transfer that communication to a third party.

---

# 2 References

T 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 123 228: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Stage 2 (3GPP TS 23.228 version 8.8.0 Release 8)".
- [3] ISO/IEC 9646-7: "Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 7: Implementation Conformance Statements".

## 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 Protocol Implementation Conformance Statement proforma

### 4.1 Instructions for completing the PICS proforma

#### 4.1.1 More detailed instructions are given at the beginning of the different subclauses of the PICS proforma.

The supplier of the implementation shall complete the PICS proforma in each of the spaces provided, if necessary.

##### 4.1.1.1 Purposes and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in specification [1] to [2] may provide information about the implementation in a standardized manner.

The PICS proforma is subdivided into subclauses for the following categories of information:

- instructions for completing the PICS proforma;
- identification of the implementation;
- product supplier;
- client;
- PICS contact person;
- PICS proforma tables (containing the global statement of conformance).

## 4.1.2 Abbreviations and conventions

The PICS proforma is composed of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [3].

### Item column

It contains a number that identifies the item in the table.

### Item description column

It describes each respective item (e.g. parameters, timers, etc.).

### Reference column

It gives reference to the CDIV specification [1], except where explicitly stated otherwise.

### Status column

The following notations, defined in ISO/IEC 9646-7 [3], are used for the status column:

- m mandatory - the capability is required to be supported.
- n/a not applicable - in the given context, it is impossible to use the capability. No answer in the support column is required.
- o optional - the capability may be supported or not.
- o.i qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies a unique group of related optional items and the logic of their selection which is defined immediately following the table.
- ci conditional - the requirement on the capability ("m", "o" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying a unique conditional status expression that is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities. If an ELSE clause is omitted, "ELSE n/a" shall be implied.

NOTE: Support of a capability means that the capability is implemented in conformance to the specification(s) [1] to [2].

### Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [3], are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- N/A or n/a no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional status).

## 4.2 Identification of the implementation

Identification of the Implementation Under Test (IUT) and the system in which it resides - the System Under Test (SUT) should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

## 4.2.1 Date of the statement

<b>Date of the statement:</b>	
-------------------------------	--

## 4.2.2 Implementation Under Test (IUT) identification

<b>IUT name:</b>	
<b>IUT version:</b>	

## 4.2.3 System Under Test (SUT) identification

<b>SUT name:</b>	
<b>Hardware configuration:</b>	
<b>Operating system:</b>	

## 4.2.4 Product supplier

<b>Name:</b>	
<b>Address:</b>	
<b>Telephone number:</b>	
<b>Facsimile number:</b>	
<b>Additional information:</b>	

## 4.2.5 Client

<b>Name:</b>	
<b>Address:</b>	
<b>Telephone number:</b>	
<b>Facsimile number:</b>	
<b>Additional information:</b>	

## 4.2.6 PICS contact person

<b>Name:</b>	
<b>Telephone number:</b>	
<b>Facsimile number:</b>	
<b>Additional information:</b>	

## 4.3 PICS proforma tables

## 4.3.1 Global statement of conformance

	<b>(Yes/No)</b>
<b>Are all mandatory capabilities implemented?</b>	



## 4.3.2 Terminal and network capabilities

**Table 1: Network capabilities**

Item	Item description	Reference	Status	Support
1	Is the blind transfer supported?	5.11.6 [2]	o.11	
2	Is the assured transfer supported?	5.11.6 [2]	o.11	
3	Is the consultative transfer supported?	5.11.6 [2]	o.11	
4	The AS initiate the special REFER handling procedures when a 403 Forbidden or 501 Not implemented is received after the REFER request is forwarded to the Transferee?	4.5.2.4.1.2.3 [1]	o	
5	The AS of the initiator of the REFER request that has prior knowledge that the remote party is not allowed to receive or does not support the REFER method, initiates the special REFER handling procedures directly?	4.5.2.4.1.2.3 [1]	o	
6	Does the Transferee AS reject the INVITE request sent to the Transfer Target if the Referred-By header does not match the stored Referred-By header of the received REFER?	4.5.2.7.3 [1]	c21	
7	Does the Transferee AS replaces the URI of the Referred-By header in the INVITE sent to the Transfer Target with the URI stored from the received REFER request, if there is no match?	4.5.2.7.3 [1]	c22	
8	Does the Transferee AS inserts a Referred-By header in the INVITE request sent to the Transfer Target if the Referred-By header is absent and the value is equal to the stored value received in the REFER request.	4.5.2.7.3 [1]	o	
o.11: It is mandatory to support at least one of these items. c21: IF NOT 1/7 THEN o ELSE n/a. c22: IF NOT 1/6 THEN o ELSE n/a.				

**Table 2: User Equipment capabilities**

Item	Item description	Reference	Status	Support
1	Is the blind transfer supported?	5.11.6 [2]	o.21	
2	Is the assured transfer supported?	5.11.6 [2]	o.21	
3	Is the consultative transfer supported?	5.11.6 [2]	o.21	
4	[Transferor] Is the UE able to Issue a REFER request in the original communications dialog to invoke the transfer of the session?	4.5.2.1 [1]	c21	
5	[Transferee] Is the UE able to handle a received REFER to transfer the current session?	4.5.2.5 [1]	o	
o.21: It is mandatory to support at least one of these items. c21: IF 2.1 OR 2.2 OR 2.3 THEN m ELSE n/a.				

---

## History

<b>Document history</b>		
V2.1.1	July 2009	Publication