FINAL DRAFT
International Standard

ISO/IEC
FDIS
23090-19

Information technology — Coded representation of immersive media —

Part 19: Reference software for V-PCC

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

Partie 19: Logiciel de référence pour V-PCC

ISO/IEC JTC **1**/SC **29**

Secretariat: **JISC**

Voting begins on:
2026-08-11

Voting terminates on:
2026-10-06

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ISO/IEC FDIS 23090-19:2026(en)

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Published in Switzerland

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Foreword

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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*.

This second edition cancels and replaces the first edition (ISO/IEC 23090-19:2023), which has been technically revised.

The main changes are as follows:

— Bug fixes for attribute smoothing and PLR;

— Added support for high bit depth sequences.

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

Reference software is useful in aiding users of a coding standard to establish and test conformance and interoperability, and to educate users and demonstrate the capabilities of the standard. For these purposes, the accompanying software is provided as an aid for the study and implementation of ISO/IEC 23090-5 for Visual Volumetric Video-based Coding (V3C) with Video-based Point Cloud Compression (V-PCC). The reference software includes both encoder and decoder functionality

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Information technology — Coded representation of immersive media —

Part 19:
Reference software for V-PCC

1 Scope

This document provides reference software for ISO/IEC 23090-5 as an electronic attachment.

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 23090-5, *Information technology — Coded Representation of Immersive Media — Part 5: Visual Volumetric Video-based Coding (V3C) and Video-based Point Cloud Compression (V-PCC)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 23090-5 and the following 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 https://www.electropedia.org/

3.1
decoder
embodiment of a process that operates on a bitstream and may conform to the decoding process requirements specified for conformance to ISO/IEC 23090-5.

Note 1 to entry: Note to entry: The scope of decoder, as considered herein, does not include a display process, which is outside the scope of this document

3.2
encoder
embodiment of a process, not specified in this document, that produces a bitstream

4 Abbreviated terms

V3C visual volumetric video-based coding

V-PCC video-based point cloud compression

Clause 4 of ISO/IEC 23090-5:2026 applies.

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