

# ETSI TS 101 520 V1.1.1 (2000-09)

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*Technical Specification*

**Telecommunications and Internet Protocol  
Harmonization Over Networks (TIPHON);  
Implementation Conformance Statement (ICS)  
proforma for the support of packet based multimedia  
communications systems;  
Support of ITU-T Recommendation H.323**

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**Reference**

DTS/TIPHON-06011

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**Keywords**

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**ETSI**

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## Foreword

This Technical Specification (TS) has been produced by ETSI Project Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON).

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## 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).

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# 1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for Packet based multimedia communications systems as specified in ITU-T Recommendation H.323 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [3].

The supplier of an implementation, which is claimed to conform to ITU-T Recommendation H.323 [1] is required to complete a copy of the 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.

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# 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, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ITU-T Recommendation H.323 (Version 3, 1999): "Packet-based multimedia communications systems".
- [2] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [3] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [4] ETSI TS 101 471: "Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); Signalling for basic calls and inter-domain calls between an H.323 terminal and a Terminal in a Switched-Circuit Network (SCN); Phase III: Scenario 1, 2, 3, and 4".

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# 3 Definitions and abbreviations

## 3.1 Definitions

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

- terms given in ITU-T Recommendation H.323 [1];
- terms given in ISO/IEC 9646-1 [2] and in ISO/IEC 9646-7 [3].

In particular, the following terms given in ISO/IEC 9646-1 [2] 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. The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, information object ICS, etc.

**ICS proforma:** document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

## 3.2 Abbreviations

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

APDU	Application Protocol Data Unit
GK	Gatekeeper
ICS	Implementation Conformance Statement
IUT	Implementation Under Test
MCU	Multipoint Control Unit
MSI	Manufacturer Specific Information
PDU	Protocol Data Unit
PER	Packed Encoding Rules
ROS	Remote Operations Service
SCS	System Conformance Statement
SS	Supplementary Service
SUT	System Under Test

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## 4 Conformance to this ICS proforma specification

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

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

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## Annex A (normative): ICS proforma for ITU-T Recommendation H.323

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 ICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed ICS.
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### A.1 Guidance for completing the ICS proforma

#### A.1.1 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in ITU-T Recommendation H.323 may provide information about the implementation in a standardized manner.

The ICS proforma is subdivided into sub-clauses for the following categories of information:

- guidance for completing the ICS proforma;
- identification of the implementation;
- identification of the protocol;
- global statement of conformance;
- roles;
- major capabilities;
- subsidiary capabilities;
- operations;
- arguments, results and errors;
- timers.

#### A.1.2 Abbreviations and conventions

The ICS 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 that 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;
ci	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.323, except where explicitly stated otherwise.

### 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, are used for the support column:

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 ICS 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.
- List of values:                    < value1 >, < value2 >, ....., < valueN >:
  - example:                            2, 4, 6, 8, 9;
  - example:                            '1101'B, '1011'B, '1111'B;
  - example:                            '0A'H, '34'H, '2F'H.
- List of named values:            < name1 >(< val1 >), < name2 >(< val2 >), ....., < nameN >(< valN >):
  - example:                            reject(1), accept(2).
- Length:                            size (< min size > .. < max size >):
  - example:                            size (1 .. 8).

### Values supported column

The values supported column shall be filled in by the supplier of the implementation. In this column, the values or the ranges of values supported by the implementation shall be indicated.

### References to items

For each possible item answer (answer in the support column) within the ICS proforma a unique reference exists, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns are discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.5/4 is the reference to the answer of item 4 in table 5 of annex A.

EXAMPLE 2: A.6/3b is the reference to the second answer (i.e. in the second support column) of item 3 in table 6 of annex A.

### Prerequisite line

A prerequisite line takes the form: Prerequisite: < predicate >.

A prerequisite line after a clause or table title indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

## A.1.3 Instructions for completing the ICS proforma

The supplier of the implementation shall complete the ICS proforma in each of the spaces provided. In particular, an explicit answer shall be entered, in each of the support or supported column boxes provided, using the notation described in subclause A.1.2.

If necessary, the supplier may provide additional comments in space at the bottom of the tables, or separately on sheets of paper.

More detailed instructions are given at the beginning of the different subclauses of the ICS proforma.

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## A.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.

### A.2.1 Date of the statement

.....

### A.2.2 Implementation Under Test (IUT) identification

IUT name:

.....  
 .....

IUT version:

.....

### A.2.3 System Under Test (SUT) identification

SUT name:

.....  
 .....

Hardware configuration:

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

Operating system:

.....

### A.2.4 Product supplier

Name:

.....

Address:

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

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

## A.2.5 Client (if different from product supplier)

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

## A.2.6 ICS contact person

(A person to contact if there are any queries concerning the content of the ICS)

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

.....

## A.3 ICS/System Conformance Statement (SCS)

Provide the relationship of the ICS with the SCS for the system.

## A.4 Identification of the standard

The ICS proforma applies to the following standard:

ITU-T Recommendation H.323: "Packet based multimedia communications systems".

## A.5 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No).

NOTE: Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the ICS, with an explanation of why the implementation is non-conforming, on pages attached to the ICS proforma.

## A.6 Capabilities

### A.6.1 Major capabilities

**Table A.1: Major capabilities**

Item	Procedure	H.323 Reference	Status	Support Y   N   n/a
MC 1	Supports H.323, version 1	H.323	o	
MC 2	Supports H.323, version 2	H.323	m	
MC 3	Supports H.323, version 3	H.323	o	
MC 4	Implementation can act as terminal	H.323	o.1	
MC 5	Implementation can act as GK	H.323	o.1	
MC 6	Implementation can act as GW	H.323	o.1	
MC 7	Implementation can act as MCU	H.323	o.1	
MC 8	Supports H.323, version 4	H.323	o	
MC 9	Supports TS 101 471 (3011 before)	TS 101 471	m	
o.1: One or more options shall be supported				
Comments:				

## A.6.2 Subsidiary capabilities

### A.6.2.1 H.323 terminal characteristics

This subclause applies to all implementations that act like a H.323 Terminal. These are all that support the option MC4 and all that support MC6 in subclause A.6.1 and have decided to behave like a Terminal on the network (see H.323 6.3).

**Table A.2: Support of H.323 terminal characteristics**

Item	Characteristic	H.323References	Status	Support Y   N   n/a
TC 1	Supports required terminal characteristics: System Control Unit, H.225.0 layer, Network Interface and an Audio Codec Unit	6.2	m	
TC 2	Supports video codecs	6.2.4	o	
TC 3	- H.261 video codec: QCIF mode	6.2.4	TC2:m	
TC 4	- H.261 video codec: Other modes	6.2.4	o	
TC 5	- H.263 video codec	6.2.4	o	
TC 6	- Other video codecs	6.2.4	o	
TC 7	- Can send > one video channels at the same time	6.2.4	o	
TC 8	- Can receive > one video channels at the same time	6.2.4	o	
TC 9	- Can operate in asymmetric video bit rate & frame rate	6.2.4	o	
TC 10	Supports audio codecs	6.2.5	m	
TC 11	- G.711 codec with $\mu$ -law	6.2.5	TC10:m	
TC 12	- G.711 codec with A-law	6.2.5	TC10:m	
TC 13	- G.723.1 codec: 5.3 & 6.3kbit/s modes	6.2.5	o	
TC 14	- G.729 codec	6.2.5	o	
TC 15	- Other audio codecs (e.g. GSM)	6.2.5	o	
TC 16	- supports audio mixing	6.2.5.1	o	
TC 17	- supports audio-video transmit skew operation	6.2.5.2	TC2:m	
TC 18	- supports low bitrate operation	6.2.5.3	c.1	
TC 19	Supports receive path delay	6.2.6	o	
TC 20	Supports data channels	6.2.7	o	
TC 21	- T.120 capability	6.2.7	TC20:m	
TC 22	- T.123 unicast	6.2.7	TC20:m	
TC 23	- T.125, annex A multicast	6.2.7	o	
TC 24	- T.128 application sharing	6.2.7	o	
TC 25	- non-standard data application	6.2.7	o	
TC 26	- transparent user data application	6.2.7	o	
TC 27	Supports remote device control through H.282 protocol	6.2.7.2	o	
TC 28	Supports H.245 control function processing for H.323	6.2.8	m	
TC 29	- supports capabilities exchange operations	6.2.8.1	m	
TC 30	- supports logical channel signalling operations	6.2.8.2	m	
TC 31	- supports mode preference operations	6.2.8.3	o	
TC 32	- supports master-slave determination operations	6.2.8.4	m	
TC 33	Supports H.225.0 RAS signalling function operations	6.2.9	m	
TC 34	Supports H.225.0 call signalling function operations	6.2.10	m	
TC 35	- Can open call signalling channel to remote endpoint (direct routed model or gatekeeper routed model)	6.2.10	o	
TC 36	- Can open call signalling channel to GK (gatekeeper routed model)	6.2.10	m	
TC 37	Supports logical channels according to the H.225.0	6.2.11 6.2.11.1 6.2.11.2	m	
c.1: If TC13 or TC14 then m else n/a				
Comments:				

### A.6.2.2 Monolithic Gateway (GW) characteristics

This subclause applies only if the implementation supports the option MC6 in subclause A.6.1.

**Table A.3: Support of H.323 Monolithic Gateway characteristics**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
GW 1	Supports GW SCN functions	6.3	m	
GW 2	- SCN analog interface provided	-	o.1	
GW 3	- PBX analog interface provided	-	o.1	
GW 4	- PBX QSIG interface provided	-	o.1	
GW 5	- SCN ISDN BRI provided	-	o.1	
GW 6	- SCN ISDN PRI provided	-	o.1	
GW 7	GW can detect SCN DTMF signals and map to H.245 userInputIndication using signal and signalUpdate	6.3	o.2	
GW 8	GW can detect SCN DTMF signals and map to H.245 userInputIndication using nonStandard	6.3	o.2	
GW 9	GW can detect SCN DTMF signals and map to H.245 userInputIndication using alphanumeric	6.3	o.2	
GW 10	GW can use H.245 userInputIndication with userInputSupportIndication to indicate the DTMF-mapping capabilities of the endpoint.	6.3 H.245: B.2.2.10	o	
GW 11	GW can map H.245 userInputIndication – signal and signalUpdate to SCN DTMF signals	6.3	o.3	
GW 12	GW can map H.245 userInputIndication – nonStandard to SCN DTMF signals	6.3	o.3	
GW 13	GW can map H.245 userInputIndication – alphanumeric to SCN DTMF signals	6.3	o.3	
GW 14	SCN call signalling received by GW and not applicable to the Gateway is passed through to the LAN	6.3	o	
GW 15	Supports GW – SCN – GW communications	6.3	o	
GW 16	Supports GW – LAN - GW communications	6.3	o	
o.1: GW must provide at least one of these selections.				
o.2: GW must provide at least one of these selections.				
o.3: GW must provide at least one of these selections.				
Comments:				

### A.6.2.3 Gatekeeper (GK) Characteristics

This subclause applies only if the implementation supports the option MC5 in subclause A.6.1.

**Table A.4: Support of H.323 Gatekeeper characteristics**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
GC 1	Supports address translation	6.4	m	
GC 2	Supports admissions control	6.4	m	
GC 3	Supports bandwidth control	6.4	m	
GC 4	Supports zone management	6.4	m	
GC 5	Provides call control signalling	6.4	m	
GC 6	Provides call authorization	6.4	m	
GC 7	Provides bandwidth management	6.4	m	
GC 8	Provides call management	6.4	m	
GC 9	GK can translate E.164 addresses (dialled digit string) received	6.4	o	
GC 10	GK can translate <i>partyNumber</i> addresses received	6.4	o	
Comments:				

NOTE: The mandatory GC 5 – GC 8 are given by the fact of the mandatory requirement for a GRC in 03011.

### A.6.2.4 Multipoint Controller (MC) characteristics

**Table A.5: Support of H.323 Multipoint Controller characteristics**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
MCC 1	Terminal supports MC	6.5	o	
MCC 2	GK supports MC	6.5	o	
MCC 3	GW supports MC	6.5	o	
MCC 4	MCU supports MC	6.5	o	
Comments:				

### A.6.2.5 Multipoint Processor (MP) characteristics

This subclause applies only if the implementation supports the option MC7 in subclause A.6.1.

**Table A.6: Support of H.323 Multipoint Processor characteristics**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
MP 1	Supports MP media stream processing	6.6	m	
MP 2	- MP can process multiple media stream types	6.6	o	
MP 3	- MP can process video	6.6	o	
MP 4	- MP can process audio	6.6	o	
MP 5	- MP can process data	6.6	o	
Comments:				

### A.6.2.6 Multipoint Control Unit (MCU) characteristics

This subclause applies only if the implementation supports the option MC7 in subclause A.6.1.

**Table A.7: Support of H.323 Multipoint Control Unit characteristics**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
UC 1	MCU contains a MC	6.7	m	
UC 2	MCU contains an audio MP	6.7	o	
UC 3	MCU contains an video MP	6.7	o	
UC 4	MCU contains an data MP	6.7	o	
UC 5	Supports Centralized multipoint conferences	6.7	o.1	
UC 6	Supports Decentralized multipoint conferences	6.7	o.1	
o.1: At least one of these options shall be supported				
Comments:				

## A.6.2.7 Multipoint Capability

This subclause applies to all implementations providing Multipoint Capabilities.

**Table A.8: Support of H.323 Multipoint Capability**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
PC 1	Endpoint supports centralized multipoint processing	6.8.1	m	
PC 2	Endpoint supports decentralized multipoint processing	6.8.2	o	
PC 3	Endpoint supports hybrid multipoint, centralized audio processing	6.8.3	o	
PC 4	Endpoint supports hybrid multipoint, centralized video processing	6.8.4	o	
PC 5	MC supports common mode establishment	6.8.5	m	
PC 6	MC supports multipoint rate matching	6.8.6	m	
PC 7	MP supports multipoint lip synchronization	6.8.7	MP3:m	
PC 8	MP supports multipoint encryption	6.8.8	MP1:o	
PC 9	MC supports cascading	6.8.9	o	
Comments:				

## A.6.2.8 Call Signalling

**Table A.9: Support of H.323 Call Signalling**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
CS 1	Supports address processing	7.1	m	
CS 2	- entities can share a Network Address	7.1.1	o	
CS 3	- entities can have multiple TSAP Identifiers	7.1.2	o	
CS 4	- entities use dynamic TSAP Identifiers for the H.245 control, audio, video and data channels	7.1.2	m	
CS 5	- an endpoint can have > one alias addresses	7.1.3	o	
CS 6	Supports RAS channel processing	7.2	m	
CS 7	- endpoint and GK can send RIP message	7.2	o	
CS 8	- endpoint and GK can process RIP message	7.2	o	
CS 9	- endpoints support manual GK discovery	7.2.1	o.4	
CS 10	- endpoints support automatic GK discovery	7.2.1	o.4	
CS 11	- GK can indicate alternate GKs to use	7.2.1	o	
CS 12	- endpoint can store and use alternate GK information	7.2.1	o	
CS 13	- GWs and MCUs can register multiple TAs	7.2.2	o	
CS 14	- endpoint can use alternateEndpoint IE	7.2.2	o	
CS 15	- Gatekeeper can process and use alternateEndpoint IE	7.2.2	o	
CS 16	- GK can assign alias addresses to endpoints	7.2.2	o	
CS 17	- endpoints can process alias addresses assigned by a GK	7.2.2	o	
CS 19	- GK supports <i>timeToLive</i> and <i>keepAlive</i>	7.2.2.1	m	
CS 20	- endpoint can send lightweight RRQ	7.2.2.1	m	
CS 21	- GK accepts lightweight RRQ	7.2.2.1	m	
CS 22	- endpoint can access contact information by issuing an LRQ	7.2.3	o	
CS 23	- GK can access contact information by issuing an LRQ	7.2.3	o	
CS 24	- endpoint can locate GWs outside their zone	7.2.3	o	
CS 25	- GK can locate GWs outside their zone	7.2.3	o	
CS 26	- supports bandwidth processing in ARQ message exchange with a GK	7.2.4	m	
CS 27	- can request bandwidth change in BRQ message exchange with a GK	7.2.4	o	
CS 28	- Terminal supports access token procedures	7.2.5	o	
CS 29	- GK supports access token procedures	7.2.5	o	
CS 30	- GW supports access token procedures	7.2.5	o	
CS 31	Supports call signalling channel processing	7.3	m	
CS 32	- supports multiple calls using 1 Call Signaling Channel	7.3	o	
CS 33	- Device supports the "maintain connection" feature	7.3	o	
CS 34	- supports Direct Endpoint Call Signalling	7.3.1	o	
CS 35	- supports GK Routed Call Signalling	7.3.1	m	
CS 36	- GK closes the Call Signalling Channel after call setup is completed	7.3.1	o.5	
CS 37	- GK keeps open the Call Signalling Channel after call setup is completed	7.3.1	o.5	



Item	Characteristic	H.323 References	Status	Support Y   N   n/a
CS 38	- endpoint accepts closure of Call Signalling Channel during life of call	7.3.1	m	
CS 39	- endpoint accepts reopening of Call Signalling Channel during life of call	7.3.1	m	
CS 40	Gatekeeper supports "direct routed model" for control channel (H.245)	7.3.2	o.6	?
CS 41	Gatekeeper supports "Gatekeeper routed model" for control channel (H.245)	7.3.2	o.6	?
CS 42	GK follows rules for indicating H.225.0/H.245 version number	7.3.3	m	
CS 43	Supports CRV usage	7.4	m	
CS 44	Supports Call ID processing	7.5	m	
CS 45	Supports conference ID and conference goal	7.6	m	
o.4: At least one of these methods shall be supported.				
o.5: At least one of these methods shall be supported.				
o.6: At least one of these methods shall be supported.				
Comments:				

## A.6.2.9 Call Signalling Procedures

Table A.10: Support of H.323 Call Signalling Procedures

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SP 1	Supports call setup procedures	8.1	m	
SP 2	- basic call setup - neither endpoint registered to GK	8.1.1	o	
SP 3	- both endpoints registered to the same GK	8.1.2	o	
SP 4	- only calling endpoint has GK	8.1.3	o	
SP 5	- only called endpoint has GK	8.1.4	o	
SP 6	- Endpoint supports facility message to redirect call signalling to Gatekeeper	8.1.4	m	
SP 7	- both endpoints registered to different GKs	8.1.5	o.7	
SP 8	- supports optional called endpoint signalling	8.1.6	o.7	
SP 9	Supports fast connect procedures	8.1.7	o	
SP 10	- can process both h245Address (early H.245) and fastStart (fast connect) in Setup message	H.225.0: 7.3.10	o	
SP 11	- <i>OpenLogicalChannel</i> in Setup message contains <i>mediaControlChannel</i> element	8.1.7.1	m	
SP 12	- <i>OpenLogicalChannel</i> returned by called endpoint contains <i>mediaControlChannel</i> element	8.1.7.1	m	
SP 13	Supports call setups via GWs	8.1.8	m	
SP 14	- incoming SCN calls	8.1.8.1	m	
SP 15	- outgoing calls to SCN	8.1.8.2	m	
SP 16	Gateway can generate Call Proceeding message	8.1.8.2	m	
SP 17	Gateway includes Progress Indication IE in Alert, Call Proceeding or Connect	8.1.8.2	m	
SP 18	Supports call setups with an MCU using a centralized conference	8.1.9	o	
SP 19	Supports call forwarding using Facility message	8.1.10	o	
SP 20	Supports H.332 broadcast call setup	8.1.11	o	
SP 21	Supports overlapped sending / receiving	8.1.12	o	
SP 22	- by terminals	8.1.12	o	
SP 23	- by a GK	8.1.12	o	
SP 24	- by a GW	8.1.12	o	
SP 25	- by an MCU	8.1.12	o	
SP 26	Supports call setup to conference alias	8.1.13	o	
SP 27	Supports initial communication and capability exchange	8.2	m	
SP 28	Can tunnel H.245 in Q.931 messages	8.2.1	o	
SP 29	- by terminals	8.2.1	o	
SP 30	- by an MCU	8.2.1	o	
SP 31	- by a GW	8.2.1	o	
SP 32	Can switch to H.245 tunneling after using fast connect procedures	8.2.1	o	
SP 33	- by a GK (even if Q.931 message is not forwarded)	8.2.2	o	
SP 34	Can switch to separate H.245 connection after using fast connect procedures	8.2.3	o	
SP 35	Can switch to separate H.245 connection after using H.245 tunneling	8.2.3	o	
SP 36	Supports establishment of audiovisual communication	8.3	m	
SP 37	- supports mode changes	8.3.1	m	
SP 38	- can exchange video by mutual agreement	8.3.2	o	
SP 39	- supports media steam address distribution	8.3.3	m	
SP 40	- supports correlation of media steams in multipoint conferences	8.3.4	m	
SP 41	- supports communication mode command procedures	8.3.5	m	
SP 42	Supports call service procedures	8.4	m	
SP 43	- supports bandwidth change procedures using BRQ	8.4.1	m	
SP 44	- supports IRQ/IRR status procedures	8.4.2	m	
SP 45	- supports ad hoc conference expansion procedures	8.4.3	o.8	
SP 46	> for speech only	8.4.3	o.8	
SP 47	> for speech and data	8.4.3	o.8	
SP 48	> for speech and video	8.4.3	o.8	
SP 49	> for speech, data and video	8.4.3	o.8	
SP 50	> direct endpoint call signalling - conference create	8.4.3.1	o.8	
SP 51	> direct endpoint call signalling - conference invite	8.4.3.2	o.8	
SP 52	> direct endpoint call signalling - conference join	8.4.3.3	o.8	

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SP 53	> GK routed call signalling - conference create	8.4.3.4	o.8	
SP 54	> GK routed call signalling - conference invite	8.4.3.5	o.8	
SP 55	> GK routed call signalling - conference join	8.4.3.6	o.8	
SP 56	> ad hoc conference Facility message handling	8.4.3.7	o.8	
SP 57	- supports multipoint cascading procedures	8.4.5	o	
SP 58	- supports third party initiated pause and re-routing	8.4.6	m	
SP 59	Supports call termination procedures	8.5	m	
SP 60	- endpoint call clearing without a GK	8.5.1	CS29:m	
SP 61	- endpoint call clearing with a GK	8.5.2	m	
SP 62	- call clearing initiated by a GK	8.5.3	m	
SP 63	Supports protocol failure handling	8.6	m	
SP 64	- on H.245 Control Channel	8.6	m	
SP 65	- on Call Signalling Channel for each type of endpoint	8.6	m	
SP 66	Provides interworking with other terminal types	9	m	
SP 67	- Speech-only terminals	9.1	m	
SP 68	- Visual telephone terminals over the ISDN (H.320)	9.2	o	
SP 69	- Visual telephone terminals over the GSTN (H.324)	9.3	o	
SP 70	- Visual telephone terminals over mobile radio (H.324/M)	9.4	o	
SP 71	- Visual telephone terminals over ATM (H.321 and H.310 RAST)	9.5	o	
SP 72	- Visual telephone terminals over guaranteed quality of service LANs (H.322)	9.6	o	
SP 73	- Simultaneous voice and data terminals over the GSTN (V.70)	9.7	o	
SP 74	- T.120 terminals on the packet based network	9.8	o	
SP 75	Supports H.235	10.1	o	
SP 76	Supports maintenance procedures	11	o	
SP 77	- can loopback for maintenance purposes	11.1	o	
SP 78	- supports monitoring methods	11.2	o	
o.7: If multiple GKs are supported, then support of at least one of these methods is required.				
o.8: mandatory for MCs				
Comments:				

### A.6.2.10 H.323 annex B

**Table A.11: Support of H.323 annex B**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SB 1	Supports layered video codec procedures	Annex B	o	
Comments:				

### A.6.2.11 H.323 annex C

**Table A.12: Support of H.323 annex C**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SC 1	Supports QOS-based media streams on ATM networks using AAL5	Annex C	o	
Comments:				

### A.6.2.12 H.323 annex D

**Table A.13: Support of H.323 annex D**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SD 1	Supports real-time facsimile over H.323	Annex D	o	
SD 2	- transports T.38 packets using TCP/IP	D.2	SD1:m	
SD 3	- transports T.38 packets using UDP/IP	D.2	SD1:m	
SD 4	- supports interworking with T.38/annex B terminals	D.2	SD1:m	
SD 5	- supports fast connect procedures for opening channels to send T.38 packets	D.4	SD1:m	
SD 6	- can send BRQ to GK to indicate fax bandwidth usage	D.6	SD1:m	
Comments:				

### A.6.2.13 H.323 annex E

**Table A.14: Support of H.323 annex E**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SE 1	Supports multiplexed call signalling transport	Annex E	o	
Comments:				

### A.6.2.14 H.323 annex F

**Table A.15: Support of H.323 annex F**

Item	Characteristic	H.323 References	Status	Support Y   N   n/a
SF 1	Supports calls with Simple Endpoint Type devices	Annex F	m	
SF 2	- GK is SET-aware (e.g. supports pre-granted ARQ)	F.7.1	MC5:m	
SF 3	- can send and receive user input in a Keypad facility IE in an INFO message	F.7.2, 7.3.3.5	MC5:m	
SF 4	- can support H.245 tunnelling	F.7.3.1	MC5:m	
SF 5	- can recognize SET device (e.g. as always in a slave role)	F.7.3.2	MC5:m	
SF 6	- supports terminal capability exchange with a SET device	F.7.3.3	MC5:m	
SF 7	- supports reconfiguration of media stream at any time during a call	F.7.3.4	m.9	
SF 8	- supports modified 3 <sup>rd</sup> party pause and rerouting procedures	F.7.6	m.9	
Comments: m.9: optional for iNOW Terminals				

NOTE: SF1 is mandatory in TIPHON.

## A.6.3 Protocol data units

No items requiring response.

## A.6.4 Protocol data unit parameters

No items requiring response.

## A.6.5 Timers

No items requiring response.

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## History

<b>Document history</b>		
V1.1.1	September 2000	Publication