Needs Assessment for Non-Fungible Token (NFT) Standards
Industry Connections Activity Initiation Document (ICAID)

Version: 1.0, 08 August 2021

<mark>IC21-008-01 Approved by IESS SMDC 20 September 2021</mark>

Instructions

- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- 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: Ryoma Ito
Email Address: ryoma@makersplace.com
Employer: Onchain Labs, Inc. DBA MakersPlace
Affiliation: Onchain Labs, Inc. DBA MakersPlace

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.

One of the primary goals is for the assessment of education/standards needs and proposed actions surrounding NFTs, by convening a group of experts within IEEE SA to explore the value offered by

NFTs and its applications. While the [Christie's/Beeple](#) auction did well to bring visibility to the NFT technology/ecosystem, there is still lots of uncertainty around its understanding, and its uses. Having an expert analysis of NFTs through experts participating in this IC program to evaluate this technology, will provide much needed trust/support to help bridge the gap with those that have uncertainties.

This IC program will also consider developing education material and guidance/best practices around NFTs which will enable in the proliferation and adoption of this technology with increased confidence. Having a trusted source that can provide education, will help ease those that are skeptical/uncertain about blockchain/crypto related technologies.

As the NFT ecosystem grows, the more different types of blockchains begin to offer their own versions of them. There isn't an understanding of how things should exist between different blockchains. If a digital asset is minted on the Ethereum blockchain, does it mean that you shouldn't mint that exact same digital asset on a different blockchain? The goal of this activity is to do a standards gap analysis and develop a proposal for a new standards project through IEEE.

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.).

The Ethereum Foundation has developed standards for NFTs (ERC-721, ERC-1155), but other blockchains don't always have something formalized like this. This activity will identify and develop a new standards proposal that is applicable across all blockchains which will help in harmonization of this work.

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

https://eips.ethereum.org/EIPS/eip-721
https://eips.ethereum.org/EIPS/eip-1155

3.4 Potential Markets Served
Indicate the main beneficiaries of this work, and what the potential impact might be.

Any individual that creates content (Ie. Artists, musicians, entertainers, athletes, celebrities), can leverage NFTs to engage their fanbase in a unique way, and create a new revenue stream. This will open up new doors for content creators.

Crypto-holders can utilize NFTs as a way to diversify their holdings.

Collectors get access to a new type of collectible medium, that has better tracking of authenticity/scarcity/provenance, with assets that won't deteriorate over time, like physical collectibles do.

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

The proliferation of NFTs, will help shape the future of digital creativity, providing means for creators to monetize their efforts, in ways never previously thought possible.

This activity will proactively support IEEE standards development for blockchain/NFTs and other relevant technologies. It will help IEEE and IEEE SA establish or enhance leadership, and become thought-leaders in the blockchain/NFT sectors. Furthermore, it will likely also help IEEE and IEEE SA grow membership, 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: 09/2023

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.

Documents (e.g., white papers, reports, guides, knowledge base);
Proposals for standards; - Engage with industry leaders in the blockchain ecosystem, to work towards understanding what an blockchain agnostic NFT might look like, targeting completion in 09/2023.
Events/Workshops; - Periodic NFT events sponsored by industry participants and ticket sales

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?: No

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.

No funding requirements. Should there be any funding needs, would expect them to be addressed by external sponsorships.

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).

Executive Committee, composed of the following:

1. Volunteer Chair
2. Volunteer Program Manager
3. Volunteer Community Manager
4. Volunteer Community Participants

This program will also have a liaison relationship with the IEEE SA Blockchain Standards Steering Committee under the IEEE FT Practice.

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,* (b) Standards Committee policies and procedures accepted by the IEEE SA Standards

Board, or (c) 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 (b) or (c) 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.

This IC activity will be of interest to individuals/organizations that create content (Ie. Artists, musicians, entertainers, athletes, celebrities), those that are blockchain enthusiasts, crypto-holders/investors, and collectors (Ie. Fans of artists, musicians etc.).

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.

15

8.3 Initial Participants

Provide a number 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	Primary Contact	Additional Representatives
Entity Name	Contact Name	Name
MakersPlace	Ryoma Ito	
NonFungible	Gauthier Zuppinger	
Palm	Matt Mason	
Pantera Capital	Franklin Bi	
NFT.NYC	Cameron Bale	
DappRadar	Jon Jordan	
Apollo NFT	Nick Frontera	
0x	Brent Oshiro	

Use the following table for an individual-based activity:

Individual		Employer	Affiliation
Name			

[DO NOT MODIFY OR DELETE: ICAID template approved by the IESS SMDC on 22 March 2021]

8.4 Activity Supporter/Partner

Indicate whether an IEEE committee (including IEEE Societies and Technical Councils) 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 agreed to support this activity?: No. However, will explore opportunities to collaborate with other IEEE units where valuable/practical.

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

IEEE Committee Name:
Chair's Name:
Chair's Email Address:

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