

ETSI TS 101 890-3 V1.1.1 (2002-01)

Technical Specification

**Telecommunications and Internet Protocol
Harmonization Over Networks (TIPHON) Release 3;
Technology Compliance Specifications;
TIPHON profile for ITU-T H.245;
Part 3: Abstract Test Suite (ATS) and partial Protocol
Implementation eXtra Information for Testing (PIXIT)
proforma specification**



Reference

DTS/TIPHON-06018-3

Keywords

ATS, IP, supplementary service, testing, VoIP

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, send your comment to:

editor@etsi.fr

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 2002.
All rights reserved.

Contents

Intellectual Property Rights	5
Foreword.....	5
1 Scope	6
2 References	6
3 Definitions and abbreviations.....	7
3.1 Definitions	7
3.2 Abbreviations	7
4 Abstract Test Method (ATM).....	8
4.1 Network architecture	8
4.2 Protocol architecture.....	8
4.3 Test architecture	9
5 Untestable Test Purposes (TP)	9
6 ATS conventions	10
6.1 Naming conventions.....	10
6.1.1 Declarations part.....	10
6.1.1.1 General	10
6.1.1.2 Test suite operations definition	10
6.1.1.3 Test suite parameter declarations	10
6.1.1.4 Test case selection expression definition	10
6.1.1.5 Test suite constant declarations.....	11
6.1.1.6 Test suite variable declarations	11
6.1.1.7 Test case variable declarations	11
6.1.1.8 Timer declarations.....	11
6.1.1.9 ASP type definitions	11
6.1.1.10 PDU type definitions.....	11
6.1.1.11 CM type definitions.....	11
6.1.1.12 Alias definitions	12
6.1.2 Constraints part.....	12
6.1.2.1 General	12
6.1.3 Dynamic part	12
6.1.3.1 General	12
6.1.3.2 Test Case (TC) identifier.....	12
6.1.3.3 Test step identifier.....	12
6.1.3.4 Default identifier	13
6.1.3.5 Label identifier	13
6.1.3.6 ATS abbreviations.....	13
6.2 Implementation conventions	13
6.2.1 Declaration part	13
6.2.2 Constraint part	14
6.2.3 Dynamic part	14
7 Primitives	14
7.1 Primitives at CHN_PCO	14
7.2 Primitives at TT_PCO.....	14
7.3 Primitives at UT_PCO.....	14
Annex A (normative): Abstract Test Suite (ATS)	16
A.1 The TTCN Graphical form (TTCN.GR)	16
A.2 The TTCN Machine Processable form (TTCN.MP).....	16
Annex B (normative): Partial PIXIT proforma	17

B.1	Identification summary.....	17
B.2	ATS summary	17
B.3	Test laboratory.....	17
B.4	Client identification.....	18
B.5	SUT	18
B.6	Protocol layer information.....	18
B.6.1	Protocol identification	18
B.6.2	IUT information	19
Annex C (normative): PCTR Proforma.....		20
C.1	Identification summary.....	20
C.1.1	Protocol conformance test report.....	20
C.1.2	IUT identification	20
C.1.3	Testing environment.....	20
C.1.4	Limits and reservation	21
C.1.5	Comments.....	21
C.2	IUT Conformance status	21
C.3	Static conformance summary	21
C.4	Dynamic conformance summary.....	21
C.5	Static conformance review report.....	22
C.6	Test campaign report for Originating Endpoint (OE)	22
C.7	Test campaign report for Terminating Endpoint (OE).....	24
C.8	Observations.....	25
Annex D (informative): Bibliography.....		26
	History	27

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 Project Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON).

The present document is part 3 of multi-part deliverable covering Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Compliance Specifications; TIPHON profile for ITU-T Recommendation H.245, as identified below:

- Part 1: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- Part 2: "Test Suite Structure and Test Purposes (TSS&TP) specification";
- Part 3: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".**

1 Scope

The present document specifies the Abstract Test Suite (ATS) for TIPHON profile for ITU-T Recommendation H.245 [4], according to TS 101 883 [1].

The objective of this test specification is to provide a basis for conformance tests for TIPHON profile for ITU-T Recommendation H.245 equipment giving a high probability of inter-operability between different manufacturer's TIPHON profile for ITU-T Recommendation H.245 equipments.

This test specification covers the procedures described in TS 101 883 [1], ITU-T Recommendation H.323 [2] and ITU-T Recommendation H.245 [4].

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [6] and ISO/IEC 9646-2 [7]) as well as the ETSI rules for conformance testing (ETS 300 406 [5]) are used as a basis for the test methodology.

Annex A provides the Tree and Tabular Combined Notation (TTCN) part of the ATS.

Annex B provides the Partial Protocol Implementation eXtra Information for Testing (PIXIT) Proforma of the ATS.

Annex C provides the Protocol Conformance Test Report (PCTR) Proforma of the ATS.

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 and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

- [1] ETSI TS 101 883: "Telecommunications and Internet protocol Harmonization Over Networks (TIPHON) Release 3; Technology Mapping; Implementation of TIPHON architecture using H.323".
- [2] ITU-T Recommendation H.323 (Version 3, 1999): "Packet-based multimedia communications systems".
- [3] ITU-T Recommendation H.225.0: "Call signalling protocols and media stream packetization for packet-based multimedia communication systems".
- [4] ITU-T Recommendation H.245 (Version 7, 2000): "Control protocol for multimedia communication".
- [5] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [6] ISO/IEC 9646-1 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [7] ISO/IEC 9646-2 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".
- [8] ISO/IEC 9646-3 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation (TTCN)".
- [9] ISO/IEC 9646-6 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".

- [10] ISO/IEC 9646-7 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

- Terms defined in ITU-T Recommendation H.323 [2];
- Terms defined in ITU-T Recommendation H.245 [4];
- Terms defined in TS 101 883 [1];
- Terms defined in ISO/IEC 9646-1 [6] and in ISO/IEC 9646-2 [7].

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in ISO/IEC 9646-1 [6], ISO/IEC 9646-6 [9], ISO/IEC 9646-7 [10] and TS 101 883 [1] and the following apply:

ASP	Abstract Service Primitive
ATM	Abstract Test Method
ATS	Abstract Test Suite
BI	Invalid Behaviour
BLC	Bi-directional Logical Channel
B-LCSE	Bi-directional Logical Channel Signalling Entity
BO	Inopportune Behaviour
BV	Valid Behaviour
CEP	Capability Exchange Procedures
CESE	Capability Exchange Signalling Entity
CLC	Close Logical Channel
CLCSE	Close Logical Channel Signalling Entity
IUT	Implementation Under Test
LCS	Logical Channel Signalling
LCSE	Logical Channel Signalling Entity
LT	Lower Tester
MC	H.323 Multipoint Control entity
MCU	Multipoint Control Unit
MRS	Mode RequeSt
MRSE	Mode Request Signalling Entity
MSD	Master Slave Determination
MSDSE	Master Slave Determination Signalling Entity
MTC	Main Test Component
OE	Originating Endpoint
PCO	Point of Control and Observation
PCTR	Protocol Conformance Test Report
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
PTC	Parallel Test Component
SUT	System Under Test
TC	Test Cases
TE	Terminating Endpoint
TP	Test Purpose
TSS	Test Suite Structure
TTCN	Tree and Tabular Combined Notation
UT	Upper Tester

4 Abstract Test Method (ATM)

This clause describes the ATM used to test the TIPHON profile for ITU-T Recommendation H.245 [4], according to TS 101 883 [1].

4.1 Network architecture

The IUT to be tested can be one of the following: Originating (outgoing) or Terminating (incoming) Endpoint. They are a part of a Packet Based Network using a LAN with TCP/IP (see figure 1).



Figure 1: network architecture

4.2 Protocol architecture

The Implementation Under Test (IUT) for which this Test case specification applies consists of the H.245 protocol (see figure 2).

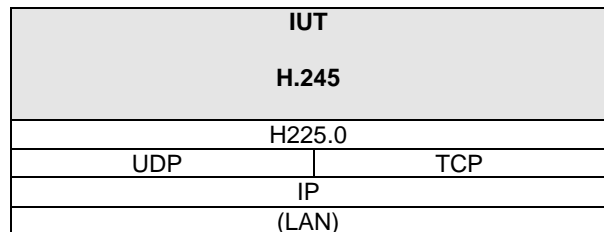


Figure 2: TIPHON protocol architecture (see note)

NOTE: According to TS 101 883 [1] clause 5.1.6.1.4.2: ITU-T Recommendation H.245 [4] messages are encapsulated within ITU-T Recommendation H.225.0 [3] messages according to ITU-T Recommendation H.323 [2] clause 8.2.1.

4.3 Test architecture

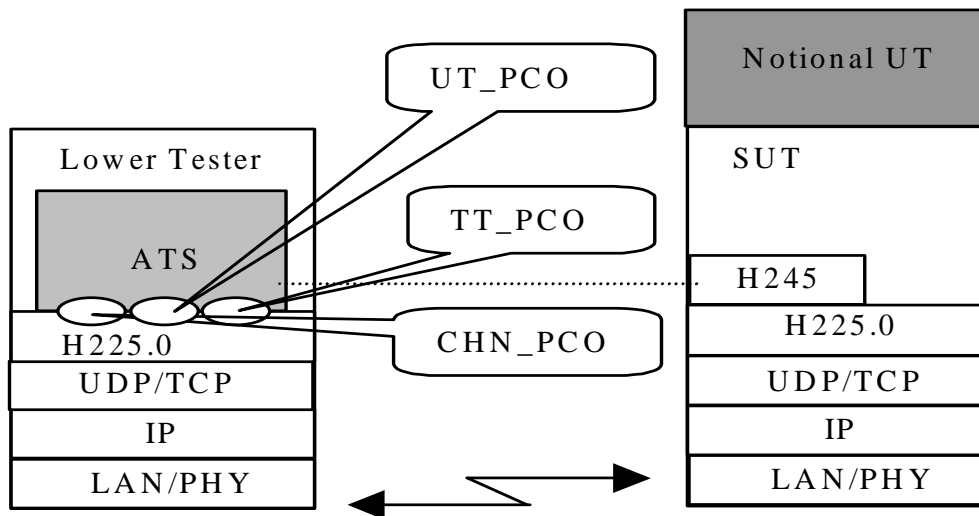


Figure 3: Test architecture

A single-party testing concept is used, which consists of the following abstract testing functions:

- Lower Tester** A Lower Tester (LT) is located in the remote test system. It controls and observes the behaviour of the IUT.
- ATS:** The Abstract Test Suite (ATS), defined in the present document, and located in the remote test system.
- TT_PCO:** A Point of Control and Observation (PCO) located at TT_SAP and used to open and to close the H245 channel over the H225.0 protocol. All test events at the PCO are specified in terms of Abstract Service Primitives (ASP).
- CHN_PCO:** A Point of Control and Observation (PCO) located at a virtual SAP corresponding to the H245 channel over the H225.0 protocol. All test events at the PCO are specified in terms of Abstract Service Primitives (ASP) containing complete PDU.
- UT_PCO:** A specific Point of Control and Observation (PCO) located at specific SAP and used to control the Upper layer of H245 in the IUT. The upper layer of H245 shall understand and answer to specific primitives for testing. All test events at the PCO are specified in terms of Abstract Service Primitives (ASP).
- Notional UT:** No explicit upper tester (UT) exists in the system under test. Nevertheless, some specific actions to cover implicit send events and to obtain feedback information are necessary for the need of the test procedures. A black box covering these requirements is used in the SUT as a notional UT as defined in ISO 9646. This notional UT is considered as part of the test system.

5 Untestable Test Purposes (TP)

This clause gives a list of TP, which are not implemented in the ATS due to the chosen ATM or other restrictions.

Table 1: Untestable TP

Test purpose	Reason

6 ATS conventions

The ATS conventions are intended to give a better understanding of the ATS but they also describe the conventions made for the development of the ATS. These conventions shall be considered during any later maintenance or further development of the ATS.

The ATS conventions contain two clauses, the naming conventions and the implementation conventions. The naming conventions describe the structure of the naming of all ATS elements. The implementation conventions describe the functional structure of the ATS.

To define the ATS, the guidelines of the document ETS 300 406 [5] was considered.

6.1 Naming conventions

6.1.1 Declarations part

This clause describes the naming conventions chosen for the elements of the ATS declarations part.

6.1.1.1 General

The following general rules apply for the name giving in the declarations part. All type definitions (simple type definitions, structured type definitions, ASP type definitions and PDU type definitions) shall be written in uppercase.

All element names (structured type definition), parameter names (ASP type definition) and field names (PDU type definition) shall be written in lowercase.

Predefined types (e.g. BITSTRING[8]) are never used in structured type definitions, ASP type definitions or PDU type definitions. Simple types are used instead.

6.1.1.2 Test suite operations definition

The test suite operation identifiers are composed of substrings in lowercase letters, except for standard prefix "TSO_". An underscore character ("_") separates each substring.

EXAMPLE: TSO_substring.

6.1.1.3 Test suite parameter declarations

The test suite parameter identifiers are composed of substrings in lowercase letters, except for the standard prefix "TSP_". An underscore character ("_") separates each substring.

EXAMPLE 1: TSP_t_wait.

If the test suite parameter references a Protocol Implementation Conformance Statement (PICS) item, the letter "C" is added to the standard prefix.

EXAMPLE 2: TSPC_encryption_support.

If the test suite parameter references a PIXIT item, the letter "X" is added to the standard prefix.

EXAMPLE 3: TSPX_pid.

6.1.1.4 Test case selection expression definition

The test case selection expression identifiers are composed of substrings in lowercase letters, beginning with the prefix "TCS_". An underscore character ("_") separates each substring.

6.1.1.5 Test suite constant declarations

The test suite constant identifiers are composed of substrings in lowercase letters, except for the prefix "TSC_". An underscore character ("_") separates each substring.

If the test suite constant represents a system parameter, the complete name defined in the protocol standard is used.

6.1.1.6 Test suite variable declarations

The test suite variable identifiers are composed of substrings in lowercase letters, except for the prefix "TSV_". An underscore character ("_") separates each substring.

Complete names as defined in the protocol standard are used.

6.1.1.7 Test case variable declarations

The test case variable identifiers are composed of substrings in lowercase letters, except for the prefix "TCV_". An underscore character ("_") separates each substring.

Complete names as defined in the protocol standard are used.

6.1.1.8 Timer declarations

Two types of timers can be identified:

1) Standardized:

- Those defined in the protocol standard, e.g. T105. They use exactly the same name as in the standard.

As there is a tolerance margin accepted for these timers, three values are needed:

- The maximum value allowed, which will use the suffix "_max";
- The minimum value allowed, which will use the suffix "_min";
- The value actually implemented, with no suffix.

EXAMPLE 1: T105_max, T105_min, and T105.

2) Not standardized:

- Those not defined in the protocol standard, i.e. for execution use, e.g. a timer waiting for a response. These timers begin with the prefix "T_", followed by a string in lowercase letters.

EXAMPLE 2: T_resp represents a timer for controlling the response time of the IUT.

6.1.1.9 ASP type definitions

The general conventions in clause 6.1.1.1 apply.

The identifier of an ASP type uses the same name as the name defined in the protocol standard.

6.1.1.10 PDU type definitions

The general conventions in clause 6.1.1.1 apply.

The PDU type identifier shall identify the related structure or type as defined in the protocol standard.

6.1.1.11 CM type definitions

The CM types are defined as the ASP types without sub-fields.

6.1.1.12 Alias definitions

Alias definitions are not used.

6.1.2 Constraints part

This clause describes the naming conventions chosen for the elements of the ATS constraints part.

6.1.2.1 General

Constraints shall be written with the first letter in uppercase, and the rest in lowercase.

The first part of the constraint declaration identifier name is equivalent to the corresponding type identifier used in the declaration part. The second part of the name describes the content of this constraint.

EXAMPLE: Declaration part: HEADER_FIELD.
Constraint part: Header_field_paging.

6.1.3 Dynamic part

This clause describes the naming conventions used for the elements of the ATS dynamic part.

6.1.3.1 General

All test cases shall be listed in the order in which they appear in the Test Suite Structure (TSS) and TP document.

6.1.3.2 Test Case (TC) identifier

The identifier of the test case is built in the same way as for the test purpose described in part 2 of the present document, with the exception that "TP" is replaced by "TC". The identifier of a TC is built according to table 2.

Table 2: TC naming convention

Identifier:	TC_<iut>_<gp>_<x>_<nn>		
<iut>	= IUT type	OE	Originating Endpoint
		TE	Terminating Endpoint
<gp>	= group of procedures	CEP	Capability Exchange Procedures
		MSD	Master Slave Determination Procedures
		LCS	Unidirectional Logical Channel Signalling Procedures
		BLC	Bi-directional Logical Channel Signalling Procedures
		CLC	Close Logical Channel Procedures
		MRS	Mode Request Procedures
x	= Type of testing	BV	Valid Behaviour Tests
		BI	Invalid Behaviour Tests
		BO	Inopportune Behaviour Tests
<nn>	= sequential number	(01-99)	Test Case Number

EXAMPLE: TP identifier: TP/TE/LCS/BV-10.
TC identifier: TC_TE_LCS_BV_10.

6.1.3.3 Test step identifier

The test step identifier is built of substrings in lowercase letters, preceded by a string of uppercase letters. Underscore characters join the substrings. The first substring indicates the main function of the test step; e.g. PR for preamble, PO for postamble, LTS for local tree and STP for general test step. The second substring indicates the purpose of the step.

EXAMPLE: PO_release_duc.

6.1.3.4 Default identifier

The default identifiers begin with the prefix "DF_", followed by a string in lowercase letters.

6.1.3.5 Label identifier

The identifiers in the label column is built according to table 3.

Table 3: Naming convention for verdict assignment identifier

Identifier:	<Table><nn>		
	<Table> = type of table	TB	Test Body
		CS	Check State test step
		DF	DeFault
		PO	POstamble
		PR	PReamble
		TS	TestStep
	<nn> = sequential number	(00-99)	Label number

6.1.3.6 ATS abbreviations

These abbreviations are used to shorten identifier names:

addr	address
ack	acknowledgement
bear	bearer
cap	capability
cfm	confirm
chn	channel
con	connection
ctrl	control
est	establish
ext	extension
id	identification
ind	indication
info	information
max	maximum
min	minimum
par	parameter
prop	proprietary
rel	release
req	request
rsp	response
std	standard
sys	system

6.2 Implementation conventions

6.2.1 Declaration part

The comment line of single element TTCN tables (e.g. test suite constants) is used to give a reference where the format and content of the element is described in the relevant protocol standards. Any particularity of the element format or content is described in the comment line.

The comment line in the header of multi element TTCN tables (e.g. ASP) is used to reference to the protocol standard.

The detailed comments are used to describe any particularity of the table.

In the ASP and PDU declarations the comment column is further used to give information about the parameter/field value, in particular if the parameter/field contains a fixed spare value.

6.2.2 Constraint part

The ASPs and PDUs are defined in a way that all relevant parameters/fields are parameterized. That improves the transparency of the constraints in the dynamic part, as all values, which are relevant for the test, are always present.

Generally no modified constraints are used. This allows an easier reuse and adaptation of constraints if they are reused in other test specifications.

The Comment line of a constraint always contains a reference to the relevant protocol standard.

The detailed comment footer is used to describe any particularity of the table.

6.2.3 Dynamic part

All events, which are defined as a conformance requirement by the TP, cause a preliminary verdict PASS if the requirement is met.

All invalid events are handled in the default tree. Only FAIL or INCONC verdicts are assigned in the default tree.

The preamble, the test body and the postamble may have different default trees, which allows a specific verdict handling, e.g. only INCONC verdicts are assigned in the preamble.

All verdict assignments are labelled. According to ISO/IEC 9646-3 [8], clause E.2, labels should be written to the conformance log. This allows, for example, to identify where the test failed. To allow an exact identification of the table, in which the verdict was assigned, the convention described in clause 6.1.3.5 is applied.

TP, which are listed in the untestable TP list in clause 5, are not considered in the ATS, thus these TC identifiers are missing in the ATS and the numbering of the TC is not always continuous.

7 Primitives

7.1 Primitives at CHN_PCO

The primitive `rcv_pdu` (`channel_number`, `PDU_message`) is used to receive H245 messages from the IUT. The `channel_number` value shall be obtained by using primitives at `TT_PCO` at the beginning of the test case.

The primitive `snd_pdu` (`channel_number`, `PDU_message`) is used to transmit H245 messages to the IUT. The `channel_number` value shall be obtained by using primitives at `TT_PCO` at the beginning of the test case.

7.2 Primitives at TT_PCO

The primitive `open_protocol_req` (`protocol_number`) is used to open one channel with the IUT for H245 or for the H245 entity upper layer. In return, the tester shall receive the primitive `open_protocol_ind` (`protocol_number`) containing the allocated `channel_number` value.

The primitive `close_protocol_req` (`channel_number`, `protocol_number`) is used to close one channel with the IUT for H245 or for the H245 entity upper layer. In return, the tester shall receive the primitive `close_protocol_ind` (`protocol_number`).

7.3 Primitives at UT_PCO

To start the first action of one of the H245 entities, the tester uses the primitive `activate_entity_req` (`entity_number`) to interact with the upper layer of the H245 entity. In return, the tester shall receive the primitive `activate_entity_ind` (`entity_number`) containing a flag indicating the acceptance of the activation.

To check the state machine of one of the H245 entities, the tester uses the primitive `check_state_req` (`entity_number`, `state`) to interact with the upper layer of the H245 entity. In return, the tester shall receive the primitive `check_state_ind` (`entity_number`) containing a flag indicating if the entity is in the checked state.

To release the last action of one of the H245 entities, the tester uses the primitive `release_entity_req` (`entity_number`) to interact with the upper layer of the H245 entity. In return, the tester shall receive the primitive `release_entity_ind` (`entity_number`) containing a flag indicating the acceptance of the command.

To request the upper layer of one of the H245 entities to accept the next action, the tester uses the following primitive `transfer_accept_req` (`entity_number`). In return, the tester shall receive the primitive `transfer_accept_ind` (`entity_number`) containing a flag indicating the acceptance of the command.

To request the upper layer of one of the H245 entities to reject the next action, the tester uses the following primitive `transfer_reject_req` (`entity_number`). In return, the tester shall receive the primitive `transfer_reject_ind` (`entity_number`) containing a flag indicating the acceptance of the command.

Annex A (normative): Abstract Test Suite (ATS)

This ATS has been produced using the Tree and Tabular Combined Notation (TTCN) according to ISO/IEC 9646-3 [8].

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 itself contains a test suite overview part, which provides additional information and references.

A.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format™ file (H245.PDF) contained in archive ts_10189003v010101p0.ZIP) which accompanies the present document.

A.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (H245.MP contained in archive ts_10189003v010101p0.ZIP) which accompanies the present document.

NOTE: Where an ETSI Abstract Test Suite (in TTCN) is published in both .GR and .MP format these two forms shall be considered equivalent. In the event that there appears to be syntactical or semantic differences between the two then the problem shall be resolved and the erroneous format (whichever it is) shall be corrected.

Annex B (normative): Partial PIXIT proforma

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

The PIXIT Proforma is based on ISO/IEC 9646-6. Any needed additional information can be found in this international standard document.

B.1 Identification summary

Table B.1

PIXIT Number:	
Test Laboratory Name:	
Date of Issue:	
Issued to:	

B.2 ATS summary

Table B.2

Protocol Specification:	TS 101 883
Protocol to be tested:	
ATS Specification:	TS 101 890-3
Abstract Test Method:	TS 101 890-3, clause 4

B.3 Test laboratory

Table B.3

Test Laboratory Identification:	
Test Laboratory Manager:	
Means of Testing:	
SAP Address:	

B.4 Client identification

Table B.4

Client Identification:	
Client Test manager:	
Test Facilities required:	

B.5 SUT

Table B.5

Name:	
Version:	
SCS Number:	
Machine configuration:	
Operating System Identification:	
IUT Identification:	
PICS Reference for IUT:	
Limitations of the SUT:	
Environmental Conditions:	

B.6 Protocol layer information

B.6.1 Protocol identification

Table B.6

Name:	TIPHON profile for ITU-T Recommendation H.245, according to TS 101 883.
Version:	
PICS References:	

B.6.2 IUT information

Table B.7 General parameters

Name/Type	Comments	Value
TSPX_ForwardLogicalChannelParameters ForwardLogicalChannelParameters	To create an OpenLogicalChannel message for sending.	
TSPX_ForwardLogicalChannelParameters2 ForwardLogicalChannelParameters	To create an OpenLogicalChannel message for bi-directional communication for sending.	
TSPX_LogicalChannelNumber LogicalChannelNumber	To create an OpenLogicalChannel message for sending.	
TSPX_LogicalChannelNumber2 LogicalChannelNumber	To create a RequestChannelClose message for sending.	
TSPX_ModeDescription ModeDescription	To create a RequestMode message for sending.	
TSPX_statusDeterminationNumber INTEGER	To create a MasterSlaveDetermination message for sending (status master or slave according to TSPX_terminalType).	
TSPX_statusDeterminationNumber2 INTEGER	To create a MasterSlaveDetermination message for sending (status indeterminate according to TSPX_terminalType2).	
TSPX_terminalType INTEGER	To create a MasterSlaveDetermination message for sending (status master or slave according to TSPX_statusDeterminationNumber).	
TSPX_terminalType2 INTEGER	To create a MasterSlaveDetermination message for sending (status indeterminate according to TSPX_statusDeterminationNumber2).	
TSPX_protocolOid OID (OBJECT IDENTIFIER)	To create a TerminalCapabilitySet message for sending.	
TSPX_SequenceNumber SequenceNumber	To create a TerminalCapabilitySet message for sending.	
TSPX_SequenceNumber2 SequenceNumber	To create a RequestModemessage for sending.	

Annex C (normative): PCTR Proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PCTR proforma in this annex so that it can be used for its intended purposes and may further publish the completed PCTR.

The PCTR proforma is based on ISO/IEC 9646-6. Any needed additional information can be found in the present document.

C.1 Identification summary

C.1.1 Protocol conformance test report

Table C.1

PCTR Number:	
PCTR Date:	
Corresponding SCTR Number:	
Corresponding SCTR Date:	
Test Laboratory Identification:	
Test Laboratory Manager:	
Signature:	

C.1.2 IUT identification

Table C.2

Name:	
Version:	
Protocol specification:	
PICS:	
Previous PCTR if any:	

C.1.3 Testing environment

Table C.3

PIXIT Number:	
ATS Specification:	
Abstract Test Method:	Remote test method, Embedded variant with notional UT
Means of Testing identification:	
Date of testing:	
Conformance Log reference(s):	
Retention Date for Log reference(s):	

C.1.4 Limits and reservation

Additional information relevant to the technical contents or further use of the test report, or the rights and obligations of the test laboratory and the client, may be given here. Such information may include restriction on the publication of the report.

.....
.....
.....
.....
.....

C.1.5 Comments

Additional comments may be given by either the client or the test laboratory on any of the contents of the PCTR, for example, to note disagreement between the two parties.

.....
.....
.....
.....
.....

C.2 IUT Conformance status

This IUT has or has not been shown by conformance assessment to be non-conforming to the specified protocol specification.

Strike the appropriate words in this sentence. If the PICS for this IUT is consistent with the static conformance requirements (as specified in clause D.3 of the present document) and there are no "FAIL" verdicts to be recorded (in clause D.6 of the present document) strike the words "has or", otherwise strike the words "or has not".

C.3 Static conformance summary

The PICS for this IUT is or is not consistent with the static conformance requirements in the specified protocol.

Strike the appropriate words in this sentence.

C.4 Dynamic conformance summary

The test campaign did or did not reveal errors in the IUT.

Strike the appropriate words in this sentence. If there are no "FAIL" verdicts to be recorded (in clause D.6 of the present document) strike the words "did or" otherwise strike the words "or did not".

Summary of the results of groups of test:

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

C.5 Static conformance review report

If clause D.3 indicates non-conformance, this clause itemizes the mismatches between the PICS and the static conformance requirements of the specified protocol specification.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

C.6 Test campaign report for Originating Endpoint (OE)

Table C.4

ATS Reference	Selected?	Run?	Verdict	Observations (Reference to any observations made in clause 8 of this annex)
TC-OE-CEP-BV-01	Yes/No	Yes/No		
TC-OE-CEP-BV-02	Yes/No	Yes/No		
TC-OE-CEP-BV-03	Yes/No	Yes/No		
TC-OE-CEP-BV-04	Yes/No	Yes/No		
TC-OE-CEP-BV-05	Yes/No	Yes/No		
TC-OE-CEP-BV-06	Yes/No	Yes/No		
TC-OE-CEP-BO-01	Yes/No	Yes/No		
TC-OE-CEP-BO-02	Yes/No	Yes/No		
TC-OE-MSD-BV-01	Yes/No	Yes/No		
TC-OE-MSD-BV-02	Yes/No	Yes/No		
TC-OE-MSD-BV-03	Yes/No	Yes/No		
TC-OE-MSD-BV-04	Yes/No	Yes/No		
TC-OE-MSD-BV-05	Yes/No	Yes/No		
TC-OE-MSD-BV-06	Yes/No	Yes/No		
TC-OE-MSD-BV-07	Yes/No	Yes/No		
TC-OE-MSD-BV-08	Yes/No	Yes/No		
TC-OE-MSD-BV-09	Yes/No	Yes/No		
TC-OE-MSD-BO-01	Yes/No	Yes/No		
TC-OE-MSD-BO-02	Yes/No	Yes/No		
TC-OE-MSD-BO-03	Yes/No	Yes/No		
TC-OE-LCS-BV-01	Yes/No	Yes/No		
TC-OE-LCS-BV-02	Yes/No	Yes/No		
TC-OE-LCS-BV-03	Yes/No	Yes/No		
TC-OE-LCS-BV-04	Yes/No	Yes/No		
TC-OE-LCS-BV-05	Yes/No	Yes/No		
TC-OE-LCS-BV-06	Yes/No	Yes/No		
TC-OE-LCS-BV-07	Yes/No	Yes/No		
TC-OE-LCS-BV-08	Yes/No	Yes/No		
TC-OE-LCS-BV-09	Yes/No	Yes/No		
TC-OE-LCS-BV-10	Yes/No	Yes/No		
TC-OE-LCS-BV-11	Yes/No	Yes/No		
TC-OE-LCS-BV-12	Yes/No	Yes/No		
TC-OE-LCS-BV-13	Yes/No	Yes/No		
TC-OE-LCS-BV-14	Yes/No	Yes/No		
TC-OE-LCS-BO-01	Yes/No	Yes/No		
TC-OE-LCS-BO-02	Yes/No	Yes/No		
TC-OE-LCS-BO-03	Yes/No	Yes/No		
TC-OE-LCS-BO-04	Yes/No	Yes/No		
TC-OE-BLC-BV-01	Yes/No	Yes/No		

ATS Reference	Selected?	Run?	Verdict	Observations (Reference to any observations made in clause 8 of this annex)
TC-OE-BLC-BV-02	Yes/No	Yes/No		
TC-OE-BLC-BV-03	Yes/No	Yes/No		
TC-OE-BLC-BV-04	Yes/No	Yes/No		
TC-OE-BLC-BV-05	Yes/No	Yes/No		
TC-OE-BLC-BV-06	Yes/No	Yes/No		
TC-OE-BLC-BV-07	Yes/No	Yes/No		
TC-OE-BLC-BV-08	Yes/No	Yes/No		
TC-OE-BLC-BV-09	Yes/No	Yes/No		
TC-OE-BLC-BV-10	Yes/No	Yes/No		
TC-OE-BLC-BV-11	Yes/No	Yes/No		
TC-OE-BLC-BV-12	Yes/No	Yes/No		
TC-OE-BLC-BV-13	Yes/No	Yes/No		
TC-OE-BLC-BV-14	Yes/No	Yes/No		
TC-OE-BLC-BO-01	Yes/No	Yes/No		
TC-OE-BLC-BO-02	Yes/No	Yes/No		
TC-OE-BLC-BO-03	Yes/No	Yes/No		
TC-OE-BLC-BO-04	Yes/No	Yes/No		
TC-OE-CLC-BV-01	Yes/No	Yes/No		
TC-OE-CLC-BV-02	Yes/No	Yes/No		
TC-OE-CLC-BV-03	Yes/No	Yes/No		
TC-OE-CLC-BV-04	Yes/No	Yes/No		
TC-OE-CLC-BO-01	Yes/No	Yes/No		
TC-OE-CLC-BO-02	Yes/No	Yes/No		
TC-OE-MRS-BV-01	Yes/No	Yes/No		
TC-OE-MRS-BV-02	Yes/No	Yes/No		
TC-OE-MRS-BV-03	Yes/No	Yes/No		
TC-OE-MRS-BV-04	Yes/No	Yes/No		
TC-OE-MRS-BV-05	Yes/No	Yes/No		
TC-OE-MRS-BV-06	Yes/No	Yes/No		
TC-OE-MRS-BV-07	Yes/No	Yes/No		
TC-OE-MRS-BO-01	Yes/No	Yes/No		
TC-OE-MRS-BO-02	Yes/No	Yes/No		

C.7 Test campaign report for Terminating Endpoint (OE)

Table C.5

ATS Reference	Selected?	Run?	Verdict	Observations (Reference to any observations made in clause 8 of this annex)
TC-TE-CEP-BV-01	Yes/No	Yes/No		
TC-TE-CEP-BV-02	Yes/No	Yes/No		
TC-TE-CEP-BV-03	Yes/No	Yes/No		
TC-TE-CEP-BO-01	Yes/No	Yes/No		
TC-TE-CEP-BO-02	Yes/No	Yes/No		
TC-TE-MSD-BV-01	Yes/No	Yes/No		
TC-TE-MSD-BV-02	Yes/No	Yes/No		
TC-TE-MSD-BV-03	Yes/No	Yes/No		
TC-TE-MSD-BV-04	Yes/No	Yes/No		
TC-TE-MSD-BV-05	Yes/No	Yes/No		
TC-TE-MSD-BV-06	Yes/No	Yes/No		
TC-TE-MSD-BO-01	Yes/No	Yes/No		
TC-TE-MSD-BO-02	Yes/No	Yes/No		
TC-TE-MSD-BO-03	Yes/No	Yes/No		
TC-TE-LCS-BV-01	Yes/No	Yes/No		
TC-TE-LCS-BV-02	Yes/No	Yes/No		
TC-TE-LCS-BV-03	Yes/No	Yes/No		
TC-TE-LCS-BV-04	Yes/No	Yes/No		
TC-TE-LCS-BV-05	Yes/No	Yes/No		
TC-TE-LCS-BV-06	Yes/No	Yes/No		
TC-TE-LCS-BO-01	Yes/No	Yes/No		
TC-TE-LCS-BO-02	Yes/No	Yes/No		
TC-TE-BLC-BV-01	Yes/No	Yes/No		
TC-TE-BLC-BV-02	Yes/No	Yes/No		
TC-TE-BLC-BV-03	Yes/No	Yes/No		
TC-TE-BLC-BV-04	Yes/No	Yes/No		
TC-TE-BLC-BV-05	Yes/No	Yes/No		
TC-TE-BLC-BV-06	Yes/No	Yes/No		
TC-TE-BLC-BV-07	Yes/No	Yes/No		
TC-TE-BLC-BV-08	Yes/No	Yes/No		
TC-TE-BLC-BV-09	Yes/No	Yes/No		
TC-TE-BLC-BV-10	Yes/No	Yes/No		
TC-TE-BLC-BO-01	Yes/No	Yes/No		
TC-TE-BLC-BO-02	Yes/No	Yes/No		
TC-TE-BLC-BO-03	Yes/No	Yes/No		
TC-TE-BLC-BO-04	Yes/No	Yes/No		
TC-TE-BLC-BO-05	Yes/No	Yes/No		
TC-TE-CLC-BV-01	Yes/No	Yes/No		
TC-TE-CLC-BV-02	Yes/No	Yes/No		
TC-TE-CLC-BV-03	Yes/No	Yes/No		
TC-TE-CLC-BV-04	Yes/No	Yes/No		
TC-TE-CLC-BO-01	Yes/No	Yes/No		
TC-TE-CLC-BO-02	Yes/No	Yes/No		
TC-TE-MRS-BV-01	Yes/No	Yes/No		
TC-TE-MRS-BV-02	Yes/No	Yes/No		
TC-TE-MRS-BV-03	Yes/No	Yes/No		
TC-TE-MRS-BV-04	Yes/No	Yes/No		
TC-TE-MRS-BO-01	Yes/No	Yes/No		
TC-TE-MRS-BO-02	Yes/No	Yes/No		

C.8 Observations

Additional information relevant to the technical content of the PCTR is given here.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Annex D (informative): Bibliography

- ETSI TS 101 890-1: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Compliance Specifications; TIPHON profile for ITU-T H.245; Part 1: Protocol Implementation Conformance Statement (PICS) proforma specification".
- ETSI TS 101 890-2: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Compliance Specifications; TIPHON profile for ITU-T H.245; Part 2: Test Suite Structure and Test Purposes (TSS&TP) specification".

History

Document history		
V1.1.1	January 2002	Publication