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Information technology — Coded representation of immersive media —

Part 26: Conformance and reference software for carriage of geometry-based point cloud compression data

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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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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 23090-18;

— conformance testing for checking interoperability for the various applications against the reference software which aims to be compliant with ISO/IEC 23090-18.

The reference software is structured as an extension of the ISOBMFF reference software library and provides additional functions required for ISO/IEC 23090-18. In addition, it includes a small command line application that uses the library to perform some basic file operations such as multiplexing and demultiplexing a file.

Furthermore, this document is accompanied by a collection of conformance files. These files provide practical demonstrations of various features of ISO/IEC 23090-18, aiding in a more comprehensive understanding and application of the standard.

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Information technology — Coded representation of immersive media —

Part 26: Conformance and reference software for carriage of geometry-based point cloud compression data

1 Scope

This document specifies the reference software and conformance suite for carriage of G-PCC data as specified in ISO/IEC 23090-18. The information provided describes the reference software modules and the features that it supports. It includes the status of the development of the reference software for ISOBMFF encapsulation of carriage of G-PCC data. It also provides a description of how the reference software can be utilized and a description of conformance test vectors.

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 23090-18, *Information technology — Coded representation of immersive media — Part 18: Carriage of geometry-based point cloud compression data*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

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

4 Abbreviated terms

API	application programming interface
G-PCC	geometry-based point cloud compression
ISOBMFF	ISO base media file format
N/A	not applicable

5 Reference software for ISO/IEC 23090-18

5.1 General

The reference software and conformance files are available at:

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