

SLOVENSKI STANDARD
SIST-TS TS 101 889-1 V1.1.1:2004
01-april-2004

Harmonizacija telekomunikacij in internetnega protokola prek omrežij (TIPHON), 3. izdaja - Specifikacija tehnološke ustreznosti - Profil TIPHON za ITU-T H.248 - 1. del: Izjava o skladnosti izvedbe protokola (PICS) - Proforma specifikacija

Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON)
Release 3; Technology Compliance Specification; TIPHON profile for ITU-T H.248; Part
1: Protocol Implementation Conformance Statement (PICS) proforma specification

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST-TS TS 101 889-1 V1.1.1:2004](#)

<https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-ts-101-889-1-v1-1-1-2004>

Ta slovenski standard je istoveten z: TS 101 889-1 Version 1.1.1

ICS:

33.020 Telekomunikacije na splošno Telecommunications in general

SIST-TS TS 101 889-1 V1.1.1:2004 en

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

SIST-TS TS 101 889-1 V1.1.1:2004

<https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-ts-101-889-1-v1-1-1-2004>

ETSI TS 101 889-1 V1.1.1 (2002-08)

Technical Specification

Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Compliance Specification; TIPHON profile for IUT-T H.248; Part 1: Protocol Implementation Conformance Statement (PICS) proforma specification

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

[SIST-TS TS 101 889-1 V1.1.1:2004](#)

<https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-ts-101-889-1-v1-1-1-2004>



Reference

DTS/TIPHON-06017-1

KeywordsH.248, IP, PICS, supplementary service,
telephony, 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° 7303/88**iTeh STANDARD PREVIEW**
(standards.iteh.ai)[SIST-TS TS 101 889-1 V1.1.1:2004](#)<https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080edc>
Important noticeIndividual 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.

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

Contents

A.9.2.4	Transaction ResponseAck.....	25
A.9.3	Contexts.....	26
A.9.3.1	Action Request.....	26
A.9.3.2	Action Reply.....	26
A.9.4	Commands.....	27
A.9.4.1	Command Requests	27
A.9.4.1.1	Add Command Request	27
A.9.4.1.2	Modify Command Request	27
A.9.4.1.3	Substract Command Request	28
A.9.4.1.4	Move Command Request	28
A.9.4.1.5	AuditValue Command Request.....	28
A.9.4.1.6	AuditCapabilities Command Request	28
A.9.4.1.7	Notify Command Request.....	29
A.9.4.1.8	ServiceChange Command Request	29
A.9.4.2	Command Replies.....	29
A.9.4.2.1	Add Command Reply.....	29
A.9.4.2.2	Modify Command Reply.....	30
A.9.4.2.3	Subtract Command Reply	30
A.9.4.2.4	Move Command Reply	31
A.9.4.2.5	AuditValue Command Reply	31
A.9.4.2.6	AuditCapabilities Command Reply	32
A.9.4.2.7	Notify Command Reply	32
A.9.4.2.8	Service Change Command Reply	32
A.9.5	Descriptors	33
A.9.5.1	Media Descriptor	33
A.9.5.2	Termination State Descriptor.....	33
A.9.5.3	Stream Descriptor.....	34
A.9.5.4	Local Descriptor	34
A.9.5.5	Remote Descriptor	34
A.9.5.6	Local Control Descriptor	35
A.9.5.7	ServiceChange Descriptor	35
A.9.5.8	Statistics Descriptor	36
A.9.5.9	Error Descriptor	36
A.10	Support of annexes/Packages	37
A.10.1	Annex C: Tags for Media Stream Properties.....	37
A.10.2	Annex D: Transport over IP	37
A.10.2.1	Transport over IP/UDP	37
A.10.2.2	Transport over IP/TCP	38
A.10.3	Annex E: Basic Packages	38
A.10.4	Annex L: Error Code descriptions	39
A.10.5	Additional annexes and Packages	39
A.11	Timers and Parameters	40
A.11.1	Timers	40
A.11.2	IUT Parameters	40
A.12	Support of specific procedures for the TIPHON interfaces according to the TIPHON release 3 profile	41
A.12.1	Specific PICS for TIPHON interface N2 according to TS 101 885	41
A.12.2	Specific PICS for TIPHON interface N3 according to TS 101 885	41
	History	42

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 1 of a multi-part deliverable covering Conformance Testing for TIPHON Release 3; TIPHON profile for ITU-T recommendation H.248.1 [20], 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".
- iTech STANDARD PREVIEW**
(standards.iteh.ai)

SIST-TS TS 101 889-1 V1.1.1:2004
<https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-ts-101-889-1-v1-1-1-2004>

Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called an Implementation Conformance Statement (ICS).

Figure 1 shows the relationship of the present document with other TIPHON release 3 deliverables.

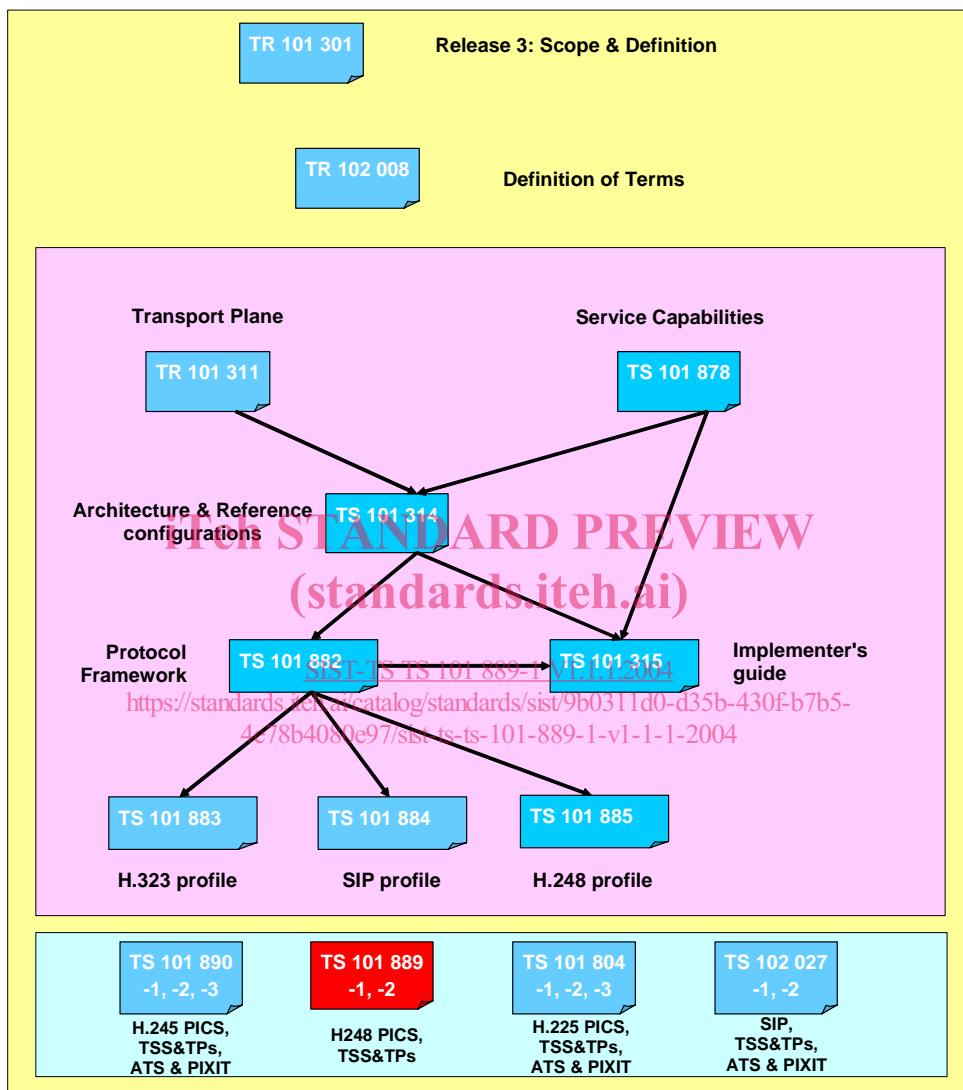


Figure 1: Relationship with other TIPHON release 3 documents

1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the audiovisual and multimedia systems Infrastructure of audiovisual services - Communication procedures, Gateway control protocol, ITU-T Recommendation H.248.1 [20] in compliance with the relevant requirements specified in TS 101 885 [1] and in accordance with the relevant guidance given in ISO/IEC 9646-7 [22].

The supplier of a protocol implementation which is claimed to conform to TIPHON mapping to H.248.1 [20] is required to complete a copy of the PICS proforma provided in annex A of the present document and is required to provide the information necessary to identify both the supplier and the implementation.

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 101 885: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Mapping; Technology Mapping of TIPHON reference point N to H.248/MEGACO protocol".
This standard is reviewed by standards.iteh.ai
- [2] ETSI TR 101 301: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Release Definition; TIPHON Release 3 Definition".
Downloaded from https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-101-889-1-v1-1-1-2004
- [3] ETSI TR 102 008: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Terms and Definitions".
https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-101-889-1-v1-1-1-2004
- [4] ETSI TR 101 311: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Service Independent requirements definition; Transport Plane".
- [5] ETSI TS 101 878: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Service Capability Definition; Service Capabilities for a simple call".
- [6] ETSI TS 101 314: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Abstract Architecture and Reference Points Definition; Network Architecture and Reference Points".
- [7] ETSI TS 101 882: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Protocol Framework Definition; General (meta-protocol)".
- [8] ETSI TS 101 315: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Functional entities, information flow and reference point definitions; Guidelines for application of TIPHON functional architecture to inter-domain services".
- [9] ETSI TS 101 883: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Mapping; Implementation of TIPHON architecture using H.323".
- [10] ETSI TS 101 884: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Mapping; Implementation of TIPHON architecture using SIP".
- [11] 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".

- [12] 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".
- [13] ETSI TS 101 890-3: "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".
- [14] ETSI TS 101 889-2: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology Compliance Specification; TIPHON profile for ITU-T H.248; Part 2: Test Suite Structure and Test Purposes (TSS&TP) specification".
- [15] ETSI TS 101 804-1: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology compliance specifications; Part 1: Revision/Update of H.225.0 Protocol Implementation Conformance Statement (PICS) proforma specification for Terminal, Gatekeeper and Gateway".
- [16] ETSI TS 101 804-2: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology compliance specifications; Part 2: H.225.0 conformance test specifications; Test Suite Structure and Test Purposes (TSS&TP) specification for Terminal, Gatekeeper and Gateway".
- [17] ETSI TS 101 804-3: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Technology compliance specifications; Part 3: H.225.0 conformance test specifications; Abstract Test Suite (ATS) and PIXIT proforma specification for Terminal, Gatekeeper and Gateway".
- [18] ~~ETSI TS 102 027-1: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Technology Compliance Specification; Draft IETF SIP RFC2543bis-04; Part 1: Test Suite Structure and Test Purposes (TSS&TP) specification;".~~
- [19] ~~ETSI TS 102 027-2: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Technology Compliance Specification; Draft IETF SIP RFC2543bis-04; Part 2: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification".~~
- [20] ITU-T Recommendation H.248.1.1: "Gateway control protocol: Version 1" ..
- [21] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [22] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [23] ETSI TS 101 882: "Protocol Framework Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; Protocol Framework Definition; General (meta-protocol)".

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.248.1 [20];
- terms defined in ISO/IEC 9646-1 [21] and in ISO/IEC 9646-7 [22].

In particular, the following terms defined in ISO/IEC 9646-1 [21] apply:

Implementation Conformance Statement (ICS): statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented

NOTE: The PICS can take several forms: protocol PICS, profile PICS, profile specific PICS, information object PICS, etc.

Protocol ICS (PICS): ICS for an implementation or system claimed to conform to a given protocol specification

3.2 Abbreviations

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

ICS	Implementation Conformance Statement
IUT	Implementation Under Test
MG	Media Gateway
MGC	Media Gateway Controller
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
SCS	System Conformance Statement
SUT	System Under Test

4 Conformance to this PICS proforma specification

If it claims to conform to the present document, the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma given in annex A, and shall preserve the numbering/naming and ordering of the proforma items.

A PICS which conforms to the present document shall be a conforming PICS proforma completed in accordance with the guidance for completion given in clause A.1.

Annex A (normative): PICS proforma for ITU-T Recommendation H.248.1 as specified in TS 101 885

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 PICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed PICS.

A.1 Guidance for completing the PICS proforma

A.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 ITU-T Recommendation H.248.1 may provide information about the implementation in a standardized manner.

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

- guidance for completing the PICS proforma;
- identification of the implementation; **iTech STANDARD PREVIEW (standards.iteh.ai)**
- identification of the protocol; **SIST-TS TS 101 889-1 V1.1.1:2004**
- global statement of conformance; **SIST-TS TS 101 889-1 V1.1.1:2004**
- general remarks; <https://standards.iteh.ai/catalog/standards/sist/9b0311d0-d35b-430f-b7b5-4e78b4080e97/sist-ts-ts-101-889-1-v1-1-1-2004>
- roles and major capabilities;
- basic procedures;
- coding supported by the IUT;
- support of annexes/packages;
- timers and parameters

A.1.2 Abbreviations and conventions

The PICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7.

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (for example parameters, timers, etc.). It implicitly means "is < item description > supported by the implementation?".

Status column

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

- m mandatory - the capability is required to be supported;
- o optional - the capability may be supported or not;
- n/a not applicable - in the given context, it is impossible to use the capability;
- x prohibited (excluded) - there is a requirement not to use this capability in the given context;
- 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;
- c.i conditional - the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying a unique conditional status expression which is defined immediately following the table;
- i irrelevant (out-of-scope) - capability outside the scope of the reference specification. No answer is requested from the supplier.

Reference column

The reference column makes reference to ITU-T Recommendation H.248.1 except where explicitly stated otherwise.

Support column

The supplier of the implementation shall fill in the support column. The following common notations, defined in ISO/IEC 9646-7, are used for the support column:

**iTech STANDARD PREVIEW
(standards.iteh.ai)**

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

If this PICS proforma is completed in order to describe a multiple-profile support in a system, it is necessary to be able to answer that a capability is supported for one profile and not supported for another. In that case, the supplier shall enter the unique reference to a conditional expression, preceded by "?" (for example ?3). This expression shall be given in the space for comments provided at the bottom of the table. It uses predicates defined in the SCS, each of which refers to a single profile and which takes the value TRUE if and only if that profile is to be used.

EXAMPLE: ?3: IF prof1 THEN Y ELSE N.

It is also possible to provide a comment to an answer in the space provided at the bottom of the table.

NOTE: As stated in ISO/IEC 9646-7, support for a received PDU requires the ability to parse all valid parameters of that PDU. Supporting a PDU while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a PDU means that the semantics of that parameter are supported.

Values allowed column

The values allowed column contains the type, the list, the range, or the length of values allowed. The following notations are used:

- range of values: < min value > .. < max value >:
- example: 5 .. 20.