International Standard

ISO/IEC 23090-7

Information technology — Coded representation of immersive media —

Part 7: Immersive media metadata

AMENDMENT 1: Common metadata for immersive media

First edition
2022-11

AMENDMENT 1
2024-12

Reference number
ISO/IEC 23090-7:2022/Amd. 1:2024(en)

© ISO/IEC 2024

Documents
Document Sharing Hub

Full document details: ISO_IEC 23090-7_2022_Amd 1_2024

COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2024

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

Documents
Document Sharing Hub

Full document details: ISO_IEC 23090-7_2022_Amd 1_2024

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.

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*.

A list of all parts in the ISO/IEC 23090 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 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: ISO_IEC 23090-7_2022_Amd 1_2024

Documents
Document Sharing Hub

Full document details: ISO_IEC 23090-7_2022_Amd 1_2024

Information technology — Coded representation of immersive media —

Part 7: Immersive media metadata

AMENDMENT 1: Common metadata for immersive media

Normative references

Add the following reference to the end of the reference list:

IEEE 754-2019. *IEEE Standard for Floating-Point Arithmetic*

Introduction

Replace:

— Clause 5 describes common metadata applicable to immersive media. This includes reference co-ordinate system related metadata and other common metadata syntax and semantics.

— Clause 6 describes metadata that applies to video and images. This includes projection formats and region-wise packing metadata metadata which applies to video and images.

with:

— Clause 5 describes common metadata applicable to immersive media, with omnidirectional media in particular. This includes reference co-ordinate system related metadata and other common metadata syntax and semantics.

— Clause 6 describes metadata that applies to video and images, with omnidirectional media in particular. This includes projection formats and region-wise packing metadata metadata which applies to video and images.

— Clause 7 describes common metadata applicable to immersive media, with Visual Volumetric Video-based Coding (V3C) and Video-based Point Cloud Compression (V-PCC) in particular. This includes extrinsic camera information, intrinsic camera information, and other 3D common metadata syntax and semantics.

— Appendices A and B on Annotations of non-timed visual volumetric data and G-PCC data.

Add the following paragraphs after the document organization list

This document follows the following guiding principles:

1) Common metadata and their data structures shall be defined for both 3DoF and 6DoF immersive content, separately as well as jointly, in order to be used for applications that are either specific to separate 3DoF and 6DoF immersive content or general to mixed 3DoF and 6DoF immersive content.

© ISO/IEC 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: ISO_IEC 23090-7_2022_Amd 1_2024