INTERNATIONAL STANDARD

ISO/IEC 14496-15

Sixth edition
2022-10

AMENDMENT 1
2023-10

Information technology — Coding of audio-visual objects —

Part 15: Carriage of network abstraction layer (NAL) unit structured video in the ISO base media file format

AMENDMENT 1: Support for LCEVC

Technologies de l'information — Codage des objets audiovisuels —

Partie 15: Transport de vidéo structurée en unités NAL sur la couche réseau au format ISO de base pour les fichiers médias

AMENDEMENT 1: Support pour LCEVC

iTeh Standards
(https://standards.iteh.ai)
Document Preview
ISO/IEC 14496-15:2022/Amd 1:2023
https://standards.iteh.ai/catalog/standards/sist/7e86ffbf-0bab-47e7-8b45-dc3b945180f4/iso-iec-14496-15-2022-amd-1-2023

Reference number
ISO/IEC 14496-15:2022/Amd. 1:2023(E)

© ISO/IEC 2023

iTeh Standards
(https://standards.iteh.ai)
Document Preview

ISO/IEC 14496-15:2022/Amd 1:2023
https://standards.iteh.ai/catalog/standards/sist/7e86ffbf-0bab-47e7-8b45-dc3b945180f4/iso-iec-14496-15-2022-amd-1-2023

COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

© ISO/IEC 2023 – All rights reserved

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents and https://patents.iec.ch. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

iTeh Standards
(https://standards.iteh.ai)
Document Preview

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

https://standards.iteh.ai/catalog/standards/iso-iec-14496-15-2022-amd-1-2023

A list of all parts in the ISO/IEC 14496 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

© ISO/IEC 2023 – All rights reserved

iTeh Standards
(https://standards.iteh.ai)
Document Preview

ISO/IEC 14496-15:2022/Amd 1:2023
https://standards.iteh.ai/catalog/standards/sist/7e86ffbf-0bab-47e7-8b45-dc3b945180f4/iso-iec-14496-15-2022-amd-1-2023

Information technology — Coding of audio-visual objects —

Part 15:
Carriage of network abstraction layer (NAL) unit structured video in the ISO base media file format

AMENDMENT 1: Support for LCEVC

Normative references

Add the following reference:

ISO/IEC 23094-2:2021, *Information technology – General Video Coding – Part 2: Low Complexity Enhancement Video Coding*

iTeh Standards
(https://standards.iteh.ai)
Document Preview

3.1 Terms and definitions

Add the following terms and definitions:

3.1.67
parameter sets for LCEVC
<LCEVC> sequence_configuration, global_configuration, or additional_info

Note 1 to entry: As defined in ISO/IEC 23094-2:2021, 7.3.4, 7.3.5, 7.3.10.

ISO/IEC 14496-15:2022/Amd 1:2023
https://standards.iteh.ai/catalog/standards/iso/[illegible]/iso-iec-14496-15-2022-amd-1-2023

3.1.68
picture dimensions for LCEVC
width and height of the decoded picture as specified by the referenced global_configuration

Note 1 to entry: As defined in ISO/IEC 23094-2:2021, 7.3.5.

3.2 Abbreviated terms

Add the following abbreviated terms:

LCEVC	Low Complexity Enhancement Video Coding [ISO/IEC 23094-2]
GC	Global Configuration for LCEVC [ISO/IEC 23094-2]
SC	Sequence Configuration for LCEVC [ISO/IEC 23094-2]
AI	Additional Information for LCEVC [ISO/IEC 23094-2]

© ISO/IEC 2023 – All rights reserved

4.2.3.3

Replace

"The syntax of a NAL unit is defined in the appropriate specification (e.g. ISO/IEC 14496-10) and includes both the one byte NAL header and the variable length encapsulated byte stream payload."

with

"NALUnit contains a single NAL unit. The syntax of a NAL unit is defined in the appropriate specification (e.g. ISO/IEC 14496-10) and includes both the NAL unit header and the variable length NAL unit payload."

5.4.2.1.1

Replace:

"The sample entry name `'avc1'` or `'avc3'` may only be used when the stream to which this sample entry applies is a compliant and AVC stream as viewed by an AVC decoder operating under the configuration (including profile and level) given in the AVCConfigurationBox. The file format specific structures that resemble NAL units (see Annex A) may be present but shall not be used to access the AVC base data; that is, the AVC data shall not be contained in Aggregators (though they may be included within the bytes referenced by the `additional_bytes` field) nor referenced by Extractors."

with:

"The sample entry name `'avc1'` or `'avc3'` may only be used when the stream to which this sample entry applies is a compliant and AVC stream as viewed by an AVC decoder operating under the configuration (including profile and level) given in the `AVCConfigurationBox`. Extractor and aggregator NAL-unit-like structures (see Annex A) shall not be present."

iTeh Standards
(https://standards.iteh.ai)
Document Preview
ISO/IEC 14496-15:2022/Amd 1:2023
https://standards.iteh.ai/catalog/standards/sist/7e86ffbf-0bab-47e7-8b45-dc3b945180f4/iso-iec-14496-15-2022-amd-1-2023

6.5.3.1.1

Replace "Extractors or aggregators may be used for SVC VCL NAL units in `'avc1'`, `'avc2'`, `'avc3'`, `'avc4'`, `'svc1'` or `'svc2'` tracks" with "Extractors or aggregators may be used for SVC VCL NAL units `'avc2'`, `'avc4'`, `'svc1'` or `'svc2'` tracks."

11.2.4.1.2

Replace "`ptl_multi_layer_enabled_flag`" with "`ptl_multilayer_enabled_flag`".

11.2.4.1.3

Replace "`ptl_multi_layer_enabled_flag`" with "`ptl_multilayer_enabled_flag`".

12.5.4.2

Replace subclause 12.5.4.2 with the following:

12.5.4.2 Sample entry for EVC slice base track

12.5.4.2.1 Definition

© ISO/IEC 2023 – All rights reserved