

IEEE – Advancing Technology for the Benefit of Humanity

Our Mission. . .

**“Foster Technological
Innovation And
Excellence For The
Benefit Of
Humanity”**

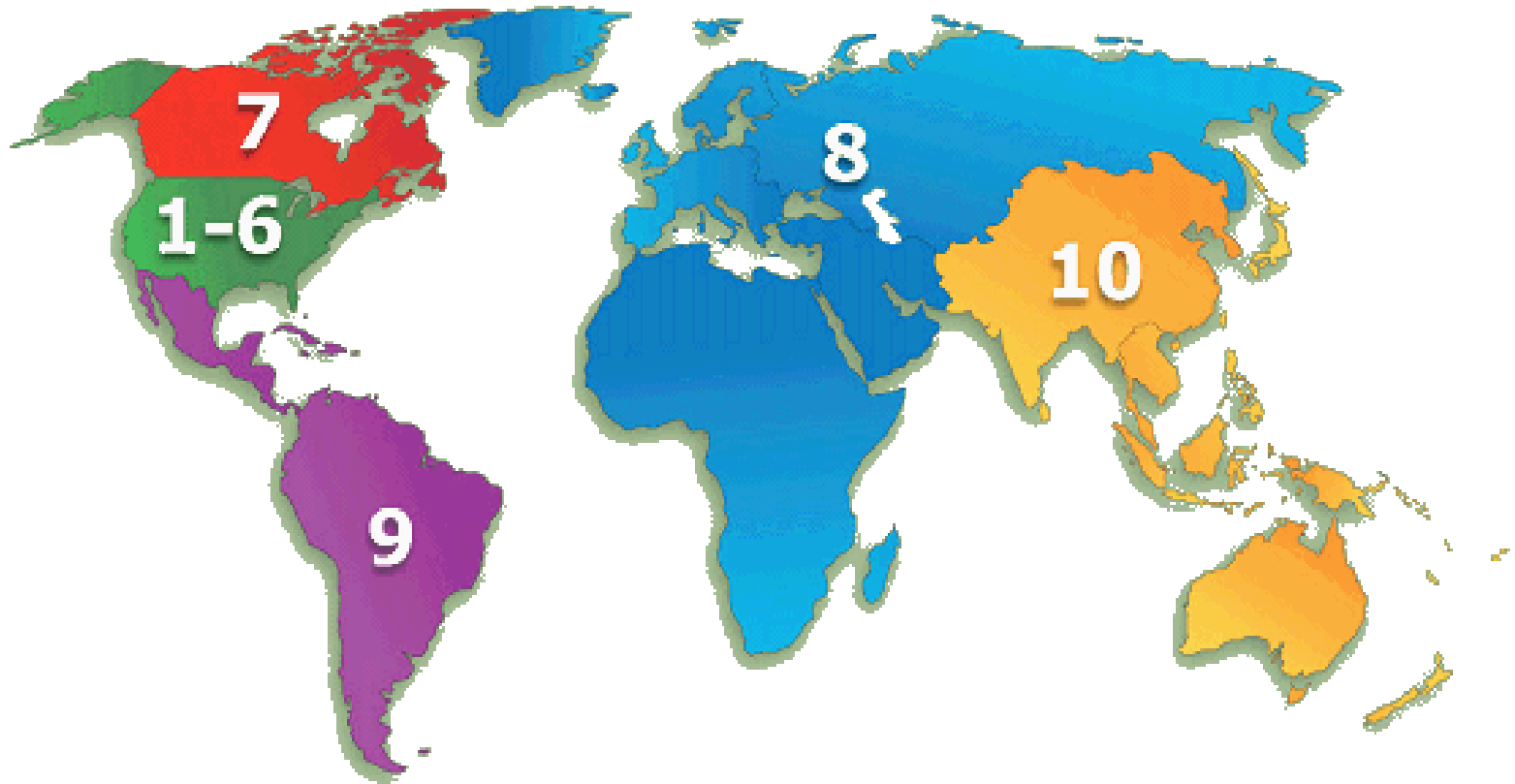
Our Heritage

- **AIEE (1884) – American Institute of Electrical Engineers**
- **IRE (1912) – Institute of Radio Engineers**
- **IEEE (1963) Institute of Electrical and Electronics Engineers from merger of AIEE & IRE**

Organization

- **Grouped into geographic areas reflecting where we live and work ...**
 - **10 Geographic Regions**
 - **333 Sections within Regions**
 - **1,855 Student Branches at universities**
 - **...and technical areas based on our fields and interests.**
 - **38 Societies and 7 Technical Councils**
 - **2,081 Chapters (within local Sections)**

Regions



Sections

- **Provide a community of colleagues**
- **Members build a network through local Section, Chapter, Student Branch activities**
- **Volunteer leaders develop new skills**
 - **Gain management, teamwork and leadership experience**
- **Provide local professional and technical activities**
- **Recognize achievements of members and others**

Societies & Councils

- **Bring members together with similar technical interests**
- **Sponsor conferences, workshops, tutorials, seminars, etc**
- **Develop publications: Journals, Magazines, Newsletters**
- **Recognize member accomplishments**

Societies & Councils

- **Aerospace & Electronic Systems**
- **Antennas & Propagation**
- **Broadcast Technology**
- **Circuits & Systems**
- **Communications**
- **Components, Packaging & Manufacturing Technology**
- **Computational Intelligence**
- **Computer**
- **Consumer Electronics**
- **Control Systems**
- **Dielectrics & Electrical Insulation**
- **Education**
- **Electromagnetic Compatibility**
- **Electron Devices**
- **Engineering in Medicine & Biology**
- **Geoscience & Remote Sensing**
- **Industrial Electronics**
- **Industry Applications**
- **Information Theory**
- **Instrumentation & Measurement**
- **Intelligent Transportation Systems**
- **Magnetics**
- **Microwave Theory & Techniques**

Societies & Councils

- **Nuclear & Plasma Sciences**
- **Oceanic Engineering**
- **Photonics**
- **Power Electronics**
- **Power & Energy**
- **Product Safety Engineering**
- **Professional Communication**
- **Reliability**
- **Robotics & Automation**
- **Signal Processing**
- **Social Implications of Technology**
- **Solid-State Circuits**

- **Systems, Man, & Cybernetics**
- **Ultrasonics, Ferroelectrics & Frequency Control**
- **Vehicular Technology**

Technical Councils

- **Biometrics**
- **Electronic Design Automation**
- **Nanotechnology**
- **Sensors**
- **Super Conductivity**
- **Systems**
- **Technology Management**

Conferences

- **IEEE Sponsored over 1,200 conferences in 78 countries in 2010**
 - **Approximately 450,000 attendees**
 - **Over \$100 million in revenue**
- **70% held in Regions 7-10 (outside U.S.A.)**

Publications

- **Nearly 3 million articles in IEEE digital library**
 - **7M+ articles downloaded per month**
- **More than 2M engineers, scientists and students have “free” access**
- **150 journals, transactions and magazines**
 - **17 of the 20 top-cited publications in electrical and electronics engineering**

Publications

- **Significant volunteer participation among the 150 IEEE publications**
 - **70% of Editors-in-Chief from U.S.**
 - **However, more than 75% of authors from outside U.S.**
 - **Nearly one-third from Region 10 (Asia-Pacific)**

Publications

Award winning **IEEE SPECTRUM Magazine** print and online

The screenshot shows the IEEE Spectrum online website. At the top, there is a search bar and navigation links for 'SPECTRUM', 'IEEE Xplore', and 'SUBMIT'. Below this is a horizontal menu with categories: HOME, MAGAZINE, BIO, COMPUTER, CONSUMER, ENERGY, SEMICON, TELECOM, and TRANSPORT. A secondary menu includes 'Mar 2009 INDEX', 'PAST ISSUES', 'Mar 2009', '2009 IEEE', 'NEWSLETTERS', 'EVENTS', 'JOBS', 'EXTRAS', and 'RSS'. A prominent orange banner advertises 'Download FREE Technical Papers' with three featured titles: 'Modeling and Simulating a ZigBee Wireless', 'Phase-Locked Loop Simulation with Medicated Stead-State Analysis', and 'Power of a Platform in the Nanometer Era'. Below the banner are sections for 'FEATURED ARTICLES' (highlighting 'Rebuild the Flying Robots'), 'SPECTRUM VIDEO' (showing a video thumbnail), and 'WHAT'S NEW' (listing various technical news items). At the bottom left, there is a 'WANT TO JOIN IEEE?' section and a 'Maker Faire' event announcement for May 3 & 4, 2008.



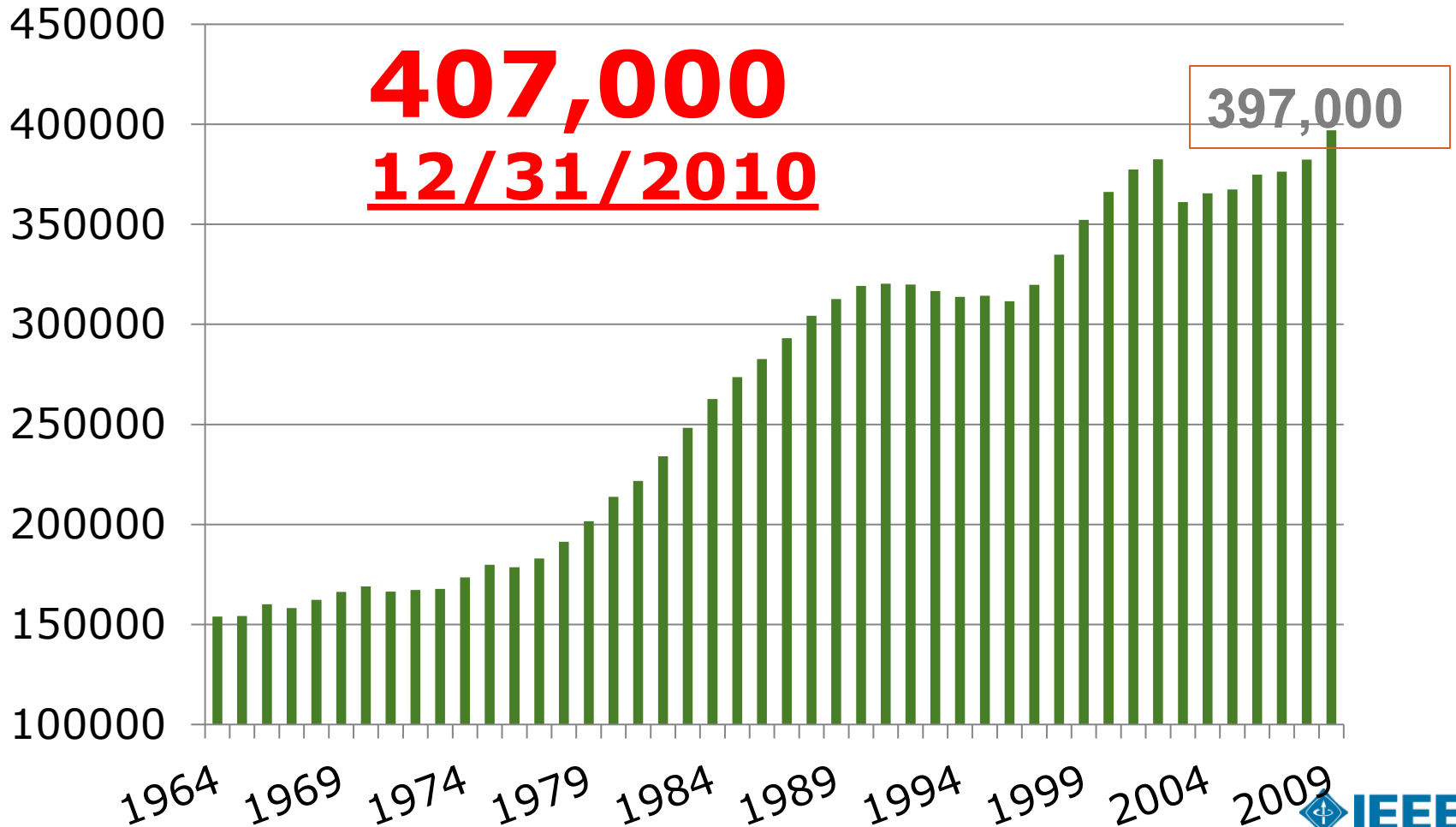
Standards

- **IEEE the leading developer of global industry standards**
- **Established standards development program**
- **Over 900 published standards; 400 in development.**
- **Portfolio of development programs, products, and services**
- **Enhanced global adoption of IEEE standards -- IEC, ISO, and ITU.**

Education Programs

- **IEEE Expert Now**
- **Education Partners Program**
- **Skills Certifications**
- **IEEE Pre-University Programs**
- **Pre-University Teacher In-Service Program (TISP)**
- **TryEngineering.org**
- **Accreditation**

Membership



Membership Data as of 12-31-2010

“Indicate all of fields in which you hold a degree” – 2008 Member Study

Electrical or electronics engineering	66%
Computer science/engineering	27%
Physics	10%
Mathematics	7%
Business or Finance	8%
Systems engineering	3%
Mechanical engineering	3%
Industrial engineering	2%
Materials science/ engineering	1%
Medicine	1%
Other	10%

68%

Student Membership



Membership Data as of 12-31-2010

IEEE Membership Initiative

- “One IEEE”: impact to current and potential members
- Envision 129,000 new Society Members!
 - Marketing your conferences & events
 - Reading your newsletters & magazines
- Simplifying our Society Membership model makes it **easier for potential members** to select and understand the options
- Simplifying our Society Basic Membership **increases efficiency** in marketing and programming

IEEE Initiatives and Relationships

- India office opens in Bangalore in 2010
- China office completes 2 years of operations from Beijing
- Singapore office relocates and expands
- National Society agreements span more than 40 countries
 - 49 national society agreements
 - 25 “sister society” agreements : ex. IEEE Computer Society and U.K. org.
 - Common interest, mutual benefit

2011 IEEE Board Priorities

- Ensure sustainable progress toward establishing IEEE's leadership in important new technical areas (including the Smart Grid and selected areas within Life Sciences).
- Develop and approve a plan to ensure that IEEE is at the forefront of digital publishing technology.
- Develop and approve an IEEE Conference strategy – including protection of quality of IEEE publications.
- Develop collaborative strategic alliances with other associations and publishers (including exploration of new joint membership agreements and incorporation of new publications in Xplore).
- To ensure all members are engaged and find a professional home in IEEE; create a global strategic member development plan, particularly emphasizing practicing engineers/ technologists and young professionals especially where IEEE membership is declining

2011 TA Leadership Focus

- Working together within TA/TAB
 - Resolve conflicts & collaborate
- Finances & new initiatives
 - Focus on funding enhancements
 - Develop new initiatives that will benefit your community
 - Creating opportunities for investing in the future rather than spending “extra” money on travel
- Interactions with other OUs
 - Working to collaborate on projects and planning

Joint technical and geographic activities programs

- Chapter development
- Chapter programs
- Speakers
- Industry Visits
- IEEE Day
- History/Milestones
- IEEE.tv broadcasts
- Local community issues
- Local education issues
- Humanitarian efforts
- Career development

IEEE Buenaventura Chapter of IEEE Engineering in Medicine and Biology Society

- Three students from California Lutheran Univ.
- Presentation at Poinettia Middle School in Ventura, California
- “Biotransmitters – Making Science fun”
- View it on [IEEE.tv](https://www.ieee.tv)





1.5KW R.E. Haiti Install



Start in Six Haiti Locations, Aim to Serve 1 Million People in Five Years
Funding support from NPPS and PES

Future Directions

- Responsible for initial vetting of ideas for new technical communities – the entry point for all new technical groups within technical activities
- Responsible for variety of collaborative technical areas (Smart Grid, Cloud Computing, Life Sciences)
- Technology Time Machine – Symposium on Technologies Beyond 2020, 1-3 June 2011 in Hong Kong
- Alternative delivery of technical content – focused sessions at companies (Boeing, Lockheed Martin)

Smart Grid

IEEE Smart Grid World Forum

- Collaboration between Technical Activities Future Directions and Region 8
- Held in Brussels, Belgium: 2-3 December 2010
- 350 attendees – full capacity
- IEEE (FDC) sponsored in conjunction with SmartGrids European Smart Grid Technology Platform and Katholieke Universiteit Leuven
- Delivered surplus exceeding budget resulting from a combination of top speakers, full attendance, good marketing, and sales of sponsorships

26

Smart Grid World Forum - Brussels



IEEE Smart Grid World Forum
2-3 December 2010 Brussels, Belgium

IEEE Smart Grid World Forum
2-3 December 2010 Brussels, Belgium

General chair:
- Marko Delimar, (University of Zagreb)

Program Committee:

- Ronnie Belmans, K.U.Leuven (Chair)	- Maher Chebbou, SAP
- Marko Delimar, University of Zagreb	- Vicente González López, REE
- Régis Hourdoulle, Alstom Grid	- Tahir Kapetanović, CEER/EREG
- Andreas Luxa, Siemens	- John D. McDonald, GE
- Lars Nordström, KTH Stockholm	- Thierry Polet, Alcatel-Lucent
- Miguel A. Sánchez Formé, Iberdrola	- Dirk Van Hertem, KTH/KU Leuven

Registration information

	Early bird (until 15-OCT-2010)	Standard (until 15-NOV-2010)
Standard registration	€ 625.00	€ 725.00
IEEE Members	€ 415.00	€ 515.00
IEEE Student Members	€ 325.00	€ 425.00

VENUE

The historic Hotel Metropole serves as the venue.

- Situated in the heart of downtown Brussels' city centre
- A short walk to Grand Place, the Royal Theatre de la Monnaie, and the Bourse (Stock Exchange)
- Only 12 kilometers from Brussels Airport (BRU)

SPONSORS




www.ieee-smartgridworld.org

Key takeaways:

- Discussion forum with the top experts and decision makers
- What is a smart grid?
- Who is going to pay for it?
- Who is going to benefit?
- What is the effect of smart grid on the economy?
- Evolution or Revolution
- Lessons learned
- Show stoppers
- Smart grid upgrade or green field deployment

Smart Grid World Forum

This series of events will gather together:

- high level policy makers
- industry decision makers
- academia

It is a global platform for the exchange of ideas and sharing best practices in different existing views and multiple approaches to Smart Grid.

EVOLUTION OF THE GRID

The IEEE Smart Grid World Forum is a unique series of events that form a global platform for the collaboration of stakeholders worldwide to support and promote the evolution of Smart Grid.

The first event in the series, entitled "Evolution of the Grid," will take place in Brussels, Belgium, 2-3 December 2010.

This event is organized together with the SmartGrids European Smart Grid Technology Platform and Katholieke Universiteit Leuven. This event will emphasize Smart Grid developments in Europe.

For more information contact: info@ieee-smartgridworld.org

www.ieee-smartgridworld.org

The Envisioned Future. . .

Be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.

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