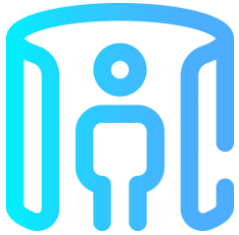


Volumetric Video

Experiences with MPEG V3C

Member's work in more detail…

5g-mag.com/technology

Volumetric Video Experiences with MPEG V3C

Overview of the work, outcomes, Execution Plan and Technical Resources

What is this project about?

Creation, encoding, rendering and presentation of Volumetric Video assets

- MPEG V3C (Visual Volumetric Video-based Coding) is a standard for **compressing and streaming volumetric video content**, which allows viewers to navigate a 3D scene with six degrees of freedom (6DoF).
- **Video-based Point Cloud Compression** (V-PCC): This part of the standard efficiently compresses 3D point clouds by projecting them onto 2D views, which are then compressed using existing video codecs.
- **MPEG Immersive Video (**MIV): This component handles the compression of immersive video captured by multiple cameras, enabling the creation of a seamless, navigable 3D scene.

WHERE TO LOOK AT?

Check the Execution Plan
All the Technical Resources
Information on Standards
Reference Tools available:

- Project: V3C Immersive Platform

Volumetric Video Experiences with MPEG V3C

Overview of the work, outcomes, Execution Plan and Technical Resources

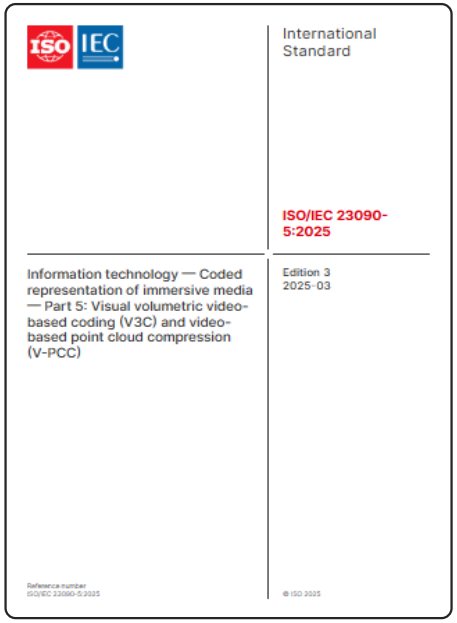
What are the members doing?

Standards

- Documentation on MPEG V3C standards for volumetric video
- 3GPP and MPEG Standardization tracker and relevant Work Items

Software

- Implementation of a Unity Player to decode and play V3C contents supporting MPEG-I V-PCC and MIV formats
- Implementation of decoded plugin library with V-PCC and MIV (MVD and MPI) synthesizers plugins
- Implementation of content streaming with V3C Carriage over MPEG-DASH
- Implementation of MPEG Haptics

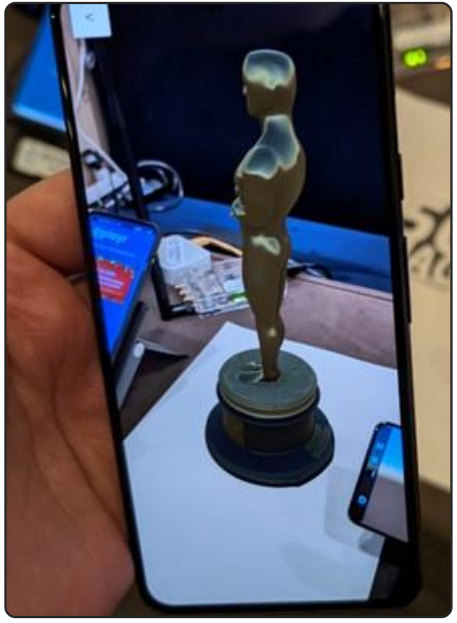

ISO IEC

International Standard

ISO/IEC 23090-5:2025

Information technology — Coded representation of immersive media — Part 5: Visual volumetric video-based coding (V3C) and video-based point cloud compression (V-PCC)

Edition 3
2025-03



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