

INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR H.324 Annex G (02/00)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

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

Terminal for low bit-rate multimedia communication Annex G: Usage of ISO/IEC 14496-1 generic capabilities in H.324 terminals

ITU-T Recommendation H.324 – Annex G

(Previously CCITT Recommendation)

ITU-T H-SERIES RECOMMENDATIONS

AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Characteristics of transmission channels used for other than telephone purposes	H.10–H.19
Use of telephone-type circuits for voice-frequency telegraphy	H.20–H.29
Telephone circuits or cables used for various types of telegraph transmission or simultaneous transmission	H.30–H.39
Telephone-type circuits used for facsimile telegraphy	H.40–H.49
Characteristics of data signals	H.50–H.99
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.399
Supplementary services for multimedia	H.450–H.499

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

ITU-T RECOMMENDATION H.324

TERMINAL FOR LOW BIT-RATE MULTIMEDIA COMMUNICATION

ANNEX G

Usage of ISO/IEC 14496-1 generic capabilities in H.324 terminals

Summary

This annex defines the usage of ISO/IEC 14496-1 ("MPEG-4 Systems") generic capabilities in H.324 terminals and the framing and error protection of the corresponding data streams.

Source

Annex G to ITU-T Recommendation H.324 was prepared by ITU-T Study Group 16 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on 17 February 2000.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The 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 Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 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.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The 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, the 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.

© ITU 2000

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

Page

Annex	G – Usage of ISO/IEC 14496-1 generic capabilities in H.324 terminals	1
G.1	Scope	1
G.2	References	1
G.3	General	1
G.4	Choice of error protection for ISO/IEC 14496 data streams	1
G.5	Framing of ISO/IEC 14496-1 data streams	1

TERMINAL FOR LOW BIT-RATE MULTIMEDIA COMMUNICATION

ANNEX G

Usage of ISO/IEC 14496-1 generic capabilities in H.324 terminals

(Geneva, 2000)

G.1 Scope

This annex defines the usage of ISO/IEC 14496-1 ("MPEG-4 Systems") [1] generic capabilities in H.324 terminals and the framing and error protection of the corresponding data streams.

G.2 References

- [1] ISO/IEC 14496-1:1999, Information technology Coding of audio-visual objects Part 1: Systems.
- [2] ISO/IEC 14496-2:1999, Information technology Coding of audio-visual objects Part 2: Visual.
- [3] ISO/IEC 14496-3:1999, Information technology Coding of audio-visual objects Part 3: Audio.
- [4] ITU-T Recommendation H.223 (1996), *Multiplexing protocol for low bit-rate multimedia communication*.

G.3 General

The codepoint for ISO/IEC 14496-1 presented herein shall only be used for applications that want to make use of the object descriptor and scene description capability of ISO/IEC 14496-1. In this case, any type of ISO/IEC 14496 data stream to be used shall be indicated by means of the ISO/IEC 14496-1 generic capability during capability exchange as defined in Recommendation H.245.

Applications that only want to use ISO/IEC 14496-2 ("MPEG-4 Visual") [2] and/or ISO/IEC 14496-3 ("MPEG-4 Audio") [3] data streams, shall use the ISO/IEC 14496-2 generic capability and/or the ISO/IEC 14496-3 generic capability, respectively, as defined in Recommendation H.245 for a fast set-up.

NOTE – H.324 terminals using these ISO/IEC 14496 codepoints shall support the mandatory audio and video codecs as applicable.

G.4 Choice of error protection for ISO/IEC 14496 data streams

The error protection of the ISO/IEC 14496 data streams can be arbitrarily negotiated, requested and chosen by use of the "transport" field in the generic capability for ISO/IEC 14496-1. By usage of this field, an appropriate DataProtocolCapability shall be indicated.

G.5 Framing of ISO/IEC 14496-1 data streams

Each individual SL packet (as defined in ISO/IEC 14496-1 [1]) to be transmitted shall be mapped on exactly one H.223 AL-SDU as defined in [4].

ITU-T RECOMMENDATIONS SERIES

- Series A Organization of the work of the ITU-T
- Series B Means of expression: definitions, symbols, classification
- Series C General telecommunication statistics
- 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 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 TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
- 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 and open system communications
- Series Y Global information infrastructure
- Series Z Languages and general software aspects for telecommunication systems



Printed in Switzerland Geneva, 2000