USNC CURRENT

Volume 11 Number 3
Fall 2016

Published by the American National Standards Institute and Its U.S. National Committee of the IEC

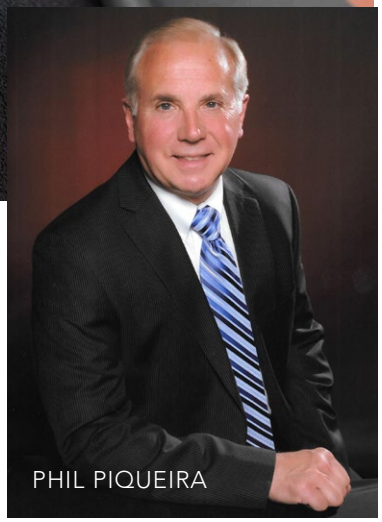
FOCUS ON PASSING THE TORCH

"When you're finished changing, you're finished." – Benjamin Franklin

As an estimated 10,000 baby boomers retire *every day,* a key focus is ensuring we have the strong and effective professionals needed to maintain and grow U.S. leadership in international electrotechnical standardization. We need to expand strategies for attracting the next generation, support new participants, and foster their active engagement and leadership in IEC activities.

The Future Looks Bright: Thoughts from the Outgoing USNC President

By Phil Piqueira, USNC President, 2010 – 2016


PHIL PIQUEIRA

The expression "time flies" is one of my first thoughts when I think of my tenure as USNC President. The USNC-hosted IEC General Meeting (GM) in Seattle in 2010 was my first GM as the USNC President-elect, and the 2016 GM in Frankfurt, Germany, was the last in which I led the U.S. delegation as USNC President. Time has, indeed, flown in between these two events. There have been 5 additional IEC GMs, 18 sets of USNC Policy meetings, 12 IEC Council Board meetings, 12 FINCA/COPANT meetings, 12 ANSI Board meetings, and a myriad of outreach meetings with other National Committees around the globe. However, the USNC, over the past six years, has been far more than just a series of meetings.

USNC Structure and Strategy

From a USNC perspective, there have been a number of governance structure changes that we have implemented over the past six years to address the evolving standards landscape. At the time I was elected USNC President, we had two Vice-Presidents: a Vice-President – Technical, and a Vice-President – Finance. Recognizing the importance of conformity assessment within the USNC/IEC, we added a Vice-President – Conformity Assessment, with the responsibility of representing the USNC on the IEC Conformity Assessment Board (CAB) and developing USNC conformity assessment strategies.

We also recognized that maintaining a robust membership base was vital to the long-term sustainability of the USNC and, consequently, added a Vice-President – Membership *(continued)*

IN THIS ISSUE

IEC symbols for electrical current: ALTERNATING CURRENT (AC) DIRECT CURRENT (DC) AC/DC

The Future Looks Bright: Thoughts from the Outgoing USNC President *(continued)*

Recruitment and Development.

In 2012 the USNC Policy Committees addressed the long-term strategic needs of our organization by developing five strategic objectives:

- Seeking leadership positions at all levels of the IEC
- Growing USNC membership
- Increasing regional effectiveness of the USNC and the IEC
- Developing a comprehensive standards strategy
- Developing a comprehensive conformity assessment strategy

These five objectives then formed the core of our programs for the next five years. In addition, although the development of strategic initiatives has been important, it has been equally important to manage the 2,000 USNC participants who are involved in 165 IEC Technical Committees (TCs) and Subcommittees (SC); this has been our focus of activity for the past six years.

No summary of the recent work of the USNC would be complete without thanking Charlie Zegers, our long-time General Secretary, who retired at the end of 2015. Charlie's commitment and professionalism were key elements of the success of the USNC for many years.

IEC People and Plans

While the USNC has been evolving in important ways, the IEC has also gone through a number of significant changes. Foremost among these was the hiring of a new General Secretary in 2012. Frans Vreeswijk (Netherlands) was a former IEC Council Board member with a strong understanding of the IEC and international standardization. In addition to Frans's leadership, there have been a number of IEC Presidents who have very capably led the IEC during this period – Jacques Regis (Canada), Klaus Wucherer (Germany), and Junji Nomura (Japan). And the USNC has been fortunate to have played a role in helping elect our own Jim Shannon as the next IEC President, beginning in 2017.

The IEC Masterplans have been the strategic roadmaps for the IEC for many years, and Masterplan 2011 has been no different. Among the initiatives associated with this particular plan is a focus on making the IEC the "home of industry," in response to industry's dwindling participation rates in Technical Committees. Additionally, the governance structure of the IEC's conformity assessment systems underwent significant modifications in the past few years, some of which were extremely controversial.

TOP L–R: PHIL PIQUEIRA WITH ANSI'S JOE BHATIA, AND WITH THE USNC'S JIM MATTHEWS (BELOW), AT THE IEC GM IN 2010.

Building on Our Success

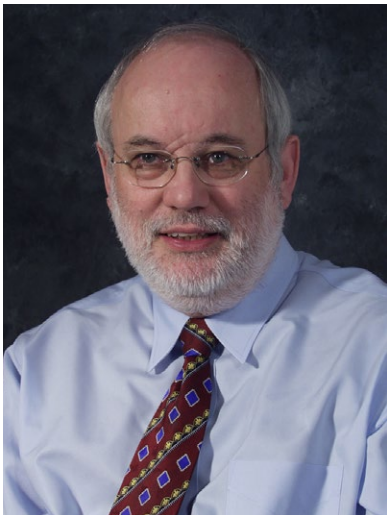
As we look to the future, there are a number of challenges facing the USNC. We need to continue to develop the "standards value equation." Industry needs to recognize that the value and benefits of participating in standards development far exceed the cost. We need to continue to attract and retain younger standards professionals by utilizing evolving technologies that appeal to millennials. Finally, we need to continue to evaluate our funding models so that the cost of participation is not an impediment to being active in the USNC. With all that being said, I am confident that the USNC will continue to grow in relevance within the international standards community and that the incoming USNC leadership team is more than up to the task of leading us through these challenges.

When I decided to run for the USNC Presidency in 2010, I had significant reservations about the time commitment and how to balance the workload with the demands of my "day job." As I look back, however, it has been one of the best career choices I have ever made. I have had the opportunity to meet and work with phenomenal people around the world. I especially want to thank Joe Bhatia and everyone at ANSI. They have been consummate professionals and a pleasure to work with. And most of all, I want to thank Tony Zertuche and the entire USNC/ANSI team (including Charlie Zegers) – they did all "heavy lifting" and were a joy to work with. I thank you and wish you all the very best.

Message to the Next Generation…from a "Jack of All Trades and Master of None"

By Alec McMillan, USNC Vice-President – Technical, 2010 – 2016

"You will one day learn to appreciate the past," my parents once told me, when I chided them for always seeming to be looking back and not seeing the potential of the future. My mathematics teacher, acting as a careers master, once asked me what I was going to do after school ended. My 17-year-old cheeky response was that I would become "a jack of all trades and master of none." Upon learning that I was going to pursue engineering at college (because I found the pure sciences of physics and chemistry too arduous, and further study in mathematics beyond me), he at least agreed with my academic self-assessment. But in his opinion I would not amount to much without a specific goal to aim for. Why engineering? That question why, which I had plagued teachers and parents with, was to become my guiding light.



ALEC MCMILLAN

Learning Objectives

It was not until I got to college that I started to answer that question and find that goal my teacher had told me was so essential. I was introduced to logic and digital technology and was assigned a tutor who had an early robotics laboratory, which piqued my interest. With the help of the tutor, I and another student persuaded the school to change the academic options in the final year of the course to accommodate a control system course with a digital light current course. Previous students had been forced to combine digital light current with telecommunications, or to combine control systems with heavy current applications, targeting careers in the telecommunications and power industries.

With the experience of a final year project addressing voice recognition, I knew that I wanted to continue to apply technology to solving problems. And thus I began a 49-year career in the field of industrial automation.

Career Cornerstones

My first 23 years were spent working in Europe as a systems development engineer, and I progressed from single machine tool controls, to computer numerical control, and then to direct numerical controls mainly applied in the discrete parts industries of automotive and aerospace. I also worked for a time on mainframe CAD systems, production scheduling systems, and the applications of microprocessor technology to solve applications for small to medium enterprises local to Heriot Watt University in Edinburgh. Experienced service and maintenance personnel, together with focused taskmasters in the form of production manager customers who wanted machines on line running with no downtime, were the best mentors and teachers you could wish for, as they provided that necessary practical expertise so essential in applying the technology to solving their problems. You should note that the standards I was using were a given, and rarely did I get to see how or where they were developed, except that there was normally a group of older engineers who took care of this work.

In 1985 I joined the Allen-Bradley company in the UK as a market development engineer, with a view to expanding my automation experience into other industries including food and beverage, paper products, and mining. Shortly after I joined the *(continued)*

Message to the Next Generation… *(continued)*

company it was acquired by Rockwell International, and I was tasked with focusing on the application of new communication and industrial computer technologies. I also spent a nine-month term managing a country sales and service subsidiary.

In the late eighties I began working with Rockwell's advanced technology group to provide European market requirements into their next-generation developments. I officially transferred to this department in 1990 to assist in development of new control and system architectures. It was through this work that my active participation in standards and regulation became a primary feature of my job, as the European Union announced and introduced their common approach to standards and conformity assessment that had to be met in order to enter their market.

A Changing Landscape

In my 26 years of active engagement in the United States within NEMA, ANSI, and USNC forums, I have witnessed and participated in global market growth and associated local regulations and regional trade agreements. I have seen a business focus develop in some major organizations to align standardization strategies with technology roadmaps and business strategies, and more recently, a focus on succession planning for standardization participants being promoted within IEC and national young professional programs.

Technologies continue to be developed, leading to new materials and processes and new and smarter control, sensors, and actuators. In particular, the expansion and proliferation of information technologies have enabled many products that previously were viewed as stand-alone equipment to now be interconnected in a systems world. I am fortunate to have been a champion for the introduction of processes and deliverables within the IEC to address such domains as smart energy, smart cities, and active assisted living. And I am serving as Co-convener of the Systems Evaluation Group (SEG) for smart manufacturing that is due to report to the Standardization Management Board (SMB) in 2017.

ALEC MCMILLAN (CENTER) RECEIVES ANSI'S FINEGAN STANDARDS MEDAL IN 2008 IN RECOGNITION OF LEADERSHIP IN THE DEVELOPMENT AND APPLICATION OF VOLUNTARY STANDARDS, WITH FORMER ANSI BOARD CHAIR BOB NOTH (LEFT) AND THE USNC'S JIM MATTHEWS (RIGHT).

These changes are not without their challenges. While our industries have evolved with the times – adopting industry consortia approaches for fast-moving technology standards development, and open source for even faster technology change – the infrastructures, processes, and business models of the formal national, regional, and international standards organizations have not changed as rapidly. The embedded technical committee silos are not readily adopting IT solutions that facilitate concurrent global development of specifications by experts that would speed up development and reduce costs of multiple face-to-face meetings.

Challenges and Opportunities

While the IEC and their partner standards developing organizations (SDOs) are focusing on the standards development necessary to facilitate implementation of smart systems, there is a need for the SDO community to look at their own internal development processes. SDOs need to leverage newer information technologies that would foster broader global participation, facilitate cooperative projects, and make it easier for the user community to navigate the systems to find the appropriate standards and technical committees addressing their interest area.

Manufacturers today still want the same maximum productivity for lowest cost, with appropriate risk mitigation to ensure quality products are delivered safely, as they did in the eighties. They also want to mitigate against security threats, and protect their systems from intrusion and data from corruption or theft. And there is also the opportunity to optimize their energy utilization – whether it's water, air, gas, electricity, or steam – and to decrease their environmental impact by reducing waste and toxic emissions and using new environmentally friendly materials.

A smart system will facilitate decision-making to balance *(continued)*

Message to the Next Generation… *(continued)*

> **LOOKING BACK AT HISTORY SURE ASSISTS IN REDUCING REPEATS OF PREVIOUS MISTAKES!**

these and other requirements in line with a particular company's business strategy. Smart decisions require that quality data is available for the key attributes that impact the decision. The challenge of smart systems is the availability of that data at the point of decision-making, whether it be made by man or machine, and the consequential ability of the complete system to manage the diverse elements of data that are needed throughout the enterprise.

Looking Back to See the Future

I am hopeful that these SDO challenges will be met in a collaborative environment where investment costs can be shared and standards and conformity assessment productivity can be improved among collaborating partners to meet industry needs. It would appear I have experienced many roles in manufacturing, and ultimately found my destiny in playing a leading role with many like-minded individuals in the world of standardization. The ride has been fun and the challenges exciting, and I owe much of my success to all those peers and customers who assisted in my training and skills development by continually answering my inevitable question… why? And, of course, I learned that looking back at history sure assists in reducing repeats of previous mistakes!

Sponsor the **USNC's Hosting** of the **IEC 2022 General Meeting** in the USA!

For only the seventh time since 1904, the United States is gearing up to host the IEC General Meeting, in October 2022. Organizations with a stake in all areas of electrotechnology are invited to demonstrate their commitment to international standardization and conformity assessment through sponsorship of the ten-day event.

For more information, see the attached Sponsorship Brochure at the end of this newsletter, or contact USNC/IEC Secretary General Tony Zertuche at tzertuche@ansi.org or 212-642-4892.

Managing Change in an Organization with History and Rich Traditions

By Jim Matthews, IEC Vice-President, and Chair, Standardization Management Board (SMB), 2011 – 2016

It has been a real pleasure to serve as the IEC Vice-President from 2011 through the end of this year. I have had the opportunity to work with people who are truly dedicated, hard-working, and enthusiastic about the work of the IEC and the impact it has across the electrotechnology sector.

All organizations, including the IEC, are faced with challenges every day from the markets they serve as well as from their internal stakeholders. How an organization reacts to those challenges will determine its long-term success, viability, and relevance. Officially established in 1906, the IEC has been vital to ensuring safety, efficiency, conformance, and interoperability in electrotechnologies for more than 100 years. As a global standards organization, its impact is felt across the world's markets.

Strategies for Success

As I became an IEC officer in 2011, it was at the beginning of the implementation of a new IEC Masterplan. The plan stressed the need to strengthen ties to industry and the markets we serve, examine new approaches to the technologies and the related complexity and convergence occurring rapidly, and develop tools and approaches to enhance the collaboration at a global level while also examining our governance and the effective use of our experts. As an organization, if we fail to react to the changes around us, we will become less relevant over time – or worse, fracture like a building in an earthquake that is too rigid and breaks.

The heart of IEC standardization work is the experts appointed by the National Committees and the Technical Committees (TCs) and Subcommittees (SCs) they work in. While there were some aspects that needed to be improved, we could not risk sacrificing the good with the bad, so, as always, change had to be constructive.

Optimizing Our Structure

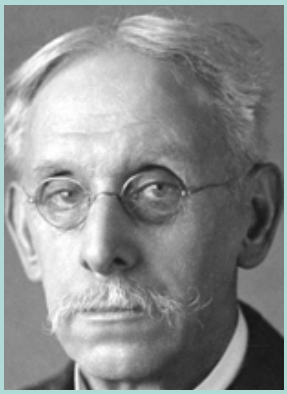
Many of our Technical Committees are high functioning, effective, and efficient, and serve the needs of their stakeholders well. They continue to adapt to market changes, bring in new people and projects, and evolve their structure and processes. These groups we have tried to celebrate and hold up as examples in presentations to the Standardization Management Board (SMB) and in our newsletters, and and we've tapped their leadership to serve on advisory or ad-hoc groups to share their experience.

JIM MATTHEWS

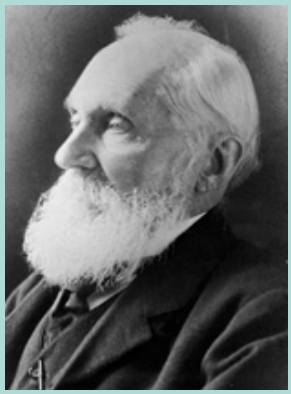
Unfortunately, there are other groups that have become no longer relevant, not adapted to market changes, and do not appear to even be productive in the work they do. The SMB established five metrics of performance to assess the activity level of TCs and SCs, and groups failing to meet any three of the five were subjected to closer examination. This process has resulted in the shutdown or merger of a number of committees with *(continued)*

A LOOK BACK: THE IEC'S EARLY LEADERS

Colonel R.E.B. Crompton
IEC General Secretary, 1904-06



The Rt. Hon. Lord Kelvin, UK
IEC President, 1906-08



Charles Le Maistre, France
IEC General Secretary, 1906-53

Dr. Elihu Thomson, U.S.
IEC President, 1908-11

Managing Change in an Organization with History and Rich Traditions *(continued)*

no experts, no projects, or no meetings in the last five years. It is really hard to close out standards groups, but it is also hard to defend the continued existence of a TC that has not met since 1998.

Promoting Progress

We also looked at the actual projects under development and quickly found that measuring "average time to publication" covered up a multitude of problems and opportunities for improvement. Some projects took a long time because the group decided to write a single standard that was over 500 pages instead of a series of smaller, more easily maintained subsections. Other groups were working meeting to meeting, and progress is slow if a group only meets once every 12 to 18 months. The SMB took a hard look at the aspects of project management and saw many opportunities for improvement.

An ad-hoc group made a series of recommendations embraced by the SMB and discussed at a joint Project Management Workshop with ISO in April 2016. It was stressed that TC/SC Officers, Convenors, and Project Leaders are responsible for managing the technical work, so we need more communication and training to support them – increasingly important as we shift from fixed "one-size-fits-all" project timing metrics to holding TC leadership accountable to a plan they select and develop.

Our current process spends a lot of scarce resources late in the project in editing drafts to the quality level we expect from IEC publications. And because of the voluntary nature of our experts, there has been a huge gap between experts and the professional editing staff of the IEC. But now, all TCs can clearly see the contact information for their Editor along with the Technical Officer on the IEC website. Future training will emphasize the need to communicate better and earlier with Editors to introduce better quality drafts at the proposal and Committee Draft (CD) stage, to minimize rework later in the process. As confirmed by the some of the best practices in the National Committees, this should improve the quality and speed of the end result.

JIM MATTHEWS AT THE 2010 IEC GENERAL MEETING IN SEATTLE.

The SMB has also shortened the time span for a number of steps in the traditional process. These include:

- **New Work Item:** 12 weeks, with the option of 4 week vote for outline only
- **CD:** 8, 12, or 16 weeks, as deemed appropriate by TC/SC Officers
- **Translation:** 8 weeks shortened to 6 weeks
- **Committee Draft for Vote (CDV):** 20 weeks shortened to 12 weeks
- **Translation for Final Draft International Standard (FDIS):** Originally shortened from 8 to 6 weeks, under discussion to possibly shorten to 0 weeks
- **FDIS:** 8 weeks shortened to 6 weeks, or optional if CDV approved and no technical changes made

The net effect is shortening the entire process by a quarter of a year, with even more gains possible.

All Systems Go

Perhaps the biggest change to occur in the IEC is the introduction of systems activities. Recognizing that the technical areas are both converging and becoming more complex, there are a number of areas where TCs cannot function alone. Many technology areas require interaction across several groups inside and outside of the IEC. For this reason we created two layers of systems-related activities and new structures to allow new approaches, use cases, and high-level connections between existing groups to emerge.

The Systems Evaluation Groups (SEGs) are a radically new idea for IEC as groups whose participation is completely open. As we saw in several areas including low-voltage direct current (LVDC), for example, these groups drew several hundred people and included many interested parties who were not traditionally involved in IEC work. This allowed us to connect new and emerging approaches to the more traditional ones and move the IEC forward.

As work is more formally defined, a Systems Committee (SyC) can be established, although some SEG work has gone to previously established SyCs, TCs, or Advisory Committees. The work of the SyCs is intended to bridge and complement the work of the TCs, and the groups should work together by consensus without one dominating the other. To aid our thinking and approach to the systems level, we created the Systems Resource Group (SRG) to provide tolls and best practices. *(continued)*

Managing Change in an Organization with History and Rich Traditions *(continued)*

Supporting Succession

At the 74th General Meeting in 2010, the IEC began a new activity known as the IEC Young Professionals (YPs). This highly successful effort continues to build year after year, bringing new faces and voices into the IEC. So far, a very high number of YPs continue their work in the IEC as Experts, Project Leaders, Officers, and more. But it also became apparent that there was a ceiling in their ability to move into the work of the IEC at the TC/SC levels. Many TC/SC Chairs had been in their position essentially for (their professional) life. And while we found that many continued to be dynamic, open, and active leaders, a number were not open to change or new ideas.

After extended discussions in the SMB and Council Board, it was agreed that we should phase in a term limit for a TC/SC Chair of no more than 9 years. This was probably one of the most controversial decisions I have been involved in as SMB Chair, but one I feel has the strongest positive impact on the IEC for the future. As a result of this decision, new leaders with new ideas and working approaches are coming into TC/SC leadership. Long-serving individuals are continuing to contribute to their TCs in other ways, and TCs and SCs are now seriously engaged in succession planning.

Advancing Communication

As a management body, the SMB itself has also evolved. SMB members were constantly asking for an opportunity to have more discussion of some issues with strategic impact, but a one-day meeting with a packed agenda made that difficult. The SMB Chair had traditionally invited a few selected members to discuss more contentious topics the day before the meeting as a Chair's Advisory Group. To increase communication, I was able to institute a Chair's Advisory Group that was open to all SMB members and alternates. As an informal meeting with no decision-making power, we found the freedom to more deeply discuss strategic issues in the level of depth and detail they deserved. We also found that through this process, the membership was able to build better trust and understanding of their colleagues and their own positions on complex issues.

I would probably be remiss if I did not address my own fondness for the use of ad-hoc groups in the work of the SMB. For many years I watched the SMB, Conformity Assessment Board (CAB), and other groups struggle with issues that could not be easily solved in a 15- or 30-minute time slot on a meeting agenda, and as a consequence the matter would bounce from meeting to meeting. What was often needed was an opportunity outside of the meeting to thresh out potential solutions, identify the issues with those approaches, and then present a clear set of options to the management body for voting and decision. By creating an ad-hoc group, ownership for developing a clear picture was established, deadlines were set, and responsible people empowered to have important discussions. This approach has served to stop the bounce of issues from meeting to meeting, enabled some SMB members and countries to gain a voice and leadership experience, and helped the SMB to make better decisions.

Changing of the Guard

My term as IEC Vice-President and Chair of the SMB is ending this year, and Dr. Ralph Sporer of Germany has been elected to take office in January 2017. I hope that the USNC and the greater IEC community will work with Dr. Sporer and give him the same support, engagement, and dedication that I have had the privilege to enjoy over the past six years.

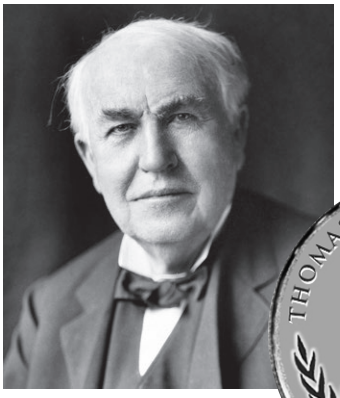
And finally, I want to again express my gratitude to the members and alternates of the IEC SMB, the IEC Central Office Staff (especially Jack Sheldon and Joyce Bleeker), and the team of the U.S. National Committee of the IEC for all their help and support.

LAUGH TRACK

© Mike Baldwin / Cornered

"Some days I think of retiring. But at my age, I'm not sure I'm up to it."

USNC Congratulates 2016 IEC Thomas A. Edison Award Recipients



> **"GENIUS IS ONE PERCENT INSPIRATION, NINETY-NINE PERCENT PERSPIRATION."**
>
> – THOMAS ALVA EDISON

At the IEC 80th General Meeting in Frankfurt, the IEC paid tribute to the dedication and work of eight leaders of the IEC family who, through their outstanding commitment and expertise, have contributed to making products and electrical systems safer, more energy efficient, and more compatible.

Among the honorees is the USNC's Geoffrey S. Ibbott, former Chair of IEC Subcommittee (SC) 62C, *Equipment for radiotherapy, nuclear medicine and radiation dosimetry*. Mr. Ibbott was recognized for his work promoting the development and recognition of IEC standards for medical radiation therapy equipment, nuclear medicine, and radiation measurement. About 20 IEC publications have been issued under his leadership and have been widely accepted in the regulatory environments of the United States, the European Union, China, Japan, and other jurisdictions.

The following is the full list of international experts recognized with the 2016 Thomas A. Edison Award:

Robert Arsenault, Canada; Secretary, IEC Technical Committee (TC) 4
Giovanni Cassinelli, Italy; Secretary, IEC SC 23E
Marie-Elisabeth d'Ornano, France; Chair, IECQ
Geoffrey S. Ibbott, United States; Past Chair, IEC SC 62C
Yoshiaki Ichikawa, Japan; Chair, IEC TC 111
Maurice Montavon, Switzerland; Secretary, IEC TC 5
Heribert Schorn, Germany; IEC Coordinator, ISO CASCO Working Groups
Bernd Sisolefsky, Germany; Past Chair, CISPR CIS/B

The award recognizes exceptional achievements of IEC TC/SC and Conformity Assessment officers. It honors the spirit of Thomas Alva Edison, one of the greatest inventors in history. Mr. Edison developed a system of electric power generation and distribution which was a major development in the modern industrialized world. His over 1,000 patents included improving the incandescent lamp, film projection, and sound recording, which still have an impact on our daily lives.

For more information, visit www.iec.ch/about/awards.

DOCUMENTS OF INTEREST

Stay up on the latest policies, documents, and other resources from the USNC, IEC, and ANSI.

- **Global Energy Interconnection**
  http://www.iec.ch/whitepaper/pdf/iecWP-globalenergyinterconnection.pdf
- **IoT 2020: Smart and Secure IoT Platform**
  http://www.iec.ch/whitepaper/pdf/iecWP-IoT2020-LR.pdf
- **ANSI Conference on the Next Generation in Standardization Unites Companies, Educators, and Emerging Professionals**
  https://www.ansi.org/news_publications/news_story.aspx?menuid=7&articleid=d726c56e-fe93-47c2-9203-aa3af544efe2

Harmonized Certification for the Wind Industry

Adapted with permission from IEC *e-tech*

IECRE (IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications) certificates are valued in many of the world's largest wind power markets, including China, Germany and other European countries, the United States, and elsewhere. "The IECRE system for certifying wind turbines harmonizes the process and makes it less costly, so that one certificate is valid for multiple markets," said Kerry McManama, Executive Secretary of the IECRE Conformity Assessment System. "It's what the whole wind community has been waiting for. Based on mutual recognition, all stakeholders will have confidence and trust that devices are built to International Standards and perform as promised."

DEVELOPED BY INDUSTRY PLAYERS, INCLUDING EQUIPMENT MANUFACTURERS, POWER PRODUCERS, INSURANCE COMPANIES, TEST LABORATORIES, AND CERTIFYING BODIES, THE IECRE SYSTEM FOR CERTIFYING WIND TURBINES STREAMLINES A COMPLEX PROCESS AND BENEFITS NOT ONLY WIND BUT OTHER RENEWABLE ENERGY INDUSTRIES SUCH AS SOLAR AND MARINE.

Simplifying a Complex Process

Previously, wind turbines had to be certified in each country by private certification bodies according to different criteria. This was more costly, time consuming, and required repeat testing. It also took much longer to get products to market. The IECRE system provides a common language for a very technical product, which gives greater clarity to standards developers, product manufacturers, authorities, and users as to what is being certified. IECRE also enables broader industry stakeholder participation in defining the certification process, which assures the certificates will meet the needs of the broader industry.

The first certificate was issued to Vestas, a wind power solutions company that designs, manufactures, installs, and services wind turbines around the world. "What is unique about the IECRE System is that end users – mainly our customers, together with equipment manufacturers and other stakeholders – have substantially contributed to defining the new standards against which wind turbines are evaluated," said Vestas chief technology officer Anders Vedel. "Vestas began work in 2012 with other stakeholder to create such a system, so we are especially pleased that the first certificate has been issued for a Vestas turbine."

From the certification body testing lab perspective, DNV GL, one of the first approved renewable energy certification bodies (RECBs), was instrumental in the development of the IECRE and was the certification body that issued the first IECRE certificate to Vestas.

About the IECRE

IECRE was created in response to the rapid development and growth of the renewable energy (RE) sector due to the ever-increasing demand for electricity and the need to reduce the share of fossil fuels in power generation. The system aims to facilitate international trade in equipment and services for use in RE in the solar photovoltaic (PV), wind, and marine energy sectors while maintaining the required level of safety. Each of these sectors will be able to operate IECRE schemes that cover products, services, and personnel to provide testing, inspection, and certification.

While the IECRE currently focuses on solar, wind, and marine energy, the door remains open for consideration of other technologies such as concentrated solar power (CSP), geothermal energy, and fuel cells.

ANSI–Pacific Accreditation Cooperation (PAC) Workshop Provides Stakeholder Insights and Overview of ISO/IEC 17065

The American National Standards Institute (ANSI), signatory to the Pacific Accreditation Cooperation (PAC), hosted a two-day workshop in Gaithersburg, Maryland, in October with industry and government presentations on ISO/IEC 17065, *Conformity assessment - Requirements for bodies certifying products, processes and services*. Attendees included 21 international participants from PAC member accreditation bodies. PAC is an association of accreditation bodies whose objective is the creation of a system granting international recognition of conformity assessment certifications in the Pacific region.

The workshop provided a section-by-section breakdown of ISO/IEC 17065, and presentations were complemented with exercises that tested the specific clauses highlighted by speakers. Presenters dedicated time differentiating between third-party processes in relation to a regulatory body versus a certification body and their roles in voluntary consensus standards. Presentations also focused on deconstruction of organizational structures to identify legal entities within a certification body. Attendees took part in a case study exercise to highlight the roles of a certification body and a scheme owner in terms of a certification scheme. Stakeholders gathered suggestions to be brought up to the PAC Working Group on Product for consideration to improve product certification process related to ISO/IEC 17065.

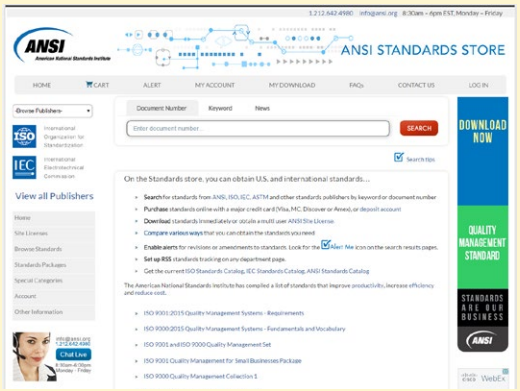
Presenters included Eamon Monahan of the U.S. Environmental Protection Agency (EPA), who provided an overview on the implementation of ISO/IEC 17065 to the EPA ENERGYSTAR certification program. William Hurst of the Federal Communications Commission (FCC) provided a presentation on experience with the application of ISO/IEC 17065 for telecommunication certification bodies in the FCC certification program. Industry stakeholder speakers included Patricia Gleason of the Safety Equipment Institute, who provided details on understanding third-party certification transitioning from Guide 65 to ISO/IEC 17065. And Keith Mowry of UL provided information related to implementation of ISO/IEC 17065 on a large certification process with a complex organizational structure.

ANSI Standards Store and Site License Purchases Support USNC

As a USNC member, you gain added benefits from dollars spent by purchasing IEC standards directly from ANSI. Revenue from standards and Site Licenses purchased via webstore.ansi.org supports the activities and initiatives of the USNC.

The USNC is a totally integrated committee of ANSI. As such, ANSI provides administrative support to the USNC and its nearly 1,500 participants. ANSI also provides the fiduciary framework by which the USNC's financial obligations are met, including the payment of annual dues to IEC.

When you purchase IEC standards from ANSI, you are making a commitment to bolster U.S. leadership at the IEC table. And purchasing standards directly from ANSI's webstore offers the additional benefits of cost savings for ANSI members, personal service, and the convenience of one-stop shopping for more than 230,000 standards available for immediate download.



The ANSI webstore is mobile-friendly and offers a vast catalog of IEC as well as U.S. and other national, regional, and international standards from over 120 publishers. And the webstore's Site License option is a powerful standards management solution that simplifies searching, monitoring, collaborating on, purchasing, and accessing standards.

The site also allows you to browse cost-effective standards packages, and search through a multitude of special categories, including energy, workplace safety, manufacturing and production, product design, electronics, automotive and aerospace, and more.

Visit webstore.ansi.org.

ABOUT THIS PUBLICATION
The USNC Current newsletter is distributed to the constituency of the U.S. National Committee (USNC) of the International Electrotechnical Commission (IEC). It provides updates on technical activities and other information of interest to members of the electrotechnical community. Some articles are reprinted with permission from the IEC News log.

HOW TO CONTRIBUTE
Contributions are gladly accepted for review and possible publication, subject to revision by the editors. Submit proposed news items to: Tony Zertuche, USNC/IEC General Secretary, ANSI
212.642.4892
tzertuche@ansi.org

Published in ANSI's NYC Office
25 West 43rd Street
Fourth Floor
New York, NY 10036
www.ansi.org

Mark Your Calendar for Upcoming Meetings & Events

2017

24 – 26 January
Tuesday – Thursday
CAPCC/TMC/Council Meetings
UL Offices, Freemont, CA

5 June
Monday
TAG Leadership Workshop
Eaton Offices, Pittsburgh, PA

6 – 8 June
Tuesday – Thursday
CAPCC/TMC/Council Meetings
Eaton Offices, Pittsburgh, PA

12 – 14 September
Tuesday – Thursday
CAPCC/TMC/Council Meetings
Corning Offices, Corning, NY

9 – 13 October
Monday – Friday
81st IEC General Meeting
Vladivostok, Russia
Monday 9: SMB/CAB
Wednesday 11: CB
Friday 13: Council

2022

October
86th IEC General Meeting
USA

For additional event info, visit www.ansi.org/calendar and search for "USNC" or "IEC."

UPCOMING ISSUES OF THE *USNC CURRENT*

www.ansi.org/usnc

Q IV IECRE & Renewable Energies

IEC 2022

HOSTED IN THE USA BY THE U.S. NATIONAL COMMITTEE

SPONSORSHIP OPPORTUNITIES

2022 General Meeting of the International Electrotechnical Commission

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes international standards for electrical, electronic, and related technologies. Founded in 1906 with British scientist Lord Kelvin as its first president, the IEC has played a vital role in the advancement of electrotechnologies for more than 100 years. IEC standards serve as a basis for national standardization and as references when drafting international contracts.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Through its national members — including the world's major trading nations and a growing number of newly industrializing countries — the IEC promotes global cooperation on questions of electrotechnical standardization and the assessment of conformity to standards in the fields of electricity, electronics, and related technologies.

IEC's international standards facilitate world trade by removing technical barriers to trade, leading to new markets and economic growth. Its work embraces all electrotechnologies including electronics, magnetics and electromagnetics, electroacoustics, multimedia, telecommunication, and energy production and distribution, as well as associated general disciplines such as terminology and symbols, electromagnetic compatibility, measurement and performance, dependability, design and development, safety, accessibility, and the environment.

United States National Committee of the IEC

FOR ONLY THE SEVENTH TIME SINCE 1904, THE UNITED STATES IS GEARING UP TO HOST THE IEC GENERAL MEETING IN OCTOBER 2022. MORE THAN 1,500 DELEGATES, ELECTROTECHNOLOGY AND STANDARDIZATION EXPERTS, AND ACCOMPANYING PERSONS FROM AROUND THE GLOBE ARE EXPECTED TO ATTEND.

ORGANIZATIONS WITH A STAKE IN ALL AREAS OF ELECTROTECHNOLOGY ARE INVITED TO DEMONSTRATE THEIR COMMITMENT TO INTERNATIONAL STANDARDIZATION AND CONFORMITY ASSESSMENT THROUGH SPONSORSHIP OF THE TEN-DAY EVENT.

WHY THE UNITED STATES IS HOSTING IEC 2022

- To reaffirm U.S. commitment to international standardization and demonstrate U.S. leadership in the electrotechnical sector markets of the world.
- To raise the level of understanding within U.S. industry and governmental agencies of the impact and importance of conformity assessment activities.
- To facilitate U.S. participation by reducing travel costs by having the IEC General Meeting and its related management and technical meetings within the United States.
- To create opportunities for U.S. businesses and industry to participate in establishing industry standards that lead to greater global market access.
- To help the U.S. electrotechnical industry compete in the global marketplace through participation and use of an open, balanced, and transparent standards development process.
- To demonstrate the USNC's leadership position in the management structure of the IEC at all levels.
- To provide evidence to the world market that the IEC international standardization activities are significant components of U.S. electrotechnical standardization activities.

SPONSORSHIP OPPORTUNITIES

DIAMOND SPONSOR — $100,000 contribution

- Recognition and speaking opportunities at opening and closing sessions
- Sponsorship of specific meeting events and activities
- Invitation to attend the President's and Secretaries' dinner, the Council luncheon and the Host Committee's reception for IEC Officers and staff
- Participation in General Meeting press conference and inclusion of company logo on event press releases
- Tabletop or sponsor promenade at registration and Internet Café
- Prominent on-site exposure via logos, banners and signage
- Distribution of company logo conference souvenir
- Inclusion of gifts and printed materials in attendee welcome kits
- Inclusion of corporate logo and link on meeting website
- Use of IEC 2022 meeting logo on "Official Sponsor" letterhead
- Plaque for recognition as Diamond sponsor

PLATINUM SPONSOR — $50,000 contribution

- Recognition at opening and closing sessions
- Sponsorship of specific meeting events and activities
- Invitation to attend the President's and Secretaries' dinner and Council luncheon
- Participation in General Meeting press conference and inclusion of company logo on event press releases
- Tabletop or sponsor promenade at registration and Internet Café
- Prominent on-site exposure via logos, banners and signage
- Distribution of company logo conference souvenir
- Inclusion of gifts and printed materials in attendee welcome kits
- Inclusion of corporate logo and link on meeting website
- Use of IEC 2022 meeting logo on "Official Sponsor" letterhead
- Plaque for recognition as Platinum sponsor

GOLD SPONSOR — $25,000 contribution

- Recognition at opening and closing sessions
- Sponsorship of specific meeting events and activities

GOLD SPONSOR (continued)

- Invitation to attend the President's and Secretaries' dinner and Council luncheon
- Inclusion of company logo on event press releases
- Tabletop or sponsor promenade at registration and Internet Café
- Prominent on-site exposure via logos, banners and signage
- Inclusion of gifts and printed materials in attendee welcome kits
- Inclusion of corporate logo and link on meeting website
- Use of IEC 2022 meeting logo on "Official Sponsor" letterhead
- Plaque for recognition as Gold sponsor

SILVER SPONSOR — $15,000 contribution

- Recognition at opening and closing sessions
- Sponsorship of specific meeting events and activities
- Invitation to attend the Council luncheon
- Inclusion of printed materials in attendee welcome kits
- Inclusion of corporate logo and link on meeting website
- Use of IEC 2022 meeting logo on "Official Sponsor" letterhead
- Prominent on-site exposure via logos, banners and signage
- Plaque for recognition as Silver sponsor

BRONZE SPONSOR — $10,000 contribution

- Recognition at opening and closing sessions
- Prominent on-site exposure via logos, banners and signage
- Inclusion of printed materials in attendee welcome kits
- Inclusion of corporate logo and link on meeting website
- Use of IEC 2022 meeting logo on "Official Sponsor" letterhead
- Plaque for recognition as Bronze sponsor

GENERAL SPONSOR — $5,000 contribution

- Recognition at opening and closing sessions
- Prominent on-site exposure via logos, banners and signage
- Inclusion of corporate logo and link on meeting website
- Use of IEC 2022 meeting logo on "Official Sponsor" letterhead
- Plaque for recognition as General sponsor

Size, prominence, and placement of logos will be a function of sponsorship level. All gift items and materials for delegates will require approval of the USNC 2022 Steering Committee.

SPONSORSHIP COMMITMENT

Sponsor:

Point of Contact:

Title:

Address:

City:

State: Zip:

E-mail:

Phone:

Fax:

SPONSOR COMMITMENT: $

☐ Please bill us immediately.

☐ Please contact us to discuss a customized payment schedule.

Note: Multiple-year payment plans are possible and should be considered.

SPONSOR LEVEL*	ONE-TIME PAYMENT
☐ DIAMOND SPONSOR	$ 100,000
☐ PLATINUM SPONSOR	50,000
☐ GOLD SPONSOR	25,000
☐ SILVER SPONSOR	15,000
☐ BRONZE SPONSOR	10,000
☐ GENERAL SPONSOR	5,000

*All sponsorships are tax deductible under the fullest extent of the law.

PLEASE COMPLETE AND RETURN TO

IEC 2022 Sponsorship Coordinator
c/o American National Standards Institute
25 W 43rd St, Fourth Floor
New York, NY 10036

E: tzertuche@ansi.org
T: 212.642.4892
F: 212.398.0023

If responding via e-mail, please be certain to provide all requested information.

All contributions will support the U.S. National Committee of the IEC and its hosting of IEC 2022 in the United States, and other international IEC policy, management, and technical meetings, as appropriate.

SPONSORSHIP OF SPECIFIC EVENTS/MEETINGS

- Silver, Gold, Platinum, and Diamond Sponsors have the option of sponsoring specific events (e.g., coffee breaks, receptions, luncheons, dinners, business center, IT and/or audio visual equipment, delegate welcome kits, etc.).
- It is also customary for IEC General Meetings to host several industry-related Technical Committee (TC) and Subcommittee (SC) meetings. Pending sponsor support, approximately 60 IEC TCs and SCs are expected to be invited to the IEC 2022 event. Sponsorship of these individual meetings is possible as well.

FOR ADDITIONAL INFORMATION

Contact the IEC 2022 Sponsorship Team

Tony Zertuche

T: 212.642.4892
F: 212.398.0023
E: tzertuche@ansi.org

www.ansi.org/usnc

United States National Committee of the IEC

IEC 2022 Sponsorship Coordinator
c/o American National Standards Institute
25 West 43rd Street, Fourth Floor
New York, NY 10036
T: 212.642.4892
F: 212.398.0023
E: tzertuche@ansi.org

IEC 2022: USA

THE IEC GENERAL MEETING, HOSTED ANNUALLY BY A DIFFERENT IEC MEMBER NATION, BRINGS TOGETHER INTERNATIONAL STAKEHOLDERS FOR DISCUSSION OF CURRENT ISSUES AND FUTURE DIRECTIONS AND STRATEGIES FOR THE IEC. THE GENERAL MEETING HAS A UNIQUE FORMAT, COMBINING MANAGEMENT AND TECHNICAL MEETINGS, AND BRINGING ALL THE KEY PLAYERS TOGETHER ON ONE STAGE.