Decentralized Metaverse Initiative
Industry Connections Activity Initiation Document (ICAID)

Version: 1.0, August 19,2022

IC22-015-01 Approved by the CAG 12 October 2022

Instructions

- Instructions on how to fill out this form are shown in red. Please leave the instructions in the final document and simply add the requested information where indicated.
- Spell out each acronym the first time it is used. For example, "United Nations (UN)."
- Shaded Text indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE SA) Industry Connections Committee (ICCom) Administrator at the following address: industryconnections@ieee.org.
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

1. Contact

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

Name: Johnny Lin
Email Address: john.lin@ieee.org
Employer: 1stCycle
Affiliation: 1stCycle

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Activity Oversight Committee and Activity officers who are responsible for IEEE work items.

2. Participation and Voting Model

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

Entity-Based

3. Purpose

3.1 Motivation and Goal
Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

Metaverse refers to a kind of experience in which the outside world is perceived by the users (human or non-human) as being a universe that is built upon digital technologies as a different universe ("Virtual Reality"), a digital extension of our current universe ("Augmented Reality"), or a digital counterpart of our current universe ("Digital Twin"). Named after the universe, a metaverse shall be persistent and should be massive, comprehensive, immersive, and self-consistent. Described as "meta", a metaverse should be ultra-realistic, accessible, pervasive, and may be decentralized. In a narrow sense, metaverse may be simply defined as Persistent Virtual Reality (PVR). In a broad sense, metaverse is the advanced stage and long-term vision of Digital Transformation.

It is generally agreed that metaverse will have a profound impact on our daily work, play, and life, across all industries and sectors, reshaping the economy and society for all humankind. However, there are many hypes, confusions, and misunderstandings about metaverse in the market and in the public. Most of them come from the efforts of promoting the concept of the decentralized metaverse and other confusing but different concepts (e.g., NFT, Web3). Such chaos is creating unnecessary barriers to the healthy growth of metaverse development and adoption.

The motivation of this initiative is to provide guidelines and reference implementations for decentralized metaverse where could not only collaborate on creating, and capitalizing intellectual properties and virtual assets in decentralized ways, but also benefit from other features of decentralization in the economy and governance of decentralized metaverses

The end goal of this initiative is to enable and endorse the economy and governance infrastructure for decentralized metaverses.

3.2 Related Work
Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

This activity is supplemental to the efforts related to metaverse, extended reality, and blockchain under other IC Activities, Working Groups, Standards Committees, and IEEE Future Directions (Blockchain Initiative, Digital Reality Initiative).

Related work also includes the Metaverse Standards Forum (https://metaverse-standards.org/) of which IEEE is a member.

3.3 Previously Published Material

Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

None at this point in time.

3.4 Potential Markets Served

Indicate the main beneficiaries of this work, and what the potential impact might be.

This work will serve and benefit all the markets where intellectual properties and virtual assets are involved. Especially, the emerging "decentralized metaverse" market will need an economy and governance infrastructure that this work can support

3.5 How will the activity benefit the IEEE, society, or humanity?

Describe how this activity will benefit the IEEE, society, or humanity.

This activity will proactively support IEEE standards development for metaverse, extended reality, blockchain, and other relevant technologies. It will help IEEE and IEEE SA establish or enhance leadership in relevant industry sectors. It will also help IEEE and IEEE SA grow membership (individual/entity) and influence globally.

4. Estimated Timeframe

Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

Expected Completion Date: 9/2024

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the responsible committee of the IEEE SA Board of Governors. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

5. Proposed Deliverables

Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

Specify the deliverables for this IC activity, please be specific.

Documents (e.g., white papers, reports);
Proposals for standards;
Workshops;
Reference implementation based on open source development;
Conformity programs, certification authorities and license trademarks.

5.1 Open Source Software Development

Indicate whether this IC Activity will develop or incorporate open source software in the deliverables. All contributions of open source software for use in Industry Connections activities shall be accompanied by an approved IEEE Contributor License Agreement (CLA) appropriate for the open source license under which the Work Product will be made available. CLAs, once accepted, are irrevocable. Industry Connections Activities shall comply with the IEEE SA open source policies and procedures and use the IEEE SA open source platform for development of open source software. Information on IEEE SA Open can be found at https://saopen.ieee.org/.

Will the activity develop or incorporate open source software (either normatively or informatively) in the deliverables? Yes

6. Funding Requirements

Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government, or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICCom.

Specify funding requirements and sources, if any.

Anticipated expenses include but are not limited to marketing, legal, finance, travel, public events, group meetings and other general and administrative overhead. Funds are expected to come from external sponsorship, donations and grants.

7. Management and Procedures

7.1 Activity Oversight Committee

Indicate whether an IEEE Standards Committee or Standards Development Working Group has agreed to oversee this activity and its procedures.

Has an IEEE Standards Committee or Standards Development Working Group agreed to oversee this activity? No

If yes, indicate the IEEE committee's name and its chair's contact information.

IEEE Committee Name: Committee Name
Chair's Name: Full Name
Chair's Email Address: who@where

Additional IEEE committee information, if any. Please indicate if you are including a letter of support from the IEEE Committee that will oversee this activity.

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Activity Oversight Committee and Activity officers who are responsible for IEEE work items.

7.2 Activity Management

If no Activity Oversight Committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc.).

Briefly outline activity management structure.

1. Executive Committee
2. Community Assembly
3. Community Participants

7.3 Procedures

Indicate what documented procedures will be used to guide the operations of this activity; either (a) modified baseline *Industry Connections Activity Policies and Procedures* (entity, individual), (b) *Abridged Industry Connections Activity Policies and Procedures* (entity, individual), (c) Standards Committee policies and procedures accepted by the IEEE SA Standards Board, or (d) Working Group policies and procedures accepted by the Working Group's Standards Committee. If option (a) is chosen, then ICCom review and approval of the P&P is required. If option (c) or (d) is chosen, then ICCom approval of the use of the P&P is required.

(a) modified baseline *Industry Connections Activity Policies and Procedures*

8. Participants

8.1 Stakeholder Communities

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity and will be invited to participate.

All the entities and different groups of individuals that are involved with the businesses related to intellectual properties and non-fungible assets, especially those who are engaged in the emerging "metaverse" market.

8.2 Expected Number of Participants

Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

20

8.3 Initial Participants

Provide a few of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an entity-based activity:

Entity Name	Primary Contact Name	Additional Representatives
1stCycle	Johnny Lin	
New Caribbean Ventures LLC	Ramesh Ramadoss	
Joystick Group	Denny Wang	
0xSenses Corporation	Ralf Ma	Frankie Zhang
Dreamerse Inc.	Stephen Dukes	
Chinese Academy of Sciences	Xiaohe Chen	
Tsinghua University	Xiaolei Chang	Bin Yang
Dream Reality, Inc.	Jianming Li	
Vincula Group	Lee Stogner	
VerseMaker	Yu Yuan	
Tongyuan Software	Ning Hu	

8.4 Activity Supporter/Partner

Indicate whether an IEEE committee (including IEEE Societies and Technical Councils), other than the Oversight Committee, has agreed to participate or support this activity. Support may include, but is not limited to, financial support, marketing support and other ways to help the Activity complete its deliverables.

Has an IEEE Committee, other than the Oversight Committee, agreed to support this activity? No
If yes, indicate the IEEE committee's name and its chair's contact information.

IEEE Committee Name: Committee Name
Chair's Name: Full Name
Chair's Email Address: who@where

Please indicate if you are including a letter of support from the IEEE Committee.