International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

H.324

Amendment 1

(01/2005)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Infrastructure of audiovisual services – Systems and terminal equipment for audiovisual services

---

Terminal for low bit-rate multimedia communication

Amendment 1

ITU-T Recommendation H.324 (2002) – Amendment 1

ITU-T H-SERIES RECOMMENDATIONS

AUDIOVISUAL AND MULTIMEDIA SYSTEMS

CHARACTERISTICS OF VISUAL TELEPHONE SYSTEMS	H.100–H.199
INFRASTRUCTURE OF AUDIOVISUAL SERVICES	
General	H.200–H.219
Transmission multiplexing and synchronization	H.220–H.229
Systems aspects	H.230–H.239
Communication procedures	H.240–H.259
Coding of moving video	H.260–H.279
Related systems aspects	H.280–H.299
Systems and terminal equipment for audiovisual services	**H.300–H.349**
Directory services architecture for audiovisual and multimedia services	H.350–H.359
Quality of service architecture for audiovisual and multimedia services	H.360–H.369
Supplementary services for multimedia	H.450–H.499
MOBILITY AND COLLABORATION PROCEDURES	
Overview of Mobility and Collaboration, definitions, protocols and procedures	H.500–H.509
Mobility for H-Series multimedia systems and services	H.510–H.519
Mobile multimedia collaboration applications and services	H.520–H.529
Security for mobile multimedia systems and services	H.530–H.539
Security for mobile multimedia collaboration applications and services	H.540–H.549
Mobility interworking procedures	H.550–H.559
Mobile multimedia collaboration inter-working procedures	H.560–H.569
BROADBAND AND TRIPLE-PLAY MULTIMEDIA SERVICES	
Broadband multimedia services over VDSL	H.610–H.619

For further details, please refer to the list of ITU-T Recommendations.

ITU-T Recommendation H.324

Terminal for low bit-rate multimedia communication

Amendment 1

Summary

This amendment addresses a series of reported problems and clarifications, namely: addition of new references, clarifications on audio and video muting and on usage of multiple video channels, plus clarifications and changes to the call reset procedure.

Additionally, a new Annex J is provided which summarizes the OIDs defined in H.324 and defines H.324 generic capabilities which are used in H.245-signalling based systems. Annex J also introduces a SessionResetCapability capability identifier, which is defined in 7.7.1/H.324.

Source

Amendment 1 to ITU-T Recommendation H.324 (2002) was approved on 8 January 2005 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g. interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

CONTENTS

ITU-T Recommendation H.324

Terminal for low bit-rate multimedia communication

Amendment 1

1) Clause 2, References

Add the following new reference:

[29] ITU-T Recommendation H.239 (2003), *Role management and additional media channels for H.300-series terminals*.

2) New clause 6.5.2.1, Channel muting

To allow H.324 terminals to also handle audio and video muting in the absence of the associated Miscellaneous Indication messages, the following new clause is added after clause 6.5.2 (Logical channel signalling):

6.5.2.1 Channel muting

Logical channels may be temporarily inactive. Such temporary inactivation (muting) should be indicated to the far-end terminal using the H.245 Miscellaneous Indication **logicalChannelInactive.**

The H.245 Miscellaneous Indication **logicalChannelActive** should be used to indicate when a normal signal has resumed on the logical channel. These indications are intended to be used to inform the human user that the far-end has muted or unmuted the channel.

Before sending the **logicalChannelInactive** message, the transmitter should ensure that no data is sent on the logical channel.

However, regardless of whether or not **logicalChannelInactive** or **logicalChannelActive** messages are received, receivers shall decode the contents of the logical channel normally.

3) New clause 6.6.2, Multiple channels of video

To clarify the usage of H.239 in H.324 systems, the following new clause is added after clause 6.6.1 (H.263 reference picture selection mode support):

6.6.2 Multiple channels of video

More than one channel of video may be transmitted, as negotiated, via H.245.

The procedures of ITU-T Rec. H.239 may be used with H.324 systems. These procedures should be used when more than one channel of video is in use, in order to indicate the role of each channel in a conference, for example "live" video of conference participants or video of "presentation" materials.

4) New clause 7.7.1, Reset of H.324 session

To clarify the procedure and extend it to a negotiation of capabilities using the H.245 capability exchange procedure, the following new clause is added after clause 7.7 (Phase G – Supplementary services and call clearing):

7.7.1 Reset of H.324 session

In Phase G, if both the terminal and the far-end have the SessionResetCapability, defined in Annex J, in **Capability.genericControlCapability**, and the mode indicated in the **EndSessionCommand** message is **gstnOptions.v34H324**, the terminal shall reset the H.324 session by moving immediately to Phase D without changing communication mode and without disconnecting the physical connection.

5) New Annex J, ASN.1 OIDs defined in ITU-T Rec. H.324

Add new Annex J as follows:

Annex J

ASN.1 OIDs defined in ITU-T Rec. H.324

J.1 Scope

This annex summarizes the OIDs defined in ITU-T Rec. H.324 and defines H.324 generic capabilities which are used in H.245 signalling-based systems.

J.2 References

– ITU-T Recommendation H.245 (2005), *Control protocol for multimedia communication*.

– ITU-T Recommendation H.324 (2002), *Terminal for low bit-rate multimedia communication*.

J.3 Summary of OIDs defined in ITU-T Rec. H.324

Table J.1/H.324 – Summary of OIDs defined in ITU-T Rec. H.324

OID	Clause reference
{ itu-t(0) recommendation(0) h(8) 324 generic-capabilities(1) SessionResetCapability(1) }	7.7.1

J.4 Session reset capability identifier

Table J.2/H.324 – SessionResetCapability capability identifier

Capability name	SessionResetCapability
Capability identifier type	Standard
Capability identifier value	{ itu-t(0) recommendation(0) h(8) 324 generic-capabilities(1) SessionResetCapability(1) }
maxBitRate	This parameter is not used.
Collapsing	This field shall not be used and shall be ignored by receivers.
nonCollapsing	This field shall not be used and shall be ignored by receivers.
nonCollapsingRaw	This field shall not be used and shall be ignored by receivers.
Transport	This field shall not be used and shall be ignored by receivers.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	**Audiovisual and multimedia systems**
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Telephone transmission quality, telephone installations, local line networks
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	Data networks, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks
Series Z	Languages and general software aspects for telecommunication systems

Printed in Switzerland
Geneva, 2005