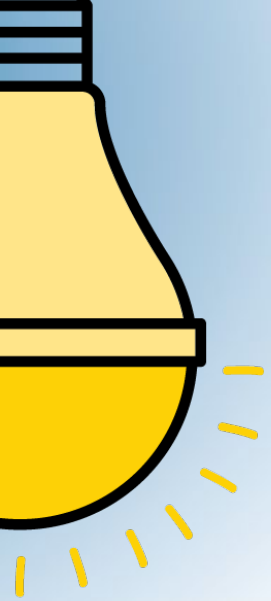
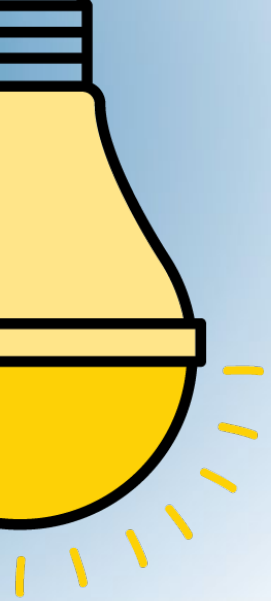
IEEE
New Initiatives Program

Brilliant
~~Bright~~ Ideas Start Here.



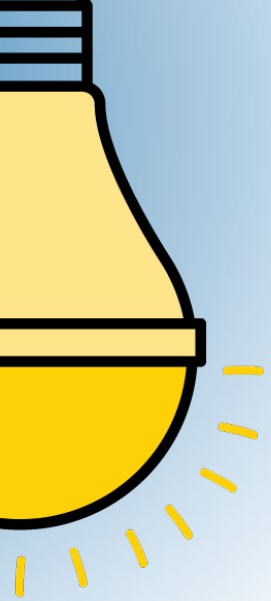
Background on New Initiatives Program

- **Historical Snapshot:**
  - Origins of the New Initiatives program dates back to 2001, proposals for which were initially solicited in 2000
  - The context for launching the program was “doing new things” and encouraging IEEE innovation
- **Appointment:** New Initiatives Committee (NIC) shall be appointed by and report to the IEEE Board of Directors.
- **Charge:** NIC identifies, recommends, and monitors new initiative projects and programs consistent with IEEE’s vision, mission, and strategic plan.



Background on New Initiatives Program

- **Programs:** NIC employs two funding tools
  - **Seed Grants:** for small scale and/or potentially high risk proposals requiring relatively small amounts of funding (up to USD 40,000) and generally less than one year in duration
  - **New Initiatives:** for larger proposals expected to require USD 100,000 or more for a 12-month period. However, any project proposed to NIC with a total budget exceeding USD 40,000 is considered a new initiative. NIC recommends and the IEEE Board of Directors approves new initiatives.
- **Totals projects funded:** Between 2003 and 2018 NIC funded 128 projects (40 Seed Grants, 83 New Initiatives and 5 Seed Grant that grew into New Initiatives) and allocated more than $40 million of IEEE funds to projects



What is a New Initiative?

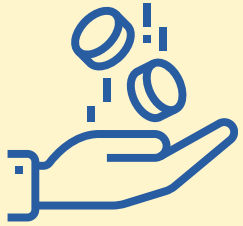
- An IEEE initiative is a new program, service or product

  … that will provide significant benefit to members, the public, the technical community, or customers,

  … or which could have lasting impact on the IEEE or its business processes

- Initiatives must be of strategic importance to IEEE
- Initiatives are not operational necessities at the time of their initiation
- Projects that can be funded by appropriate baseline budget reductions within the unit are not classified as initiatives

More on the Seed Grant Program



SEED GRANTS OF UP TO

$40,000

are available for small projects taking less than 12 months to complete.

- NIC approves seed grants
- Guideline: NIC reviews submissions within 45 days
- They can be pilot programs that are innovative and may entail some risk
- No salaries or capital equipment
- Seed grant projects need leader(s), volunteer/OU co-sponsor, and a staff project manager

Example of Seed Grant – Forums of the Future Project

- Seed grant proposed by Technical Activities and Conferences Committee
- Goal was to experiment with new conference models and stand up two virtual conferences in order to learn and be able to meet the demand when it comes.
- **Amount: $40K for 1 year**
- The project turned into what is now the Virtual Center of Excellence within Global Meetings, Conferences & Events Management (MCE).

More on New Initiatives Program

Typical LARGER GRANTS OF

$100,000

or more are awarded for larger projects taking 1-3 years to complete.

- New initiatives use two step process
  - Phase I (preliminary/similar to a letter of intent)
  - Phase II (full proposal)
- NIC invites Phase II submission
- Board of Directors (BoD) approves spending on new initiative projects
- Projects need an identified initiative leader(s), require an endorsement from a Volunteer Champion, and need a staff project manager

Example of a New Initiative – IEEE Smart Grid

- New initiative proposed by Technical Activities, Future Directions Committee, Corporate Activities, and IEEE-SA
- The goal is that IEEE be recognized as the professional home for those focused on Smart Grid development.
- **Amount: $3.2 million over 4 years**
- Transitioned to the Power and Energy Society

Image from *The Institute*, http://theinstitute.ieee.org/

Rolling Submission Processes

- Rolling process that allows for new initiative and seed grant evaluation at any time during the year
  - NIC does not have submission deadlines for new initiative and seed grant proposals. Proposals **may be submitted any time** in the year for review by NIC.
  - However, NIC's budget cycle is on a calendar year basis, and consequently, projects encounter an end-of-year hard stop on funding
  - Projects that are approved late in the year sometimes cannot be implemented effectively
  - Therefore, NIC and the initiative leader can negotiate the start date, which includes release of funding.

Bring your ideas of the dark.
Apply today! Details at
ieee.org/initiatives

Appendix: Committee Roster, Examples of Projects and Lessons Learned

IEEE Smart Grid

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Public Policy Engagement in Europe

- New initiative proposed by IEEE Corporate Activities
- Develop and implement an effective and sustainable program to assist European IEEE members to influence and shape European public policy
- **Amount: $965,000 over 4 years**
- Transitioned to the European Public Policy Committee (EPPC)

Image from *The Institute*, http://theinstitute.ieee.org/

Cloud Computing

- New initiative proposed by Technical Activities Board and IEEE-SA
- Position IEEE in a leading role in the development of cloud computing globally and increase collaboration across societies, councils, and IEEE OUs.
- **Amount: $1.7 million over 4 years**
- Transitioned to the IEEE Computer Society

Liaison Office in China

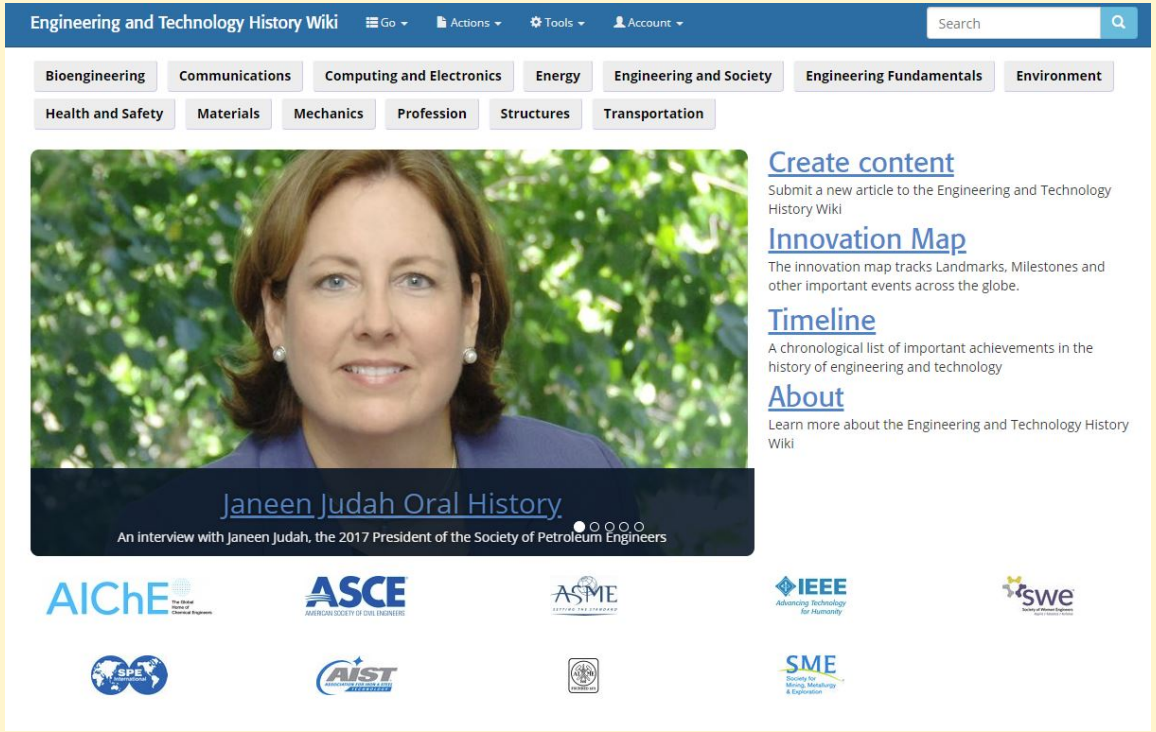
- New initiative proposed by IEEE Corporate Activities
- Its goal to establish a physical presence in China
- The office is operationalized with budget targets for revenue and staff supporting the revenue generating activities of IEEE OUs.
- **Amount: $1.4 million over 3 years**
- Transitioned to Corporate Activities reporting to the Exec. Dir. & COO IEEE

Life Sciences in IEEE

- New initiative proposed by Technical Activities Board
- Create a community for IEEE professionals and other interested parties who work at the intersection of the Life Sciences with Electrical Engineering, Computer Engineering, Computer Sciences, Physics and Mathematics.
- **Amount: $1.1M over 4 years**
- Transitioned to a TAB technical community and operational in 2014

Global History Network

- New initiative proposed by the IEEE History Committee
- Develop the premier global online resource on the history of electrical, electronics, and computer technologies and the institutional history of IEEE. Committee.
- **Amount: $619K over 3 years**
- Today IEEE GHN is part of the Engineering and Technology History Wiki at ethw.org



IEEE Learning Network

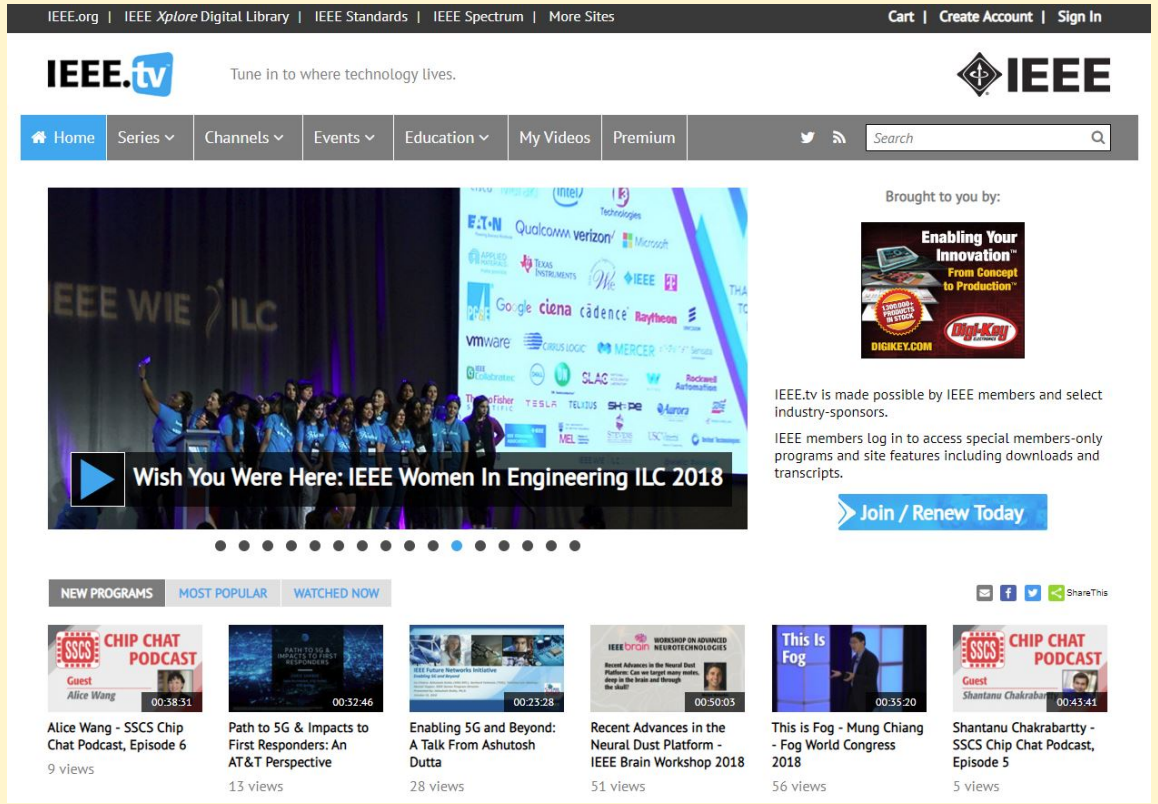
- New initiative sponsored by Educational Activities
- IEEE Learning Network (ILN) is intended as a one-stop single site for all continuing education products including webinars, self-study courses, MOOCs, and registration for live offerings from across the Institute on a common platform.
- **Amount: $1.3M over three years**
- Soft launch is scheduled for May 2019 and full launch in June 2019

Rebooting Computing

- New initiative sponsored by the Future Directions Committee
- The initiative has four major activities:
    1. International Roadmap for Devices and Systems (IRDS),
    2. a new Industry Summit to expose industrial partners to Rebooting Computing,
    3. a Lower Power Image Recognition Challenge (LPIRC), and
    4. the International Conference on Rebooting Computing (ICRC).
- **Amount: $757K over 3 years**
- Planning underway for transition to one or more OUs in 2020

IEEE.tv

- New initiative sponsored by IEEE Regional Activities (today its MGA)
- Develop, launch and deploy productions for IEEE.tv. It launched in August 2006 and now is an Internet-based, live-streaming television network service producing and delivering special-interest programming about technology and engineering.
- **Amount: $505K over 4 years**
- Integrated into IEEE operations, with professional oversight and management

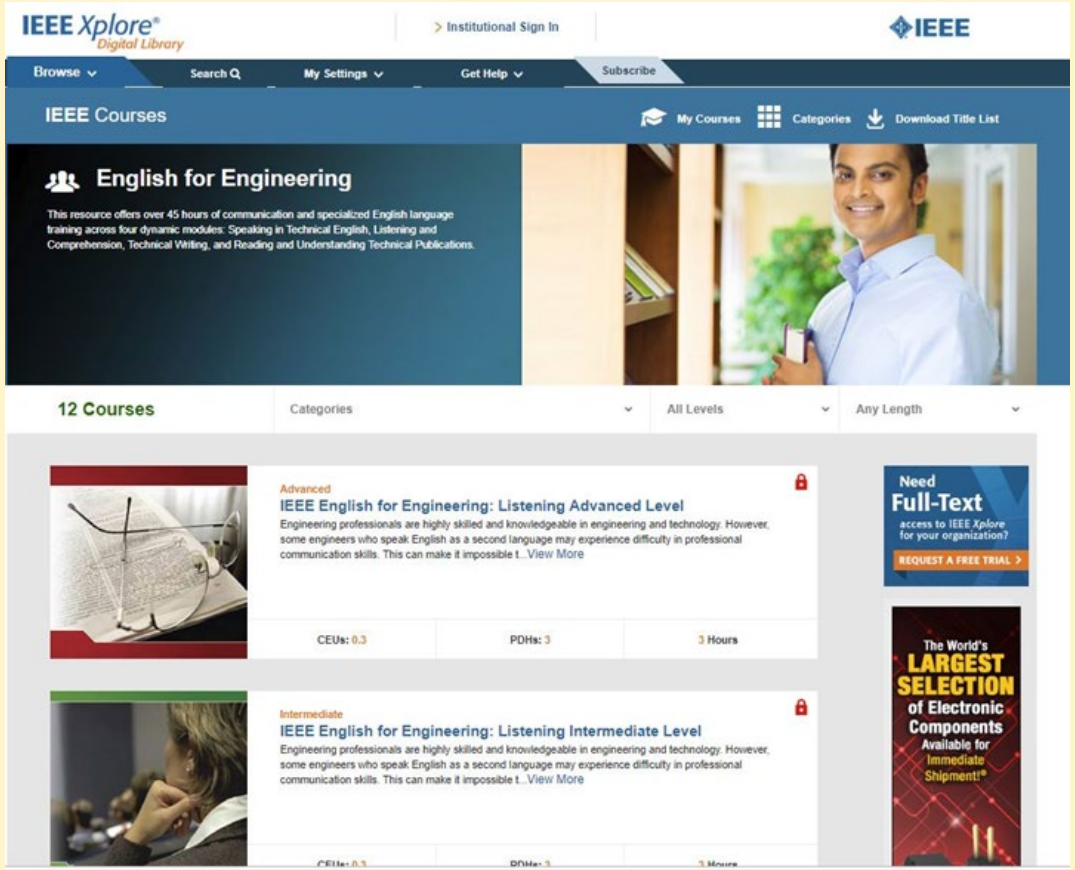


Launching our Children's Path to Engineering

- New initiative sponsored by Educational Activities
- The initiative had several programs, one named TryEngineering.org launched in 2006 in collaboration of IEEE, IBM, and the New York Hall of Science. It offered a variety of resources to engage and excite students, as well as advance the skill and knowledge of educators
- **Amount: $160K for one year**
- TryEngineering is now a recognized brand

Technical English Program (TEP)

- New Initiative sponsored by Uruguay Section, IEEE Region 9 and IEEE Educational Activities.
- Address a widely recognized need for technology and computing professionals experiencing difficulties in understanding and speaking English, reading technical articles in English, and composing technical articles in English.
- **Amount: $364K over 3 years**
- TEP, known as IEEE English for Engineering, is administered by EAB as a continuing education program, first institutional sale in August 2012 and now generates over $300K per year in revenue.



Forums of the Future Project

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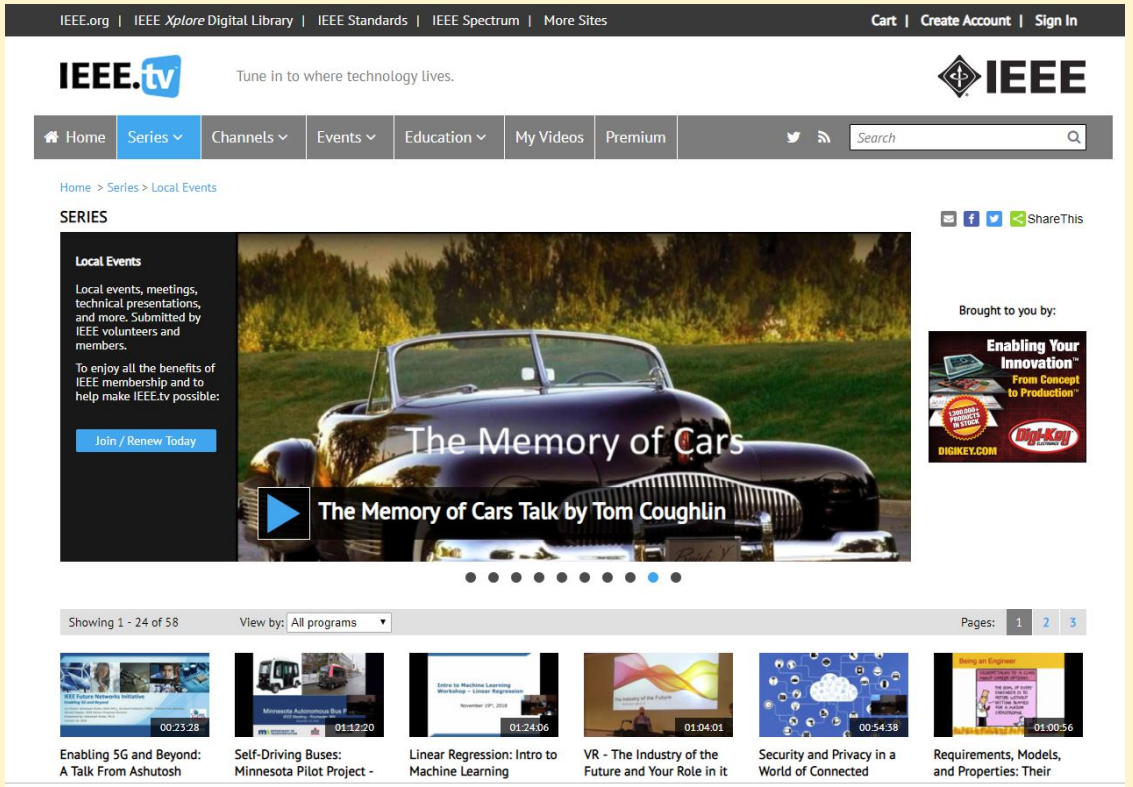
- Goal was to experiment with new conference models and stand up two virtual conferences in order to learn and be able to meet the demand when it comes.
- **Amount: $40K for 1 year**
- The project turned into what is now the Virtual Center of Excellence within Global Meetings, Conferences & Events Management (MCE).

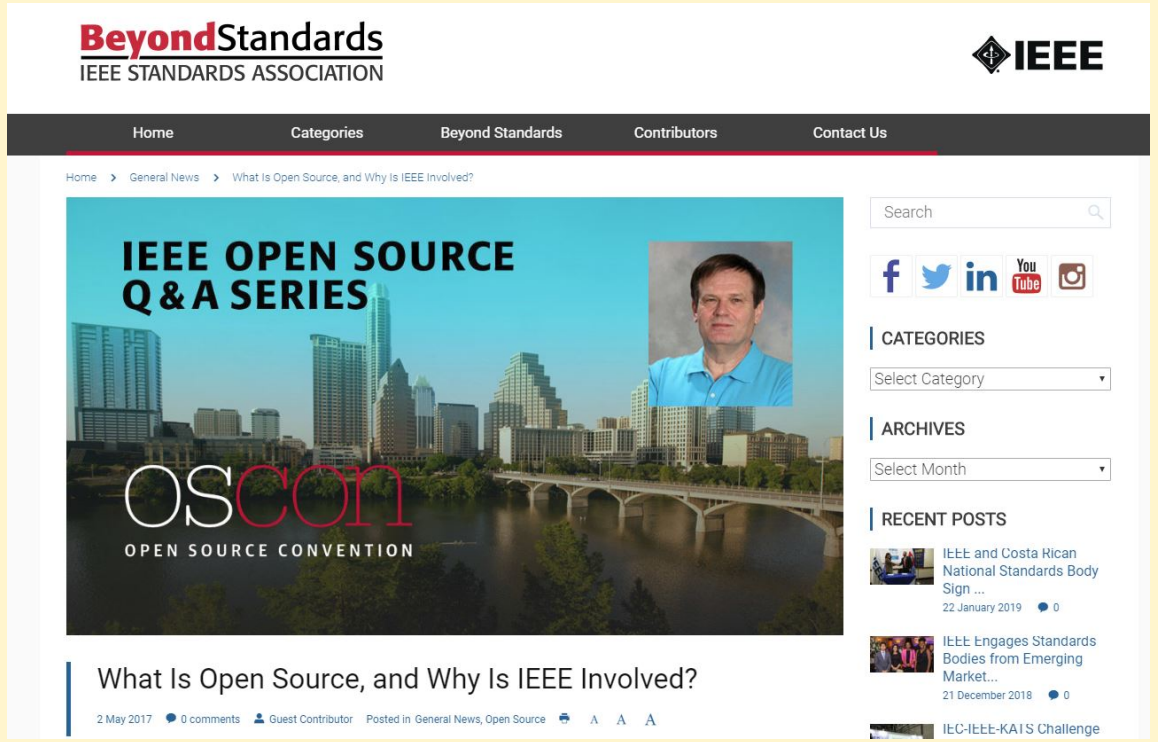
Chapter Technical Meeting Recording and Distribution

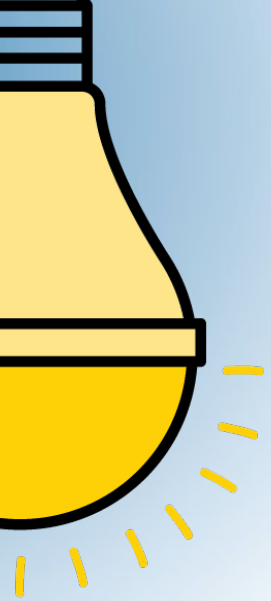
- Seed grant proposed by Region 6, Region 4 and Computer Society
- The project captured IEEE local section chapter technical meeting presentations and provided a way for these recorded presentations to be stored and accessed by IEEE members.
- **Amount: $80,000 from two seed grants over 2 years**
- See IEEE.TV Local Events https://ieeetv.ieee.org/ieee-local-events



IEEE Open Source

- Seed grant proposed by IEEE-SA
- NIC funded an IEEE Standards pilot for an IEEE-wide approach to open source.
- **Amount: $40,000 for 1 year**
- The project is operational and funded by IEEE-SA after proof of concept phase was completed.

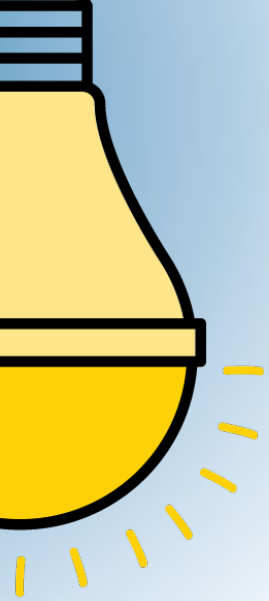




Lesson Learned for Determining Success

In the words of the project teams

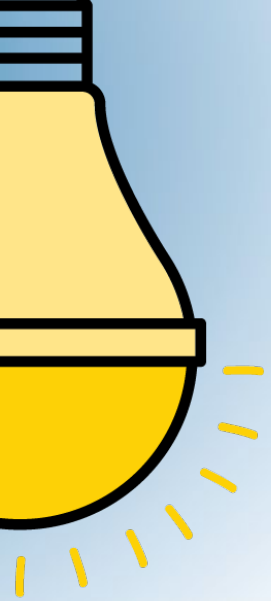
- Alignment
  - Strong alignment with at least one of the BoD's priorities
- Role of volunteers and staff
  - Need a volunteer and staff structure set up before starting the project, we would not have successfully completed the hundreds of tasks associated with the various stages of the project without the volunteer-staff team.
  - A strong staff Project Manager should be assigned as soon as a project is initiated, so that it can proceed smoothly.
  - Success requires volunteers who work and deliver on commitments, they need to be accountable and they should be recognized by IEEE in some way for their work.



Lesson Learned for Determining Success

In the words of the project teams

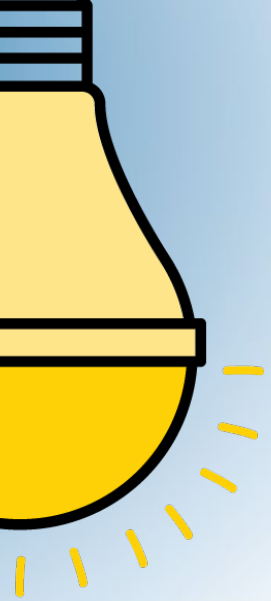
- Multi-OU collaboration
  - Collaborating with other OU's, other projects and other groups within IEEE such as multiple societies, councils, and OUs working together
  - Cross-OU effort: IEEE-SA worked with IEEE Legal for the License Framework, the IEEE Humanitarian Ad Hoc, other IEEE Ad Hoc's, OUs, and societies. We engaged with the IEEE Foundation, Educational Activities, Membership Activities, MSD, Pubs and Technical Activities/Societies to lay out collective opportunities for mutual and collective impact.



Lesson Learned for Sustainability

In the words of the project teams

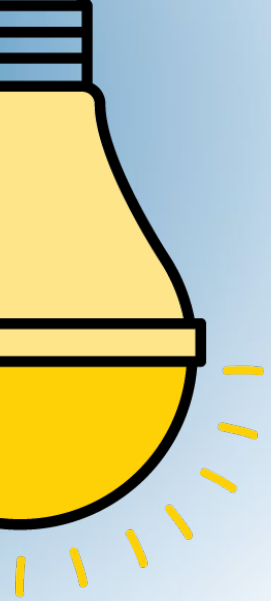
- Sustainability needs to be a goal from Day 1 of new initiatives; each new product or service needs to include a home or potential home from its inception.
- Have a business plan, governance, and revenue model for sustainability and growth from “day one”
- Revenue generation is important.
- Community growth requires sustained and consistent effort and energy (both from volunteers and from staff)
- The added value of the new products and revenue generation resulting from the initiative will be a result of leveraging and bringing together existing competence in various Societies and OUs.



Lesson Learned for Institutionalization

In the words of the project teams

- IEEE is a complex organization and changes can take more time than anticipated and operational integration requires a great deal of socialization, coordination and support.
- Each and every project operates in collaboration with the existing IEEE infrastructure, e.g. Societies, Councils, OUs



THANK YOU