

~~2023-05-17~~

ISO/IEC_23001-11:2023/~~AMDPRF Amd 1:2023(E)~~

ISO/IEC ~~JTC1/JTC 1~~/SC-29

Secretariat:-JISC

Date: 2024-05-09

Information technology — MPEG systems technologies —

—

**Part 11:
Energy-efficient media consumption (green metadata) —
Amendment**

iTeh Standards

(<https://standards.iteh.ai>)

Document Preview

ISO/IEC 23001-11:2023/PRF Amd 1

<https://standards.iteh.ai/catalog/standards/iso/d88bb285-d4a8-4e5e-8f95-aa7fa10a199b/iso-iec-23001-11-2023-prf-amd-1>

**AMENDMENT 1: Energy-efficient media consumption (green metadata)
for EVC**

Edited DIS - MUST BE USED FOR FINAL DRAFT

ISO #####-#:####(X)

Copyright notice

This PROOF

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

[ISO/IEC 23001-11:2023/PRF Amd 1](https://standards.iteh.ai/catalog/standards/iso/d88bb285-d4a8-4e5e-8f95-aa7fa10a699b/iso-iec-23001-11-2023-prf-amd-1)

<https://standards.iteh.ai/catalog/standards/iso/d88bb285-d4a8-4e5e-8f95-aa7fa10a699b/iso-iec-23001-11-2023-prf-amd-1>

ISO/IEC-23001-11:2023/~~AMD~~PRF Amd 1:2023(E,en)

~~© ISO document is a working draft/IEC 2024~~

~~All rights reserved. Unless otherwise specified, or committee draft and is copyright protected by ISO. While required in the reproduction context of working drafts or committee drafts in any form for use by participants in the ISO standards development process is permitted without prior permission from ISO, neither its implementation, no part of this document nor any extract from its publication may be reproduced, stored or utilized otherwise in any form or transmitted in any form for any other purpose by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission from ISO. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.~~

~~Requests for permission to reproduce this document for the purpose of selling it should be addressed as shown below or to ISO's member body in the country of the requester:~~

ISO copyright office

Case postale 56 • CP 401 • Ch. de Blandonnet 8

CH-12111214 Vernier, Geneva-20

Tel: Phone: + 41 22 749 01 11

Fax + 41 22 749 09 47

E-mail: copyright@iso.org

Web www.iso.org

Reproduction for sales purposes may be subject to royalty payments or a licensing agreement.

Violators may be prosecuted.

Website: www.iso.org

Published in Switzerland

ISO/IEC 23001-11:2023/PRF Amd 1

https://standards.iteh.ai/catalog/standards/iso/d88bb285-d4a8-4e5e-8f95-aa7fa10a699b/iso-iec-23001-11-2023-prf-amd-1

© ISO/IEC ~~2023~~ 2024 – All rights reserved

iii
Edited DIS - MUST BE USED FOR FINAL DRAFT

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).

Field Code Changed

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.

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.

Field Code Changed

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*.

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.

Field Code Changed

Information technology — MPEG systems technologies

Part 11:
Energy-efficient media consumption (green metadata)
Amendment

AMENDMENT 1: Energy-efficient media consumption (green metadata) for EVC

6.2.1

Replace the following in subclause 6.2.1 (“General”):

With respect to the functional architecture in Figure-1, the green-metadata generator provides CMs that indicate the picture-decoding complexity of an AVC, HEVC or VVC bitstream to the decoder.

with:

With respect to the functional architecture in Figure-1, the green-metadata generator provides CMs that indicate the picture-decoding complexity of an AVC, HEVC, VVC or EVC bitstream to the decoder.

6.2.2

Add the following at the end of the subclause 6.2.2 (“Syntax”):

The syntax for the EVC CMs is described in Table X.1:

Table X.1 — Syntax for the HEVC CMs

<code>period_type</code>	u(8)
<code>if (profile_idc == 0) {</code>	—
<code> if (period_type == 0 period_type == 2) {</code>	—
<code> num_non_zero_4_cus</code>	uk(v)
<code> num_non_zero_8_cus</code>	uk(v)
<code> num_non_zero_16_cus</code>	uk(v)
<code> num_non_zero_32_cus</code>	uk(v)
<code> num_non_zero_64_cus</code>	uk(v)
<code> portion_fractional_prediction_sample</code>	u(8)
<code> } else if (period_type == 1 period_type == 3) {</code>	—
<code> num_count</code>	u(16)
<code> for (t=0; t<num_count; t++) {</code>	—

ISO/IEC 23001-11:2023/PRF Amd 1(en)

num_non_zero_4_cus [t]	uk (v)
num_non_zero_8_cus [t]	uk (v)
num_non_zero_16_cus [t]	uk (v)
num_non_zero_32_cus [t]	uk (v)
num_non_zero_64_cus [t]	uk (v)
portion_fractional_prediction_sample [t]	u (8)
}	—
}	—
else if (profile_idc ==1) {	—
if (period_type == 0 period_type == 2) {	—
num_non_zero_samples	uk (v)
num_affine_samples	uk (v)
num_dmvr_samples	uk (v)
num_alf_samples	uk (v)
num_deblocking_filter_samples	uk (v)
num_htdf_samples	uk (v)
} else if (period_type == 1 period_type == 3) {	—
num_count	u (8)
for (t=0; t<num_count; t++) {	—
num_non_zero_samples [t]	uk (v)
num_samples [t]	uk (v)
num_dmvr_samples [t]	uk (v)
num_alf_samples [t]	uk (v)
num_deblocking_filter_samples [t]	uk (v)
num_htdf_samples [t]	uk (v)
}	—
}	—
}	—

6.2.4.4

Add the following ~~after the end of new~~ subclause after subclause 6.2.4.3 (“VVC semantics”):

6.2.4.4—_EVC Semantics

6.2.4.4.1—_General

As EVC Baseline profile and Main profile share almost no tools and the methods used for partition of the pictures are not same, the profile the CVS conforming to is used to decide the set of syntax elements to describe the complexity metrics to be applied to each CVS. In addition, As the largest size of picture is indicated by the level the CVS is conformed to, the length of the syntax elements indicating the number of pixels and coding