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Part 17: Reference software and conformance for omnidirectional media format (OMAF)

Technologies de l'information — Représentation codée de média immersifs —

Partie 17: Logiciel de référence et conformité pour le format de média omnidirectionnel (OMAF)

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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).

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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.

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Introduction

The conformance and reference software in this document serves two main purposes:

— validation of the written specification of ISO/IEC 23090-2;

— conformance testing for checking interoperability for the various applications against the reference software which aims to be compliant with ISO/IEC 23090-2.

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Information technology — Coded representation of immersive media —

Part 17: Reference software and conformance for omnidirectional media format (OMAF)

1 Scope

This document specifies the conformance and reference software for omnidirectional media format (specified in ISO/IEC 23090-2). This document describes the reference software modules and the features that is supports. It also provides a description of how the reference software can be utilized.

In addition, the document lists and describes test vectors comprising ISO base media file format files, media presentation descriptions, segments and combinations thereof that conform to ISO/IEC 23090-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 23090-2, *Information technology — Coded representation of immersive media — Part 2: Omnidirectional media format*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 23090-2 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Abbreviated terms

2D	two-dimensional
DASH	MPEG dynamic adaptive streaming over HTTP (specified in ISO/IEC 23009-1)
HEVC	high efficiency video coding
IDR	instantaneous decoder refresh
ISOBMFF	ISO base media file format (specified in ISO/IEC 14496-12)
JSON	JavaScript object notation

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