Best Practice Guide to Developing Ethically Aligned Standards
Industry Connections Activity Initiation Document (ICAID)
Version: 1.0, 14 May 2022
<mark>IC22-006-01 Approved by the CAG 7 June 2022</mark>

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.
- <mark>Spell out each acronym the first time it is used. For example, "United Nations (UN)."</mark>
- 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: Ruth Lewis
Email Address: ruthlewis@ieee.org
Employer: Technology Foresight
Affiliation: Technology Foresight, IEEE Society for Social Implications of Technology (SSIT) Standards Committee

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).

Individual-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.

Developing ethical standards is really hard - much harder than a standard technical standard - as it involves a great deal of uncertainty, a diverse range of human values and background of participants, as well as ambiguity and complexity about the outcomes required and the process to be used for development. This initiative describes the development of a 'go-to guide' for new standards development in the ethical Artificial Intelligence Systems (AIS) and Information Technology (IE) areas.

Since the initiation of the 'Ethically Aligned Design' reports, the instantiation of the IEEE SSIT Standards Committee and the consequential development of the IEEE range of 'ethically aligned' technical standards (such as the IEEE 70xx series), there has been a perception that these types of standards add additional complexity and ambiguity into the development process, and therefore require a special guide to assist in the pre-standards and in-standards development activities.

Current practice sees that the members of the IEEE SSIT Standards Committee spend a disproportionate amount of time in coaching and guiding prospective and current Working Group chairs through the process of defining their 'ethically aligned' scope, purpose and outcomes and assisting them to bring their projects to fruition, compared with 'ordinary' technical standards that the IEEE develops.

The key difference between 'ethically aligned' technical standards and 'ordinary' technical standards may be that the latter require designing the standard for a broader context, where the impact must be demonstrated to be philosophically ethical, the development process involves more variables, and the standard must be able to test and validate the 'ethically aligned' outcomes with a different process.

Since the 'ethically aligned' standard process is still in an evolving state with five successfully published standards and 16 others in development, a "Best Practice" guide will not only help with new PARs but provide clarity and perspective for Working Groups looking for cross pollination-based insights. It will also inform other Working Groups who are not primarily 'ethically aligned' with considerations for ethical practices for their own standards.

The goal of this proposed Industry Connections (IC) program is to produce a 'Best Practice Guide to developing Ethically Aligned Standards', as a kind of a 'Dummies Guide to…. Ethical Standards development in the IEEE'.

This guide will be used both by prospective initiators of Project Authorization Requests (PARs), by Working Groups, and by Standards Committees, to inform and educate themselves on the most efficient and effective methods for conducting their projects.

The Best Practice Guide is envisaged to be a living document (like a live wiki), containing the collected experiences by various participants in IEEE-SA EAD-style standards development. However, it will be also useful for 'ordinary' standards developments, to inform themselves when they need to deal with morally ambiguous and complex issues.

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 plans to collect publicly available foundational literature on standards development, particularly sourcing guidelines from NIST, ISO, British Institute of Standards, Aerospace industry, etc. This author is not aware of any specific guidelines yet existing relating to 'ethically aligned' standards development'.

Describe the related 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.

None

List the previously published material, if any.

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

This guide will be used both by prospective initiators of PARs, by Working Groups, and by Standards Committees, to inform and educate themselves on the most efficient and effective methods for conducting their projects. It will be also useful for participants and Chairs of working groups engaged in 'ordinary' standards developments, to inform themselves when they need to deal with morally ambiguous and complex issues.
The potential impact of developing this guide will be substantial efficiency in developing and producing 'ethically aligned' technical standards, consequentially increase in the production of said standards in a shorter timeframe, with a shorter time to market.

3.5 How will the activity benefit the IEEE, society, or humanity?
An agreed EAD standards development guideline will provide increased efficiency which will benefit IEEE staff, standards volunteers, and Working Group/Standards Committee Officers and members, making the collaborative work more fruitful and satisfying, less frustrating, and lowering the potential for lost time searching for guidance on how to execute on their purpose.
Society and humanity will also directly benefit, as the direct beneficiaries of the work of the IEEE SSIT Standards Committee are to produce practical standards to implement the principles and policies contained within the United Nations' Universal Declaration of Human Rights, Sustainability Development Goals, and through Agency and sovereignty over the data of humans.
Thus, the beneficiaries of this work will be the IEEE and society, and Humanity.

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: 06/2024

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.

A 'how to' living IEEE wiki guide on EAD standards development, containing guidance on best practices for the novice and experienced potential ethical standards developer with a 'big idea', and for those who would like to lead or participate in ethical standards development. The overall intent is to complete this work within one year, and to make this wiki available as soon as possible, for the use and benefit of the EAD aligned Standards Committees, working groups, and staff (i.e. May 2023, assuming this initiative is endorsed by May 2022).

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 additional funding is anticipated to be required at this stage, as this initiative will be developed by volunteers. However, if access to certain 3rd party standards/guidelines or other literature require IEEE funding contributions, this will be raised and requested as required.

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? Yes

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

IEEE Committee Name: Society for Social Implications of Technology (SSIT) Standards Committee
Chair's Name: Ruth Lewis
Chair's Email Address: ruthlewis@ieee.org

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.
I am the author of this proposal request. This initiative has been endorsed by a vote of the SSIT Standard Committee, of which I am Chair.

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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.).

Not applicable. This activity will be managed as an activity of the SSIT Standards Committee.

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.

The SSIT Standards Committee policies and procedures accepted by the IEEE SA Standards Board will be used to guide the operations of this activity.

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

SSIT-SC_2021.pdf

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.

Key stakeholder communities expected to be involved in participating and providing input to this Guide include past and current Working Group Chairs/participants (as study participants) from selected Working Groups that have been/are currently developing 'ethically aligned' standards, ie those in the IEEE 70xx series, those within the SSIT/SC remit, IEEE SA staff and Directors, other volunteers and office bearers.

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.

Approximately 30 individuals.

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 individual-based activity:

Individual Name	Employer	Affiliation
Ruth Lewis	Technology Foresight	IEEE SSIT SC Chair
Lisa LeVasseur	Me2B Aliance	IEEE SSIT SC Vice Chair/Chair P7012
Peter Reid	Self	IEEE SSIT SC Secretary/Chair P7011
Angelo Feraro	University of South Carolina	Chair, P2895
Deborah Hagar	The Foundation for Sustainable Communities	Chair, P7010.1
John Havens	IEEE	
Christy Bahn	IEEE	

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.