USD Core Specification Working Group Charter

This Working Group Charter establishes the Scope and intellectual property terms used to develop the materials identified in this Working Group Charter for the Project. Only Project Steering Members, General Members, and Contributors, as applicable, that Joined the Working Group Charter will be bound by its terms and be permitted to participate in this Working Group.

1. Working Group Name. USD Core Specification

2. Working Group Deliverables. This Working Group will create: ***[Check Specification, Source Code, and/or Dataset]***

   X Specifications. There are two options for specification development. The "Community Specification" mode is designed specifically for a repository-based workflow that is familiar to developers while incorporating specification development due process and best practices. The "Traditional mode uses a governance model that is based on traditional approaches to standards and specification development. The Traditional mode includes a choice of copyright and patent licensing options so you may select the options best suited to your goals.

   [Check Community Specification Mode or Traditional Mode]

   □ Community Specification Mode.

      1. Governance. The Working Group will operate in accordance with terms and policies of the Community Specification materials set forth at https://github.com/CommunitySpecification/1.0.

      2. Working Group Scope. As set forth in the Working Group repository's Scope.md file.

   X Traditional Mode.

      1. Governance. Traditional Mode uses the governance rules as set forth in Appendix A.

      2. Working Group Scope. Universal Scene Description (USD) is an established open source technology that forms a foundation for 3D content authoring, interchange and transmission, thereby empowering a broad range of creative efforts and end-user experiences. In order to further broaden adoption and enable inclusion by other standards, the Core Specification Working Group will develop, maintain and evolve a specification detailing the key, stable features of the Open Universal Scene Description Project (OpenUSD Project) that are necessary to promote and enable interoperability and access for all creators and users of USD.
      Scope: The Core USD Specification to be delivered by this Working Group will be focused on essential features (i.e., technical details or requirements on composition model, file format, data model, and schemas) that are stable, understood, implementable, and important for interoperability of 3D authoring and transmission and that are (i) included in or derived from the OpenUSD Project open source repository (OpenUSD Repository) or (ii) developed in the Core Specification Working Group. The Core Specification Working Group can choose to incorporate deliverables specified by other AOUSD Working Groups into the Core USD Specification after they have sufficiently matured and been implemented.
      Approved Deliverables: The Working Group's first Approved Deliverable will be Version 1.0 of the Core USD Specification, which seeks to specify a "core" of behavior and functionality necessary for interoperable 3D authoring and transmission. It will be derived from a subset of the OpenUSD Repository as it exists at the launch of the Working Group, including all or a subset of composition, file format, and data model. Schemas present in the OpenUSD Repository determined to be fundamental to the technology may also be included. Future Approved Deliverables will build on the Version 1.0 of the Core USD Specification by adding additional or updated features from the then-current OpenUSD Repository and/or new "core" features developed within the Core Specification Working Group that extend the composition, file format or data model. Future Working Group deliverables may also incorporate (or refer) to the work of other AOUSD Working Groups when necessary for the evolution of "core" USD functionality. Work Plan Proposals for future versions will be subject to approvals described in the AOUSD Process & Procedures. New features will be evaluated to ensure that they are stable, understood and

implementable before being incorporated into an Approved Deliverable. The Working Group will ensure, to the extent reasonably practicable, that there is backward and forward interoperability between versions of the Core USD Specification.

Other documentation: In addition to the Approved Deliverables described above, the Core Specification Working Group may also develop non-normative educational, marketing, and informational materials, as well as white papers, to accompany any Approved Deliverables and to facilitate understanding and adoption of the Approved Deliverables. These documents will not undergo the Approved Deliverable process. All marketing materials should be developed in collaboration with, and approved by, the Marketing Working Group and Legal committee. The Working Group may also develop reference source code implementations of new features that have been formally approved for inclusion in the Core USD Specification and contribute those to the OpenUSD Repository, subject in each case to approval by the OpenUSD Project.

Out of Scope: Areas not identified as within scope are out of scope. This includes, but is not limited to the following:

Rendering. The working group's Approved Deliverables may specify up to the rendering interface, but rendering engines and technology are outside the scope of this Working Group.

Application Design. With the exception of UI-oriented metadata and schemas that provide application-agnostic hints about how to display/interact with particular USD data, specifying details on application design and editing user interactions is out of scope.

Software Architecture. As one of the key goals of the Core USD Specification is to support broad interoperability and allow for multiple implementations, it is out of scope of the Core USD Specification to specify details that dictate software architecture or design patterns such as programming language and modularity.

Hardware Architecture. Hardware features, except for documenting optional platform acceleration opportunities, is out of scope.

Other file formats. Outside of changes to USD's own files formats, the Working Group will not specify the other file formats that USD can read (e.g., Draco), but such file format specifications may be normatively referenced.

Encode/decode. Any development related to audio, video, and multimedia codecs is outside the scope of this Working Group. The expectation is that the Working Group will refer to established technology in this space.

New Schemas. Schemas outside of those expressed in the OpenUSD Repository or not developed by other AOUSD Working Groups are out of scope of the Core Specification Working Group.

Materials. Work on interoperable materials may be conducted in separate AOUSD working group(s) or, if developed outside of AOUSD, be normatively referred to by the Core Specification Working Group.

OpenSubdiv. The OpenSubdiv open source project-an essential component of OpenUSD- will be specified by a separate AOUSD working group. The deliverable of that Working Group may be normatively referenced by the Core Specification Working Group.

Asset structure. Policies for use and best practices of USD in production pipelines are out of scope for the Core Specification Working Group.

Linear media distribution. The Working Group will not specify technology relating to traditional linear media broadcast.

OTT Video Streaming. New technology developments specifically related to commercial-scale (aka over-the-top) video streaming and delivery are out of scope. If needed, the Working Group may make normative references to existing standards-based media streaming technologies such as HTTP Live Streaming (HLS) and MPEG-DASH.

The Working Group will avoid standardizing in the Core USD Specification(s) efforts conducted in other Alliance for OpenUSD working groups, absent revision of the Charter's scope.

Additional Working Group Provisions: The Working Group may form subgroups within it, as permitted by AOUSD's Process (available on AOUSD's website), to develop certain features, deliverables, or materials. The Working Group may also work with other organizations that have liaison relationships with the AOUSD. As indicated below, the Working Group will operate under (1) the Traditional Mode Governance, as supplemented by the Alliance for OpenUSD Process & Procedures, available on the Alliance's website; (2) the W3C Mode, as supplemented by the Alliance's Process & Procedures; and (3) Apache 2.0 for any source code contributions to the Working Group.

3. Copyright Licensing. Each Working Group must specify the copyright mode under which it will operate prior to initiating any work on any Draft Deliverable or Approved Deliverable other than source code or datasets. The copyright mode for this Working Group is: ***[Check one box]***

X Copyright Grant to Project, as set forth in Appendix B, Copyright Policy Option 1.

□ Creative Commons Attribution 4.0, as set forth in Appendix B, Copyright Policy Option 2.

□ Open Web Foundation 1.0. (Only for those Working Groups selecting the Open Web Foundation mode for patent licensing).

4. Patent Licensing. Each Working Group must specify the patent mode under which it will operate prior to initiating any work on any Draft Deliverable or Approved Deliverable other than source code or datasets. The patent mode for this Working Group is: ***[Check one box]***

□ RAND Royalty-Free Mode, as set forth in Appendix B, Patent Policy Option 1.

□ International Mode, as set forth in Appendix B, Patent Policy Option 2.

□ Open Web Foundation Agreement 1.0 Mode, as set forth in Appendix B, Patent Policy Option 3.

X W3C Mode, as set forth in Appendix B, Patent Policy Option 4.

□ No Patent License. No patent licenses are granted for the Draft Deliverables or Approved Deliverables developed by this Working Group.

X Source Code. Working Group Participants contributing source code to this Working Group agree that those source code contributions are subject to the Developer Certificate of Origin version 1.1, available at http://developercertificate.org/, the license indicated below, and any policies and governance rules included in the source code's repository. Source code may not be a required element of an Approved Deliverable specification. ***[Check one box]***

X Apache 2.0, available at http://www.apache.org/licenses/LICENSE-2.0.html.

□ MIT License, available at https://opensource.org/licenses/MIT.

□ Mozilla Public License 2.0, available at https://www.mozilla.org/MPL/2.0/.

□ Other {{OTHER OSS}}_____.

□ Dataset. Datasets are developed under the governance rules as set forth in Appendix A. Working Group Participants contributing data to a dataset to this Working Group agree that those data contributions are subject to the license indicated below. The dataset may not be a required element of an Approved Deliverable specification. ***[Check one box]***

□ CDLA-Permissive-1.0.

□ CC0 1.0.

□ Open-Use-of-Data-Agreement.

□ CDLA-Sharing-1.0.

□ Computational-Use-of-Data-Agreement.

□ Other {{OTHER DATA}}_____.

3. Non-Working Group Participant Feedback and Participation. Upon the Approval of the Working Group Participants, the Working Group can request feedback from and/or allow Non-Working Group Participant participation in a Working Group, subject to each Non-Working Group Participant executing the Non-Member Agreement set forth in Appendix C. By making a Contribution

to this Working Group or adding its name to this Working Group's member list, the member agrees to the terms of this Working Group Charter.