The IEEE Global Initiative on Trust Technology
Industry Connections Activity Initiation Document (ICAID)
Version: 1.0, 13 September 2022
IC22-011-01 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: Yihui ZHANG
Email Address: zhangyihui@caict.ac.cn
Employer: China Academy of Information Communications and Technology, China
Affiliation: China Academy of Information Communications and Technology

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).

Specify: "Entity-Based".

3. Purpose

[DO NOT MODIFY OR DELETE: ICAID template approved by the IEEE SA CAG on 14 March 2022]

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.

Fast development of emerging technologies arise new challenges about trust in a digital world, such as availability, reliability, maintainability and usability. Trust Technology is the foundation of digital trust. In the past years, there have been quite a number of vivid research activities to improve trust, such as blockchain, trusted computing, federated learning, decentralized identifier. Construct a trust framework with blockchain as the main body to realize the trustworthiness of the whole business process.Trust technology has the potential to transform the future of business, improve underlying processes and capitalize on the new digital economy. How to guarantee the development of trust technology can meet industry requirements, and promote application of related trust technologies in industries are interesting research topics.

The end goal is to promote research and development on emerging Trust Technology, build a cooperation platform to facilitate cooperation among companies on Trust Technology all over the world, extend or co-create multi-party applications and business networks with Trust Technology, help to realize the power of digital trust, solve the trust problem of digital world and accelerate the decentralization and digitization of financial services and new digital economy. Supporting other IEEE initiatives in common areas of internet, focus and applications through standards. Engaging the broader community in the domains of blockchain, trusted computing, federated learning, and decentralized identifier to increase universality of the standards collaborative output. supporting the transition of working efforts to appropriate areas of IEEE that may sustainably support mature workstream efforts in the mid-to-longer term.

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 under IEEE Future Directions Blockchain Initiative and the efforts of many IEEE Working Groups and Standards Committees in multiple IEEE Societies.

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

List the previously published material, if any.
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.

Describe the potential markets.

Anyone involved in the research, design and solutions around Trust technology , including universities, organizations, governments, and corporations.

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

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

Our vision is for value to be exchanged as quickly as information. Blockchain enables value exchange. Until now, selling, buying or exchanging these assets has required an intermediary like a bank, marketplace (physical or digital), credit card company, or third-party booking service like Airbnb. Blockchain technology, including other trust-enhancingt technology allows assets to be transferred from one party directly to another, with no middleman.

The reason why other trust enhancement technologies are needed is that it is difficult to create a closed loop of trust simply by relying on the blockchain. And trust-enhancing technologies include privacy computing, distributed digital identity, etc. We aim to build the second era internet and construct an on-chain and off-chain collaboration model based on blockchain.

This activity will proactively support IEEE standards development for blockchain, on-chain and off-chain collaboration model, the second era internet(internet of value).This activity will proactively support IEEE standards development for blockchain, on-chain and off-chain collaboration model,and the second era internet(internet of value). 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/corporate) and influence globally.

At present, IEEE already has several blockchain project groups led by different national entities, each with its own characteristics. What we need to do is to find common ground in technology, cooperate with different blockchain project groups based on the broader topic of trust technologies, and even unite all teams creatively to explore the latest global trends.

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: 09/2024

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.

Compared with the existing activities, The IEEE Global Initiative on Trust Technology will organize some workshop, conference and other activities, and finally output the standard proposal.

I. Workshop on blockchain integrates multiple technologies to construct a closed loop of trust.（1~2 times/year）

II. Workshop on on-chain and off-chain collaboration cases（1~2 times/year）

III. Conference on the second era internet(internet of value)（~1 year）

IV. Cases set about blockchain integrates multiple technologies to construct a closed loop of trust (~1 year)

V. Inventory of existing blockchain standards（~6 months）

VI. Proposals for standards about Trust Technology，including technical framework, technical and application requirements(~1 year)

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.

Specify funding requirements and sources, if any.

The Industry Connections/Initiative will be largely self-funded, participants will also support related Industry Connections activities.

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.

An Executive Committee of 5~10 volunteers will oversee the work of The Initiative.
The Executive Director in conjunction with The Initiative Chair are in regular contact to drive overall strategy and to deal with any issues that arise on a more frequent basis.

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.

Specify the policies and procedures document to be used. Attach a copy of chosen policies and procedures.
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.

Specify types of entities or groups of individuals.
Universities, organizations, governments, and corporations and individuals involved in the research, design and solutions around Trust technology.

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.

Number of entities or number of individuals.
The Initiative expect at least 30 more entities to be involved in the coming 24 months.

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
China Academy of Information Communications and Technology	Yihui ZHANG	Lifeng ZHANG
ANT FINANCIAL SERVICES GROUP	Wenting CHANG	
Zhongxing Telecommunication Equipment Corporation	Yasen LIU	
Huawei Technologies Corporation	Liangliang ZHANG	
Hangzhou Qulian Technology Corporation	Xiangjuan JIA	
Zhejiang University	Xiaofeng CHEN	
Tencent Technology(Shenzhen)Company Limited	Kepeng Li	
Institute of Computing Technology, Chinese Academy of Sciences	Yi SUN	
WeBank	Kaixiang ZHANG	
Sun Yat-sen University	Chuan CHEN	
China Academy of Telecommunication Technology	Jun ZHAO	
Peking University	Zhong CHEN	
Qinghua University	Qingguo MENG	
Beijing University of Aeronautics and Astronautics	Wangjie QIU	

Use the following table for an individual-based activity:

Individual Name	Employer	Affiliation

8.4 Activity Supporter/Partner

[DO NOT MODIFY OR DELETE: ICAID template approved by the IEEE SA CAG on 14 March 2022]

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.