**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION**

**ORGANISATION INTERNATIONALE DE NORMALISATION**

**ISO/IEC JTC 1/SC 29/WG 03 MPEG SYSTEMS**

**ISO/IEC JTC 1/SC 29/WG 03 N1048**

**October 2023, Hannover, Germany**

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| **Title** | **Technologies under consideration for ISO/IEC 23090-14 Scene Description** |
| **Source** | **WG 03, MPEG Systems** |
| **Status** | **Approved** |
| **Serial Number** | **23201** |

More detailed TuC is provided in the attached PDF. The PDF is created based on the project <http://mpegx.int-evry.fr/software/kondrad/sd-tuc>

The source of TuC are:

# Extensions

**= MPEG\_camera\_control**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/12[m56337], http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/147[m57409]

**= Multi-user interactivity**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/565[m64014]

**= MPEG\_material\_acoustic**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/568[m64377]

# ISOBMFF

**= Improvements for MPEG-I SD random access description**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/246[m58853]

**= On sample formats for lighting information**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/618[m65312]

# Codec Support

**= Dynamic mesh support in scene description**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/148[m57410]

**= Support for multiple atlases for MIV applications (MPEG142)**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/484[m62515]

**= On G-PCC support**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/510[m63070]

# Data Formats

**= Support of glTF CBOR binary format**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/95[m56102]

# Interfaces

**= On DASH Dynamic Bitrate Adaption with Viewpoint Update**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/94[m56094]

**= Supporting Multiple Viewers in the Media Access Function**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/242[m58510]

**= CoAP API support in MAF**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/116[m56739]

**= An Abstract API for Driving External Renderers**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/620[m65395]

# MPEG-I Audio in Scene Description

**= Immersive audio extension**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/538[m63549]

**= MPEG-I Audio in Scene Description**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/411[m61180]

**= Establishing a Mapping between Audio and MPEG-I Scenes**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/619[m65378]

# Reference Software

**= Thoughts on trimesh playback of AR scenes**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/358[m60282]

# Interactivity framework

**= On event-based scene update**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/445[m61812]

**= Physic Support**

Source: https://mpeg.expert/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/612[m65177]

# Collected problem statements and industry needs

**= On the support of real environment data**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/444[m61811]

**= Semantic representation**

Source: http://mpegx.int-evry.fr/software/MPEG/Systems/SceneDescription/MPEG-Contributions/-/issues/576[m64402]