IEEE Communications Society
IEEE Standards Association

International Conference on SmartGrid Communications

International Standards Coordination

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Vice Chair, ComSoc Standards Board

TAB's Representative to IEEE-SA Standards Board

IEEE COMMUNICATIONS SOCIETY

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IEEE Advancing Technology for Humanity

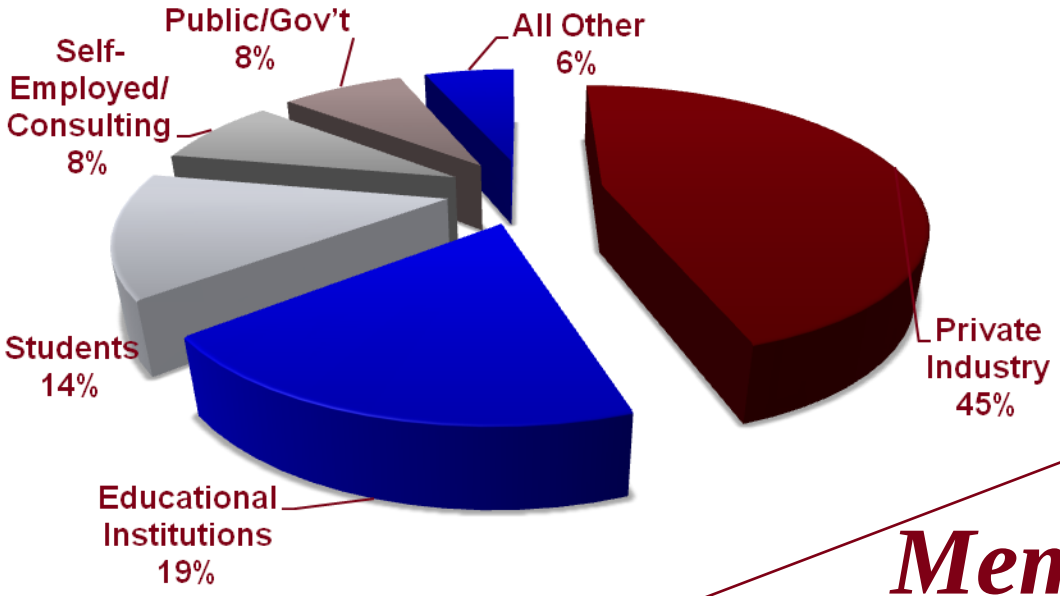
IEEE Mission Statement

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

Communications Society Mission

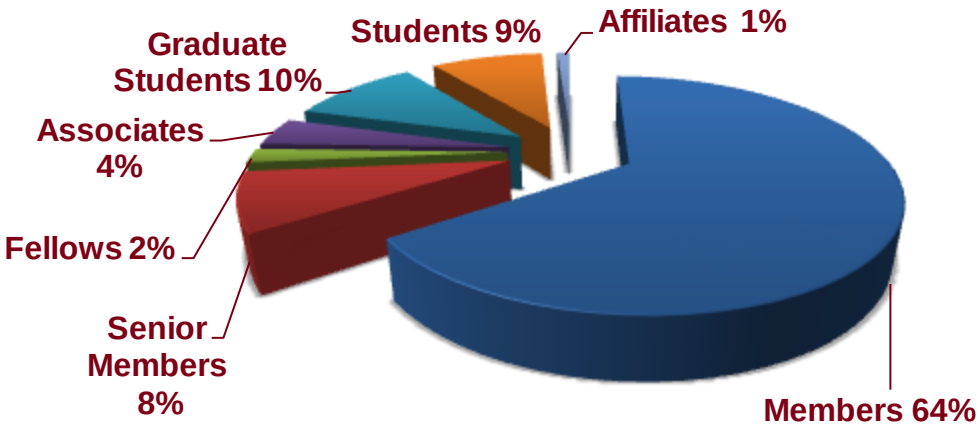
The IEEE Communications Society promotes the advancement of science, technology and applications in communications and related disciplines. It fosters presentation and exchange of information among its members and the technical community throughout the world. The Society maintains the highest standard of professionalism and technical competency.

Member Employment

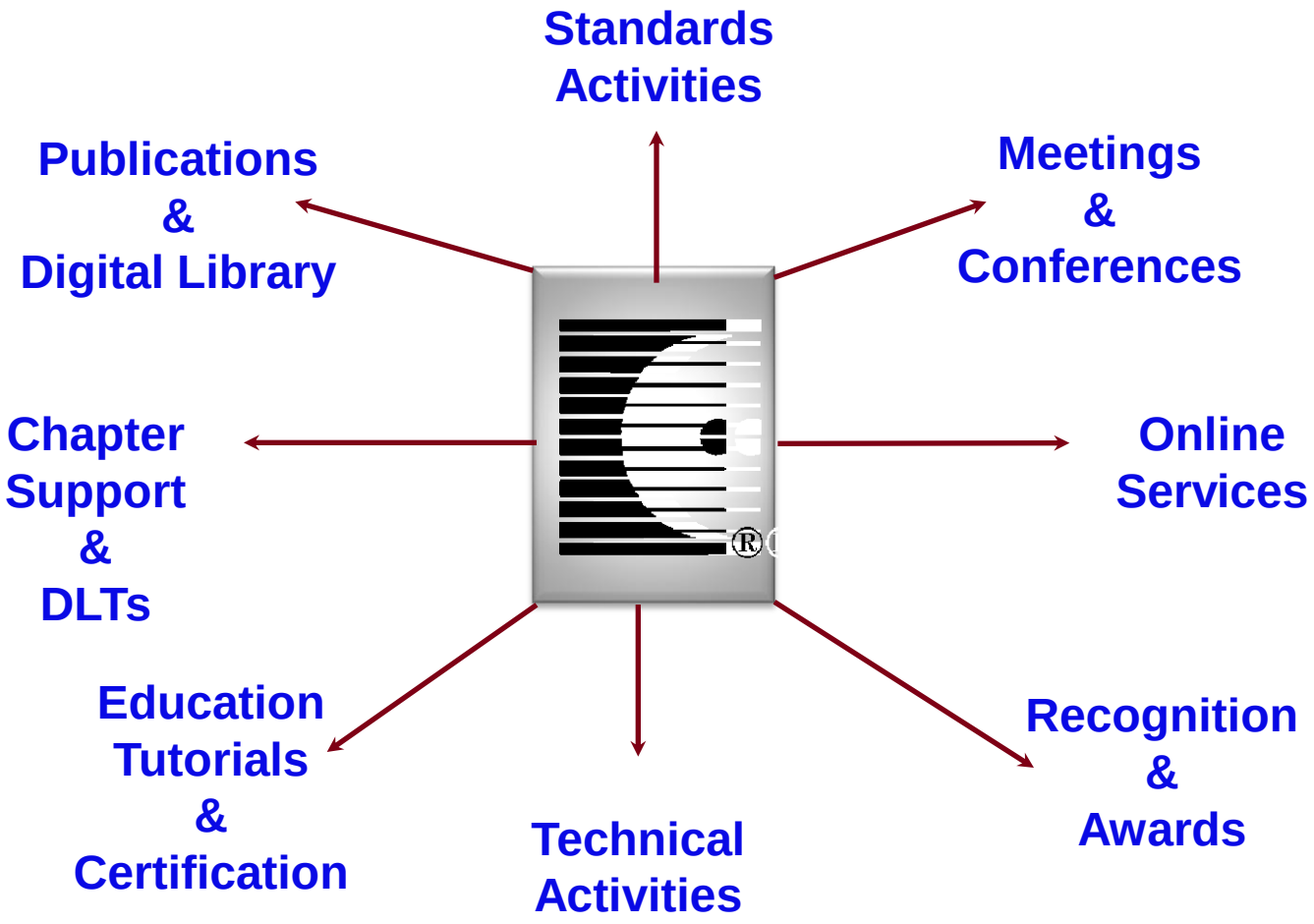


All Other includes retired and unemployed.

Members by Grade



ComSoc Products and Services



IEEE Standards Association, IEEE-SA
The Mission

The IEEE Standards Association provides a standards program that serves the global needs of industry, government, and the public. It also works to assure the effectiveness and high visibility of this standards program both within the IEEE and throughout the global community.

- *Increasing visibility and usage of IEEE Standards worldwide*
- *Promoting reliance on IEEE standards as a source of technical information for international, regional and national standards bodies*
- *Encouraging worldwide participation in IEEE Standards*

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SG Standards Coordinating Model

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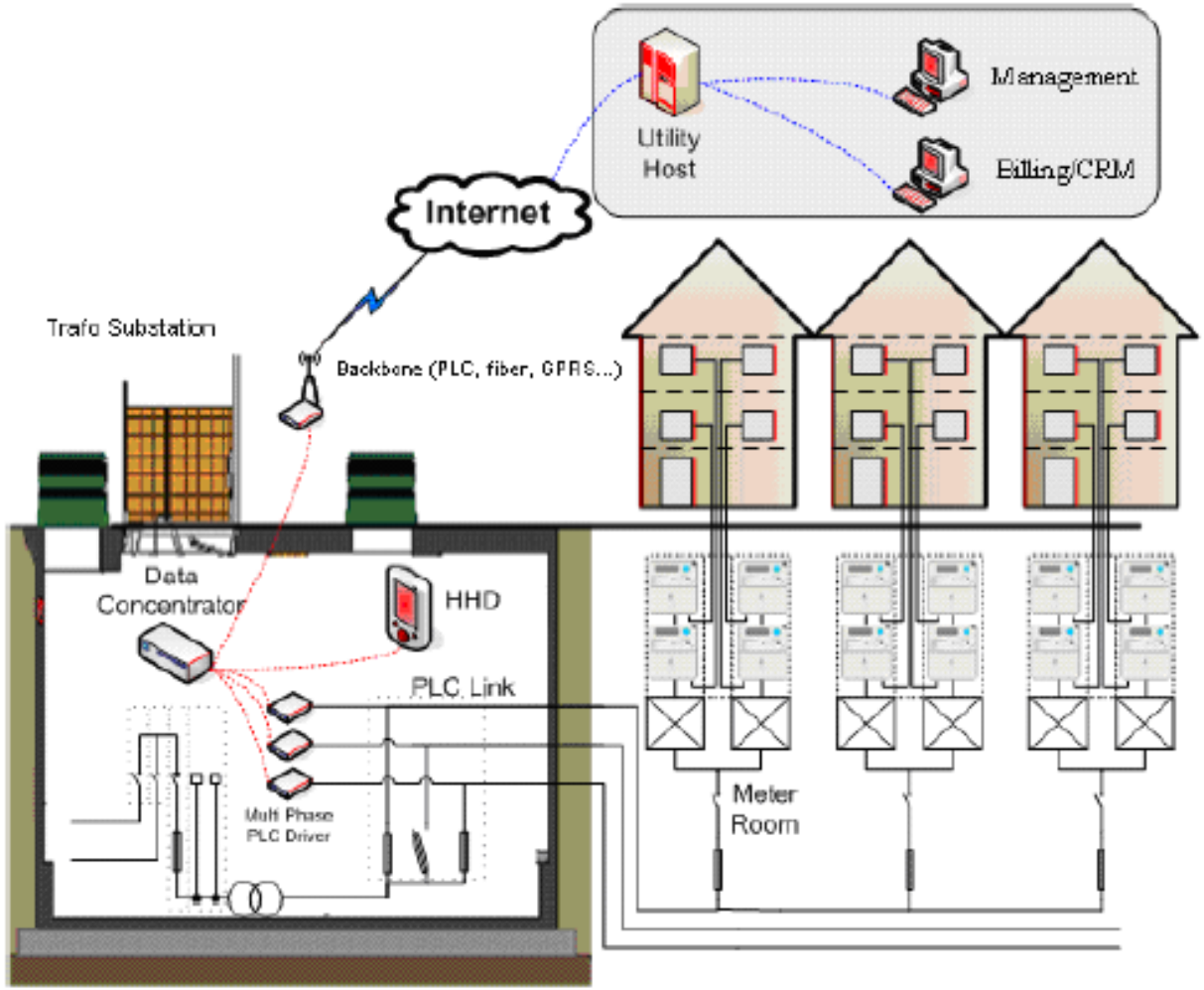
ITU-T/IEEE Partnership in NB PLC Standardization
Problem Space and Rationale

- PLC is a key enabling technology for Smart Grid applications, particularly in smart metering and home energy management spaces
- To facilitate cost-effective solutions and broad industry adoption of this technology, it is critical to bring a timely, coherent and stable PLC standard to the market
- IEEE P1901.2 and ITU-T G.hnem exhibit significant overlap in the scope and constituency

NB PLC Application Paradigm – Access



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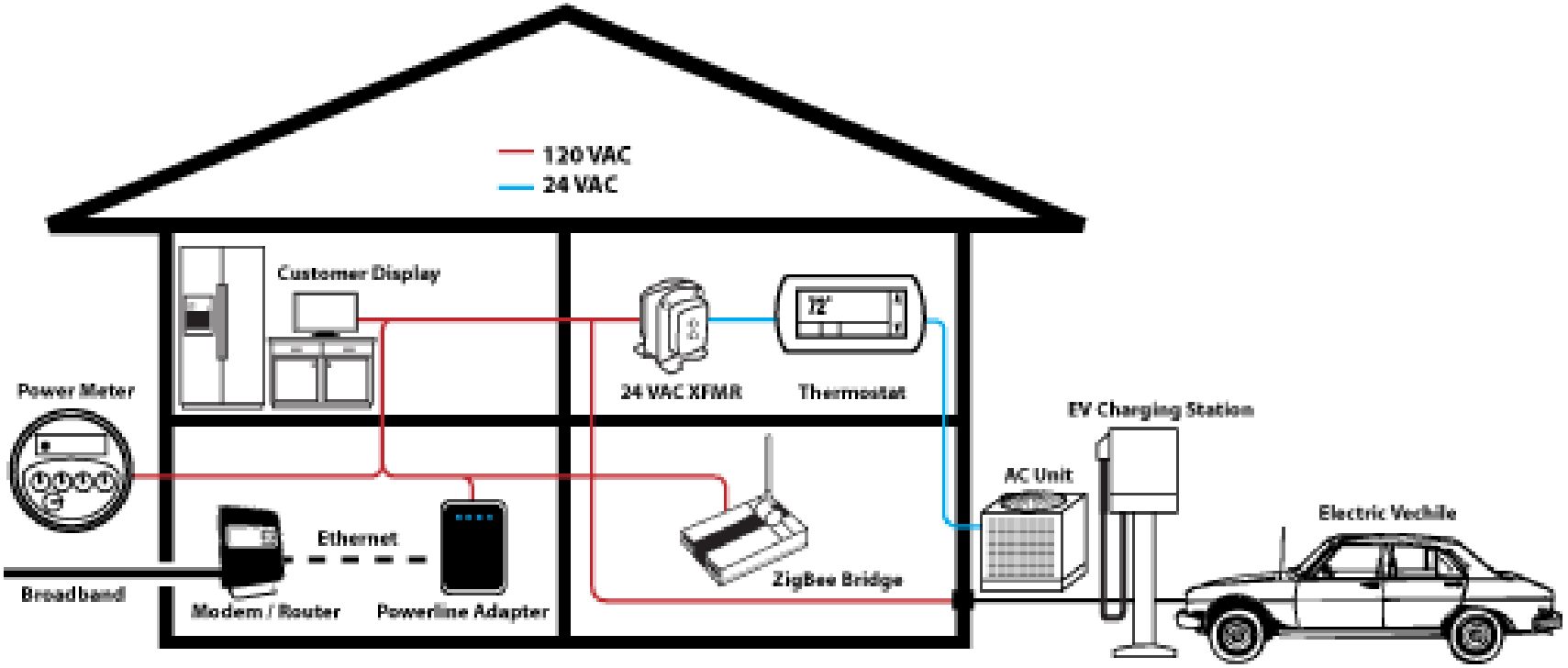
NB PLC Application Paradigm – Home



HomePlug

Background and Approach

- Sept 10, 2010 at a meeting related to SGIP activity at NIST between IEEE and ITU-T discussed an approach for joint work on an IEEE/ITU-T narrow-band PLC standard in support of Smart Grid applications
- The approach: both Working Groups will work together to develop a common deliverable
- An MOU to describe the partnership scenario is being developed.
- The MOU and guidelines will be presented to ITU-T G.hnem and IEEE P1901.2 for ratification and to Governance of both organizations for approval
- Both organizations are enthusiastic about this partnership on technical and governance levels and first joint meeting of the technical people is to take place in mid November

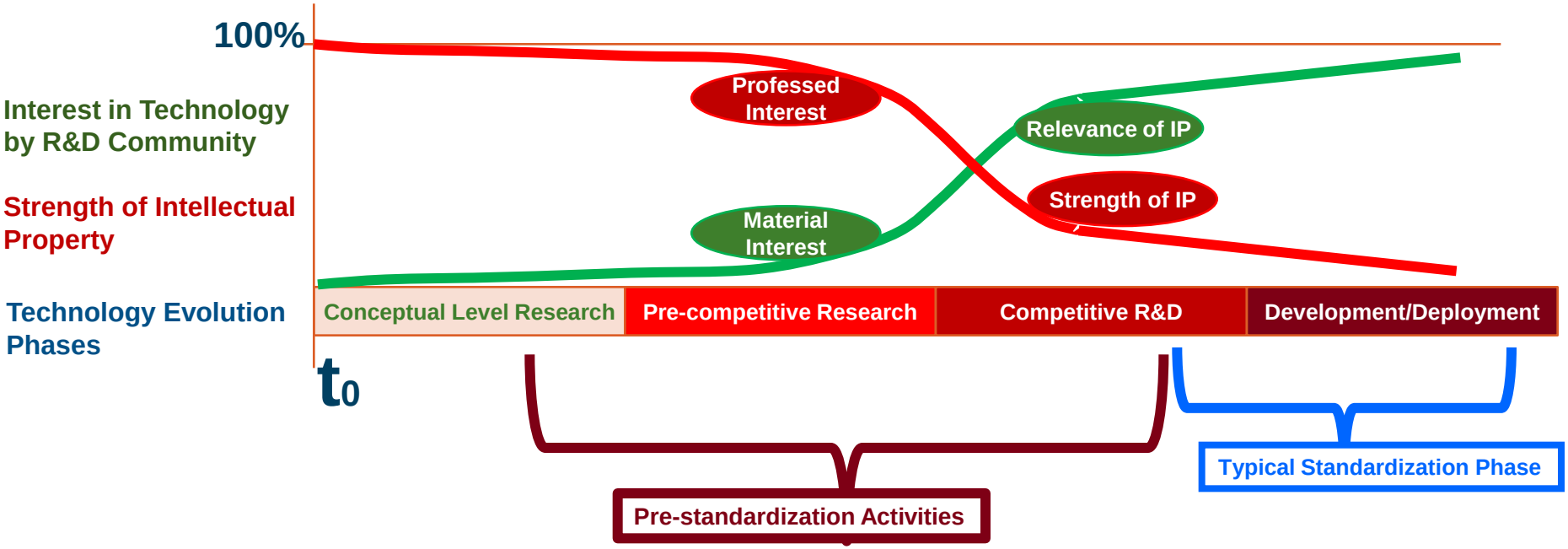
IEEE/ITU-T Partnership Highlights and Challenges

- Define the partnership objective and principles
- Create the partnership scenario and gain support of IEEE and ITU-T organizations on technical and governance levels
- Enable technical work by the joint working team and building consensus
- Ensure integrity of IEEE and ITU-T standards processes
- Secure the entire standard's lifecycle

International Standards Coordination

Effective coordination and cooperation even for the benefit of standards need start earlier – in pre-standardization phases of technology evolution

Technology Evolution, Intellectual Property, and Standardization



- Intellectual property strength follows professed interest
- Intellectual property relevance follows material interest

- Coordination and cooperation in Standards is impaired by stake holders' positions in IPR, R&D, and Markets
- Coordination could benefit from stake holders' engagement in earlier phases of innovation and intellectual property development

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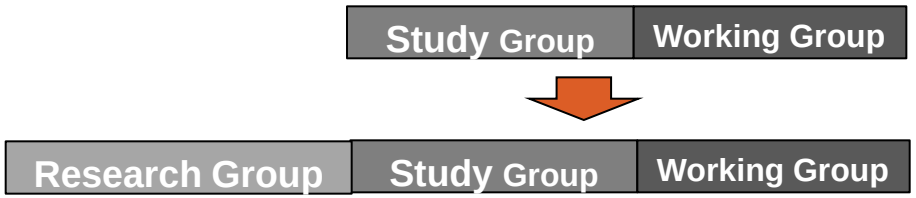
Preamble to Standards Development Process

Current IEEE Scenario

Proposed Scenario



- A new Standards Development Phase is being proposed
- This proposal is for consideration and approval of IEEE-SA
- It is expected that this pre-standardization phase will to a significant degree engage academic and industrial researchers

It is critical that governments' and industry's research grants to academia include pre-standardization and standardization components

Global Pre-standardization Partnerships – Governments, Industry and Academia

- **Pre-standardization activities can benefit from partnerships among industry, academia, and government's (e.g. funding agencies, and SDOs)**
- **The value to Industry**
  - Exposure to early research activities
  - Access to academic research talent and intellectual property
  - Increase strength of intellectual property due to early patenting activities
  - Increase in relevancy of patents due to targeted, standards-minded research
  - Standards development can start earlier and is expected to be accelerated by pre-standardization discussions, thus reducing time-to-market for products and services
  - ***Possibility for early coordination and cooperation***
- **Value to Academia**
  - Possibility to partner with industry
  - Possibility to engage in relevant to industry research
  - Significantly higher possibility for impact of research
  - Potential for valuable to industry practitioners publications
- **Value to Humanity – technically better standards**