

IEEE Sustainable Development Platform (SDP) Industry Connections Activity Initiation Document (ICAID)

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IC22-008-01 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: Gopal Pingali

Email Address: gpingali@gmail.com

Employer: Accenture

Affiliation: Self

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.

IEEE has a unique opportunity to accelerate its impact in this decade and beyond by launching a Sustainable Development Platform (SDP). The SDP will bring together corporations, educational institutions, social startups, and Non-Government Organizations (NGO's) into a common platform that accelerates the achievement of Sustainable Development Goals (SDG's) while fostering innovation, learning-by-doing, community spirit, and impact on the ground. IEEE can create a new channel for impact and increase its relevance and reach by providing the SDP to Enterprises, Educational Institutions, Student Chapters, and Conferences.

The goal of this IC activity is to create a working group of leaders from corporations, educational institutions, startups, and a platform provider that

- define and build a minimum viable product (MVP) version of the SDP
- pilot it through an ecosystem of educational institutions, corporations, and social organizations
- develop standards for an SDP
- come up with a strategy, business model, and action plan for scale out of the SDP to realize its full potential

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.).

A Sustainable Development Goals Initiative (SDG Initiative) was launched at the IEEE International Conference on Cloud Computing in Emerging Markets (CCEM) in 2020. This initiative started work on creating a world-wide innovation community for impact to translate SDGs into Cloud, AI, Big Data, and Internet of Things (IoT) challenges and accelerate the adoption of proven solutions for impact. The current IC activity will build upon the work started in CCEM and specifically focus on creating and launching an SDP.

Sustainable Development Goals are receiving great attention from many parts of IEEE and numerous organizations ranging from the United Nations, governments across the world, numerous corporations and their corporate social responsibility (CSR) initiatives, many schools and colleges, and myriad social organizations.

IEEE Standards Association has started focusing on IEEE Standards for Sustainable Development to support the three pillars of sustainable development – economic, environmental, and social. It has enabled standards like the [IEEE 1547™ Standard for Interconnection and Interoperability of Distributed Energy Resources With Associated Electric Power Systems Interfaces](#)

However, there has been no concerted effort specifically on creating an SDP. This IC activity will take the lead in this specific area.

3.3 Previously Published Material

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

There has been no previously published material specifically on an SDP.

3.4 Potential Markets Served

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

The SDP has the potential to significantly accelerate the realization of Sustainable Development Goals at scale by creating a worldwide innovation community for impact on a common technology platform.

The main beneficiaries of this work are:

- a. Corporations as they can leverage an SDP to
 - Engage employees in SDG impact
 - Drive impact with social enterprises
 - Launch innovation, impact challenges
 - Mentor and intern students focused on Sustainable Development
- b. Educational Institutions as they can leverage an SDP to
 - Engage faculty, students in SDG impact
 - Access an impact opportunity marketplace
 - Innovate continuously with enterprises
 - Learn by doing while driving impact
- c. Social Enterprises as they can leverage an SDP to
 - Accelerate scale and impact
 - Partner with corporations and educational institutions
 - Access interns and volunteers
 - Drive innovation and market validation
- d. Governments
 - Accelerate realization of sustainable development goals
 - Create an ecosystem of entities that work in local communities for impact
 - Track progress with data and dashboards

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

The SDP will provide IEEE with a new channel for impact and further increase the relevance of IEEE to Enterprises, Educational Institutions, Governments, Student Chapters, and Conferences – the SDP can be used by all IEEE student chapters, and all IEEE conferences in their own unique way while operating within a common framework for impact acceleration. The SDP will provide additional motivation to students and professionals to

be IEEE members and increase the reach of IEEE to other entities such as high schools, management schools. The SDP will also further the image and brand of IEEE as a pioneer in advancing technology for humanity. IEEE will pioneer the build and launch a minimum viable SDP and set the standards for SDPs.

The SDP will bring together corporations, educational institutions, SDG-focused startups, and NGO's into a common platform that accelerates the achievement of Sustainable Development Goals while fostering innovation, learning-by-doing, community spirit, and impact on the ground.

This activity will have a far-reaching impact to society as it is focused on realizing humanity's global goals for 2030.

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 (Two years)

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.

- Development of the first version of an SDP (Software) (6 months)
- Launch of SDP in an initial set of organizations (6 months)
- Expand the availability of the SDP to IEEE student chapters, most IEEE conferences (12 months)
- White paper on a Sustainable Development Platform (12 months)
- New standard proposal for Sustainable Development Platform (18 months)
- Report on practical learnings and next two-year plan (24 months)

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.

This Industry Connections program does not anticipate any funding requirements and would work with the basic support services provided to all IC 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.).

This IC program would have an executive committee chaired by Dr. Gopal Pingali. The committee shall meet every-other-month to discuss and debate on the focus areas and track/document the outcomes.

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 ICom review and approval of the P&P is required. If option (c) or (d) is chosen, then ICom 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.

Abridged 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. The different groups of entities invited to participate in this activity will include:

- Educational institutions (universities, colleges, high schools)
- Social enterprises (including NGO’s, social startups)
- Corporations (multinational companies, CSR groups in all companies, HR leaders, Innovation leaders)
- Impact Venture Capitalists
- Government organizations

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 individuals involved will initially be a core group of five to ten individuals, which will be expected to grow to fifty over the two years.

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
Dr. Gopal Pingali	Accenture	Self

Dr. Sanjay Chitnis	RV University	
Dr. Shekar Babu	Amrita University	
Dr. Rajath Vasudevamurthy	BMS College of Engineering	
Dr. Mydhili Nair	MSRIT	
Ms Jennifer Kane	Benetech	
Ms Vijayanthi Desai	Kyndryl	
Dr. K V Subramaniam	AMD	
Ms Madhumita Phukan	Tech Mahindra	
Mr. Gautam Bhat	cYAAG Technologies	

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.