

AI x Metaverse

Working Group Charter

1. Introduction

This working group serves as a dedicated forum to foster dialogue, coordination, and collaboration among practitioners, technology developers, and standards development organizations (SDOs) to facilitate unified approaches and avoid duplication of effort related to artificial intelligence (AI) and metaverse.

The following will serve as co-chairs of the working group (WG) until elections are held:

- Aditya Mani, Yologram Style
- Alfred Tom, OMA3
- Grig Bilham, Sumset
- Yu Yuan, Verse-maker

2. Proposed Scope

This working group addresses the intersection of AI and metaverse technologies, with an emphasis on identifying interoperability and standardization opportunities. Given the rapid development and diverse implementation of AI within metaverse contexts, structured coordination among industry experts and SDOs is vital.

The working group's scope is broader than typical working groups at MSF in that it not only involves scoping interoperability and standardization opportunities and gaps, it also functions as a coordination layer promoting collaboration among existing efforts related to AI as well as offering strategic recommendations for MSF's engagement with AI technologies. Therefore, this working group produces its own deliverables and also functions as a coordinator between all MSF domain groups which is similar to the Standards Register.

Scope:

- Focus only on the intersection of AI and metaverse—AI topics not relating to metaverse and metaverse topics not relating to AI are out of the scope of this working group.
- Standardization Research
 - Work with Standards Register to track and catalog ongoing standards
 - Perform gap analysis to identify additional standardization needs
 - Develop use cases to start filling gaps or augment existing efforts
 - Publish (and maintain) an AI x Metaverse standardization dashboard
- SDO Engagement
 - Identify SDOs that are needed to contribute to standardization efforts
 - Identify needs and opportunities for cross-SDO communication and cooperation
 - Develop MSF-hosted cooperative framework proposal for consideration by SDOs
 - Pitch cooperative framework proposal to SDOs and recruit their participation
- Working Group Coordination
 - Encourage and enable MSF working groups to consider AI use cases and requirements
 - Encourage MSF working groups to initiate AI-related projects under the Labs Initiative
 - Propose Exploratory Groups to fill domain coverage gaps
- MSF Recruitment
 - Message and recruit AI experts, companies, and SDOs
 - Recruit relevant Labs under Labs Initiative
- Operational Support
 - Lead the planning of AI-related events and outreach
 - Lead MSF external messaging on the the topic of AI
 - Recommend best practices for the use of AI in MSF operations

3. Projects, Goals, Non-Goals, and Deliverables

The working group's specific projects and goals will be designed to establish initial frameworks, identify knowledge gaps, and enhance coordination with industry and standards organizations. The structured initiatives outlined below aim to streamline interactions, foster informed discussions, and develop comprehensive resources to assist the MSF community in understanding and leveraging AI technologies.

Projects

1. Contact organizations or projects listed in Appendix A and form collaborations as necessary.
2. Create a living document or dashboard that:
 - a. Tracks existing standards and gaps
 - b. Communicate with MSF working groups on their use cases
 - c. Create use cases for submission to the Standards Register.
3. Create educational resources on AI for metaverse and metaverse for AI use cases.
4. Create a living document that informs MSF's internal use of AI in its operations and processes.

Goals

- Create coordination mechanisms between at least 3 SDOs working on standards related to AI and metaverse (see Appendix A).
- Put out a joint press release within 2 months with cooperating SDOs.
- Identify 5 areas (e.g.- use cases) that could benefit from standards for interoperability and portability in the intersection of AI and metaverse.
- Recruit 5 AI companies to join MSF.
- Create or add to an MSF event series focused on AI and metaverse.
- Establish a regular cadence of meetings for the working group.

Non-Goals:

- Defining standards.
- Maintaining training datasets or developing AI engines.
- Building platform-specific AI implementations.

4. Risk Factors

#	Risk	Likelihood	Severity	Remediation or Implications
1	Inability to recruit the necessary expertise into MSF and this working group	Medium-high	High	
2	AI industry moves too fast for a consortium to keep up	Medium	Low	If the collective industry is moving that fast, then there are no opportunities for standardization, or it is too early for standardization. Collecting the necessary data and working on pre-standardization efforts will still be productive.
3	Proprietary technologies overwhelm efforts to create open standards	Low	Medium	This situation tends to be self-correcting in that society cannot support multiple competing proprietary standards for any duration.
4	Too many topic areas to have complete coverage	High	Low	We don't need complete coverage to have an impact. Working groups

				should limit topics to be effective instead of trying to keep up with industry and work on too many topics.
5	AI SDOs would rather compete with each other than coordinate	Low	Low	Similar to #3.
6	A competing consortium or government body becomes the recognized standards coordination entity, or SDOs coordinate without MSF	High	High	Not really desirable for MSF, but it is good for society.
7	Lack of funding to accomplish certain goals	High	Low	Projects and external work would need to be scaled back to stay within the available budget. We will still add value.
8	Geopolitical pressures prevent the adoption of open standards	Low	High	See #3.
9	Legislation/regulation precludes critical uses of AI in the Metaverse	Low	Medium	It is highly unlikely that there would be a consistent world-wide prohibition on the use of critical AI. It is much more likely to be localized. Work could continue for the locations where use is not banned. MSF's role would be to advocate for use and understanding of AI and metaverse.

5. Operations

This Charter shall have a term of two (2) years from date of approval. This may be extended by Oversight. The WG shall determine in advance of the expiration date if the work should continue. If so, then the WG shall update or rewrite the Charter (as appropriate) so that work may continue without interruption.

This working group (WG) will meet on a schedule to be determined by the WG, but no less than once every other week. The time and dates of the meeting shall be determined by the WG Chairs. All communications (synchronized meetings and asynchronous written messages) shall use the provided MSF tools for this WG. This WG will require approved facilities that MSF provides to WGs. In particular at the time of this charter, this WG will require a separate Causeway Group with all features enabled and a separate Zoom room with its own room number.

The WG Chairs will be as specified in §1 until sufficient time has passed to conduct elections according to the MSF Cohort Process. Nominations shall open no sooner than 3 and no more than 6 WG meetings after approval of the Charter.

The WG may create additional officer positions. The requirements for the office and all nominees shall be as specified in the MSF Cohort Process.

Nothing in this Charter is to supersede any requirements, policies, or procedures specified in MSF Cohort Process document.

6. Additional Materials



Metaverse
STANDARDS FORUM™

- ☰ AI Interoperability Exploratory Group Proposal
- ☰ Standards for the Agentic Metaverse
- ☰ AI Interoperability in the Metaverse: Considerations and Recommendations

Forum Bylaws

[Cohort Policy](#)

Appendix A: List of Organizations and Projects for Collaboration

The following existing organizations or projects should be contacted to establish open communications to improve work done by this working group. Contact information for most of these organizations can be found in MSF Standards Register databases.

1. ISO/IEC JTC 1/SC 42 (Artificial Intelligence)
2. IEEE Standards Association (Ethics, Robotics, AI Interoperability, Spatial Web, Metaverse Standards Committee and P2048 WG)
3. W3C Web Machine Learning and Accessibility Initiatives
4. Linux Foundation / LF AI & Data Foundation / PyTorch Foundation
5. Open Geospatial Consortium (OGC)
6. AI4People and European AI Alliance
7. Open Neural Network Exchange (ONNX)
8. The Khronos Group (NNEF, OpenCL, Vulkan for AI acceleration)
9. UNESCO and OECD AI Policy Observatory
10. AGNTCY – Open Agent Schema Framework (OASF) and Agent Connect Protocol (ACP)
11. Partnership on AI
12. Metaverse Acceleration and Sustainability Association (MASA)
13. Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI)
14. ETSI Securing AI Committee (ETSI SAI)
15. 3GPP
16. ISO/IEC JTC 1/SC 29 (JPEG and MPEG)
17. ITU-T
18. Virtual World Society (VWS)
19. Ethereum Foundation
20. Near Foundation
21. Society of Motion Picture and Television Engineers (SMPTE, AI Work Group)
22. OMG (Object Management Group)
23. Digital Twin Consortium
24. AREA
25. Web3D Consortium