

Metaverse Standards Register Domain Working Group Charter

Version 2.0

Approved by Oversight Committee on August 23, 2023

1. Status and change history

3 Aug 2022: First Draft
24 Aug 2022: Updated terminology
28 Aug 2022: Used capitalized ISO 19135 terminology throughout
30 Aug 2022: Numerous revisions. Added clauses 2.2, 3.5, 6 and 7, edited 4.1.1, 4.1.3
08 Sep 2022: Offline Christine and Thomas
09 Sep 2022: Reese Plews updates to terminology (Annex A, review of acronyms), Thomas and Christine reviewed
13 Sep 2022: Approved by Exploratory WG
14 Sep 2022: Submitted to Oversight Committee
21 Sep 2022: Approved by Oversight Committee
26 Jul 2023: Updates to address use case collection
08 Aug 2023: Agreed updates in WG meeting
09 Aug 2023: Updates submitted to Oversight Committee
23 Aug 2023: Oversight committee approved
25 Aug 2023: Minor edits: typos and changing references of database to use case register in new sections
30 Aug 2023: WG leadership approves

2. Officers

- 2.1. Chairs Pro Tem (Elected in November 2022):
Eric S. Ackerman, Ph.D., Perry Ellis International, Inc.
Will Kreth, HAND (Human & Digital)
Dr. Thomas Stockhammer, Qualcomm
- 2.2. Other Officer positions may be created as needed under Forum Domain Working Group Processes.

3. Motivations and Goals (and NON-Goals)

The universal [Working Group processes](#) of the Metaverse Standards Forum (MSF), (the Forum) apply, including but not limited to all the relevant values of openness, transparency and inclusion.

The motivations for the creation of a Metaverse Standards Register Domain Working Group (Working Group) include:

- 3.1. Increase broad industry and community visibility into and insights about relevant SDOs and metaverse-related standards activities (completed, ongoing, planned and potential).
- 3.2. Foster collaboration between SDOs to improve interoperability, reduce redundancy and potential confusion.
- 3.3. Provide context to support prioritization of Forum activities, for example, to focus on identified gaps rather than duplication of efforts.
- 3.4. Reduce friction and confusion in communications and increase the ability for SDOs and members of the metaverse community at large to communicate clearly and concisely about components and concepts through a Forum-defined and maintained glossary of terms.
- 3.5. To avoid conflict and competition between the deliverables (clause 4) and SDO roadmaps.
- 3.6. Provide a consolidated realistic and visionary register of use cases related to the Metaverse potentially having interoperability and standards needs.

4. Project Deliverables and Requirements

See Annex A for definition of capitalized terms as per ISO 19135.

4.1. Metaverse Standards Register

This project will develop the Metaverse Standards Register (MSR), a publicly-accessible, searchable register of all *Standards-related Publications and Projects (SPPs)* relevant to the Metaverse, including but not limited to completed

standards, standardization projects, specifications, guidelines, or open source projects. All inputs and feedback will be performed using Web-based tools and processes to ensure accuracy and timely maintenance.

Some key project requirements include:

- 4.1.1. *Pre-qualified organizations or groups* (POGs), including but not limited to SDOs, shall be identified by the DWG. Each POG shall have at least one designated representative. Designated representatives shall be determined by the DWG members through a consensus-based process and should preferably be endorsed by the POG. Examples for endorsement include an e-mail or letter from the officials of the POG to the DWG chairs. Designated representatives of POGs will serve as proposers.
- 4.1.2. The Working Group shall act collectively as both the control body and the register manager for the Forum. The control body shall be allowed to edit, curate and contextualize register items for consistency.
- 4.1.3. The MSR shall enable public input, suggested corrections and feedback, separately from the submission of register items.
- 4.1.4. Register items in the MSR shall include at least the following fields:
 - 4.1.4.1. Title: title of the SPP (including any reference number)
 - 4.1.4.2. Scope: scope of the SPP
 - 4.1.4.3. Source: originating POG, and whether the POG is a Forum member
 - 4.1.4.4. Maturity: standardization status and development stage
 - 4.1.4.5. Domains: applicability to one or more Forum-defined metaverse domains
 - 4.1.4.6. Implementations: available implementations, such as reference implementations, vendor implementations
 - 4.1.4.7. Usage Rights: link(s) to governing policies
 - 4.1.4.8. Other fields may be mandated as agreed upon by the Working Group
- 4.1.5. SPP register items may include additional optional items agreed upon by the Working Group.
- 4.1.6. SPP register items shall contain metadata describing relationships between SPPs to enable identification of:
 - 4.1.6.1. The need for interoperability across-SPPs and potentially between POGs (seams)
 - 4.1.6.2. The need for new/extended interoperability SPPs (gaps)
- 4.1.7. Register items will be stored as structured data (e.g. in a database) using consistent terminology as defined in the Metaverse Glossary, (the Glossary).
- 4.1.8. Register users will have the ability to submit queries and to visualize results by selected attributes, e.g., type of standardization work, domain of work, addressed interfaces/reference points, etc.
- 4.1.9. The MSR will complement and leverage existing industry landscapes and POG roadmaps wherever possible.

4.2. Metaverse Glossary

The Working Group shall develop and maintain the Metaverse Glossary, a managed collection of terms (concepts) and definitions, that will be used in the MSR to describe POGs and SPPs pertinent to Metaverse interoperability and related concepts. All inputs and feedback will be performed using Web-based tools and processes to ensure accuracy and timely maintenance.

- 4.2.1. The Glossary shall be collaboratively developed and openly published in parallel with the MSR.
- 4.2.2. The Glossary will be a dynamically maintained resource and include terminology entries related to the MSR as well as terminology entries not used directly in the MSR.

4.3. Metaverse Use Case Register

The Working Group shall develop and maintain a repository for Metaverse-related use cases, a managed collection of use cases and associated information, that will be used in the Metaverse Standards Forum to motivate work towards

Metaverse interoperability. All inputs and feedback will be performed using Web-based tools and processes to ensure transparency, accuracy and timely maintenance.

- 4.3.1. The Use Case Register shall be collaboratively developed and openly published in parallel with the MSR and the Glossary.
- 4.3.2. The Use Case Register will be dynamically maintained.
- 4.3.3. A template that permits consistent collection and documentation of use cases shall be developed by the MSR WG and, once stable and all inputs gathered and incorporated, approved by the Oversight committee.
- 4.3.4. Submission to the Use Case Register shall be restricted to MSF members. Any MSF domain working group will be able to contribute to the Use Case Register (in lieu of creating and maintaining Domain Group specific use cases).
- 4.3.5. Metadata collected with the use cases should include information in a consistent manner in order to identify needs for interoperability in different domains, including the ability to assign certain aspects of the use cases to different working groups within the MSF. Metadata will also permit rapid searching.
- 4.3.6. A process shall be developed for determining acceptance of use cases, declaring completion and publication of the use cases.
- 4.3.7. Use Cases initially submitted to the Register may not be complete, but the Standards Register working group, possibly jointly with other Domain working groups, shall complete the use case before accepting and publishing.
- 4.3.8. Use cases may be adopted as whole or partially from external sources, for example as published in SPPs from other organizations. Use cases developed externally may be referenced as valid MSF use cases without duplication of the prior work.

5. Milestone Plan

Table 1 provides definition and duration of phases in the development of the MSR.

Table 1 – Definition and duration of Phases in the development of the MSR

Phase	Description	Milestone	Target Date
1	<i>Establishment of register management practices</i> Finalize register requirements (register specification) and the implementation plan, create governance practices for the usage, submission and moderation of content, define terms and conditions.	Completed detailed project plan and governance documentation. Funding requirements finalized.	3 months after launch
2	<i>Oversight approval and funding/resources secured</i>	Oversight Committee votes. Resources committed with terms and conditions	1 month after phase 1
3	<i>Pilot implementation</i> Seeding initial register content (subject to resource/funding approval)	Prototype register and glossary circulated to all MSF members for review and feedback	4 months after phase 2
4	<i>Forum member feedback</i> Integration of forum member feedback, continue entry of content into the register	Public launch of the register	1 month after phase 3
5	<i>Allow public feedback</i> Public feedback	Regular updates to the register	Quarterly

Phase	Description	Milestone	Target Date
6	<i>Use Case Collection Template and Process</i> The WG develops a use case collection template and a process to collect use cases from MSF members	Completion of Use case template and announcement to MSF Members	September 30, 2023
7	<i>Use Case Acceptance and Publication Process</i> The WG develops a use case acceptance and publication process to publish a first set of use cases	Publication of first set of use cases	November 30, 2023

6. Coordination

- 6.1. The Working Group shall create and curate a list of POGs, including those that have and have not participated in the MSR, and reach out to explain the purpose of the MSR and request they appoint designated representatives as proposers.
- 6.2. The Working Group shall maintain regular contact with proposers, both Forum members and non-members, to discuss ongoing maintenance and evolution of the MSR.

7. Communication Plan

- 7.1. The Working Group officers will provide quarterly updates to the Forum Oversight Committee, Forum membership, coordination partners and public, or when major milestones are achieved.
- 7.2. The Working Group will solicit subject matter experts to present to the Working Group members on register-specific topics.

8. Working Group Renewal

Two years from approval of charter, or after two quarterly updates of the MSR, whichever is sooner.

9. Project Funding and Resources

Requests for funding and/or resources will be submitted to the Forum Oversight Committee for approval once the detailed project plan is completed in Phase 1.

Annex A: Terms and Definitions

Based on ISO 19135-1:2015

1. General

control body

entity consisting of a group of experts that makes decisions regarding the content of a register

Note 1 to entry: The control body supports the register manager for the review, authentication, and approval of the register content. additional terms for register management roles can be added as needed.

identifier

linguistically independent sequence of characters capable of uniquely and permanently identifying that with which it is associated

register, noun

managed collection of information

Note 1 to entry: The use of the verb form “register” is discouraged when used in conjunction with the noun form “register” to prevent confusion.

register item

unit of information in a register with an identifier

register item class

set of register items that share specified common characteristics

register system

information system on which a register is maintained

register specification

documented information describing governance and requirements of the register and its contents

registration

process of assigning an identifier to an approved register item

proposer

entity authorized by the register owner to propose changes to the content of a register

register manager

entity delegated by the register owner to manage a register

register owner

entity that has ultimate responsibility of a register

register system manager

registry manager
entity delegated by the register owner to manage a register system

register user

entity that accesses content from a register through a register system

Note 1 to entry: Register users may have different levels of access to the register according to the register specification.

2. Background Concepts

entity

organization and other bodies or parties



standards development organization
SDO

standardizing body recognized at national, regional or international level, that has as a principal function, by virtue of its statutes, the preparation, approval or adoption of standards that are made available to the public

standard

deliverable produced through the process of standardization

standardization

activity of establishing provisions for common and repeated use aimed at the achievement of objectives in a given context, approved by a recognized body and established by consensus

Annex B. Other Terms and Abbreviations

Metaverse Standards Register

MSR

publicly-accessible, searchable register of standards-related publications and projects relevant to the Metaverse

EXAMPLE Published standards, standardization projects, specifications, guidelines, open source projects, or other materials can be contained in the MSR.

pre-qualified organization or group

POG

recognized entity with objectives and/or projects relevant to Metaverse interoperability

standards-related publications and projects

SPP

standards, specifications and projects (e.g., open source) specific to Metaverse interoperability

designated representative

entity appointed or endorsed by the POG (or determined by the DWG members) through a consensus-based process to serve as one of or the only POG's proposer

Note 1 to entry: Forms of endorsement may include an e-mail or letter from the officials of the POG to the DWG chairs.

Abbreviated terms and symbols

these are acronyms, abbreviations and any specific symbols that we may want to use in our documents

DWG	Domain Working Group
FOC	Forum Oversight Committee
MSF	Metaverse Standards Forum
WG	Working Group