USNC CURRENT

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FOCUS ON: YOUR USNC!

For this issue the USNC's Communication and Continuing Education Committee has chosen to highlight the ways in which the USNC serves its contituents. The USNC is nothing without the expertise and dedicated engagement of its members, so the Committee wants every member to know how it continually strives to fill its role as **YOUR** USNC.

YOUR USNC! The Who, What, When, Why, and How of USNC Operations

The U.S. National Committee of the International Electrotechnical Commission (USNC/IEC) serves as the focal point for U.S. parties who are interested in the development, promulgation, and use of globally relevant standards for the electrotechnical industry. The Committee is also engaged in the assessment of conformance to standards, undertaking work in areas such as testing, certification, and accreditation.

As the United States' representative to the IEC and many related regional standardization bodies, the USNC/IEC serves as a conduit to the global standards-setting community for technical and policy positions arising in the U.S., and brings issues from the global arena to the U.S. for review, consideration, and response.

The USNC/IEC is an integrated committee of the American National Standards Institute (ANSI). The Institute provides administrative support to the USNC and our over 2,000 U.S. managerial, engineering, scientific, and professional participants. ANSI also provides the fiduciary framework by which the USNC's financial obligations are met, including the payment of annual dues to the IEC.

For over 100 years, the U.S. National Committee of the IEC has worked tirelessly to leverage U.S. industry's positions internationally, increase global influence, provide oversight and direct input on IEC policy and technical issues, and offer unlimited networking opportunities with international stakeholders.

Mission

The USNC mission is to provide strategy to effectively participate in the development of IEC standards to facilitate international trade for the benefit of U.S. industry in the fields of all electrotechnologies, and to provide a framework to the U.S. industry which serves as the focal point, conduit, and advocate for U.S. interests in international and regional electrotechnical standards, conformity assessment, and other related matters.

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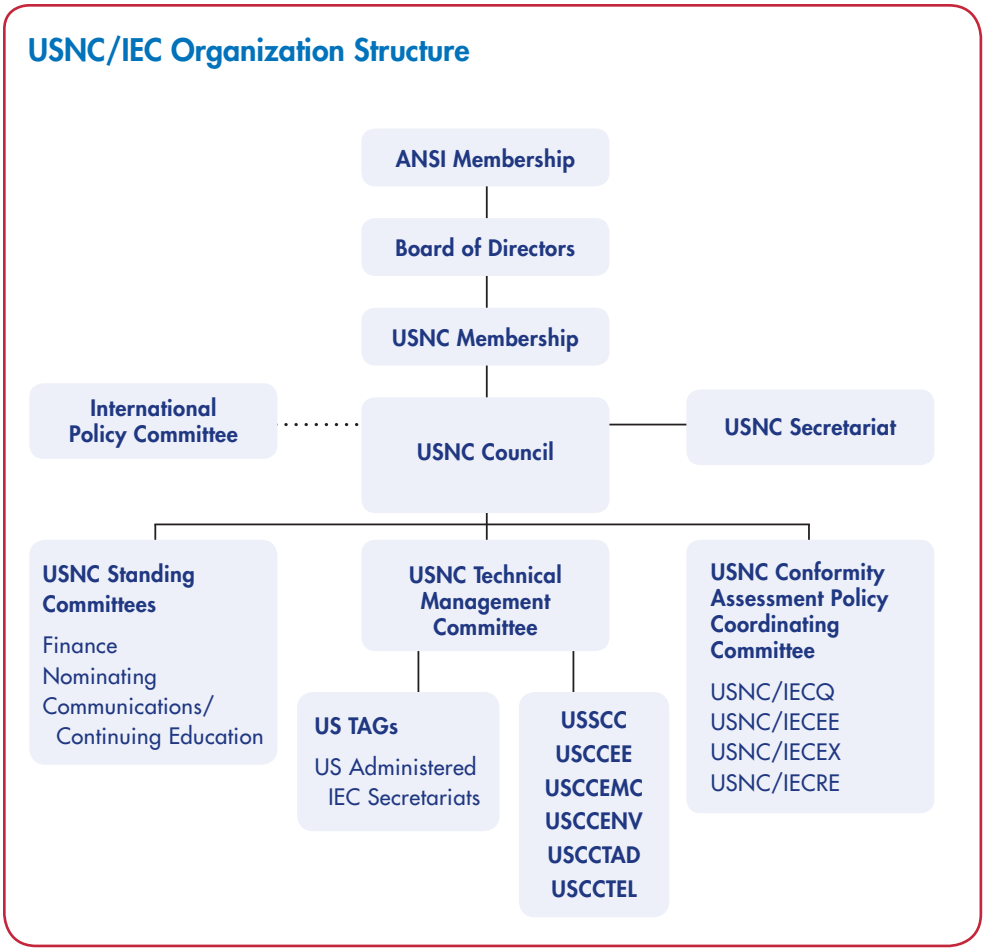
IEC symbols for electrical current: ALTERNATING CURRENT (AC) DIRECT CURRENT (DC) AC/DC

The Who, What, When, Why, and How of USNC Operations *(continued)*

USNC/IEC Organization Structure



USNC Governance and Position Development

The work of the USNC Council and its management committees offers various stakeholders the ability to become involved in shaping the conversation and strategic direction for standards and conformity assessment activities of the IEC.

Policy

Responsibility for management of policy and strategic issues of the USNC/IEC lies with the USNC Council, a group that also works to improve the overall effectiveness of the U.S. interface with IEC, its national committees, and the related regional standardization bodies.

Technical

The USNC Technical Management Committee (TMC) manages the technical work of the USNC and represents the interests of the U.S. at the Standardization Management Board (SMB). U.S. positions on technical (and certain policy) issues under consideration within the IEC technical committee structure are developed by USNC-approved mirror committees called Technical Advisory Groups (TAGs).

The USNC operates one TAG for each IEC Technical Committee, Subcommittee, or, now, Systems Committee on which the USNC is a "Participating" (P) Member. TAGs also nominate the experts who represent the United States in technical committee discussions at IEC meetings. The USNC participates in almost the entire technical program of the IEC, and administers many key committees and subgroups.

The TMC has also established Coordinating Committees that mirror the terms of reference of the IEC Advisory Committees. The role of SMB Advisory Committees is to advise, guide and coordinate IEC technical work, under the auspices of the SMB in their respective areas *(see chart below)*. *(continued)*

IEC Advisory Committee	USNC Coordinating Committee
ACOS (safety)	USSCC-U.S. Safety Coordinating Committee Chair: Larry Farr
ACEA (environmental aspects)	USCCENV-USNC/IEC Coordinating Committee on Natural Environmental Aspects Chair: Dan Manole, Rockwell Automation
ACEC (electromagnetic compatibility)	USCCEMC-U.S. Coordinating Committee on Electromagnetic Compatibility Chair: Donald N. Heirman, Don HEIRMAN Consultants
ACEE (energy efficiency)	USSCC-U.S. Coordinating Committee on Energy Efficiency Chair: Dan Manole, Rockwell Automation
ACSEC (security)	USCCENV-USNC/IEC Coordinating Committee on Security Chair: Brian Fitzgerald, FDA

The Who, What, When, Why, and How of USNC Operations *(continued)*

Conformity Assessment

The Conformity Assessment Policy Coordination Committee (CAPCC) has the responsibility to ensure that when issues are identified, USNC consensus positions are developed and represented in appropriate national, regional, and international conformity assessment groups, specifically in the IEC Conformity Assessment Board (CAB).

While the work of the CAPCC is primarily focused on the conformity assessment activities of the IEC, it offers a wider opportunity to discuss the broader conformity assessment needs of the marketplace throughout the world. CAPCC members discuss and track emerging regulatory actions, prioritize resources, and discuss potential conformity assessment solutions based on market needs. The USNC CAPCC serves as the mirror committee to the IEC Conformity Assessment Board (CAB), overseeing and reviewing the work of the IEC conformity assessment services (IECEE, IECEx, IECRE, and IECQ) allowing CAPCC members to understand the conformity assessment solutions being offered by the IEC to assist them in meeting the conformity assessment requirements around the globe.

The CAPCC oversees:

- USNC/IEC System Conformity Testing to Standards for Safety of Electrical Equipment (USNC/IECEE)
- USNC/IEC System for Quality Assessment of Electronic Components and Associated Materials and Processes (USNC/IECQ)
- USNC/IEC System for Certification to Standards for Safety of Electrical Equipment for Explosive Atmospheres (USNC/IECEx)
- USNC/IEC System for Certification to Standards relating to Equipment for use in Renewable Energy Applications (USNC/IECRE)

ANSI Standards Sales Support USNC Activities

webstore.ansi.org

USNC members get the greatest value from dollars spent if they purchase IEC standards directly from the American National Standards Institute (ANSI). Revenue from ANSI's webstore directly supports the activities and initiatives of the USNC, from workshops for U.S. Technical Advisory Group (TAG) Administrators to this latest issue of the *Current* newsletter.

The USNC/IEC is a totally integrated committee of ANSI, a non-profit organization. When you purchase standards from ANSI, you are making a commitment to bolster U.S. leadership at the IEC table – and gaining the additional benefits of cost savings for ANSI members, the option of custom site license packages, and the convenience of one-stop shopping for more than 240,000 standards available for immediate download.

More Information

Visit webstore.ansi.org or email sitelicenses@ansi.org.

DOCUMENTS OF INTEREST

The **USNC Online Toolbox** is a one-stop resource where USNC constituents will find a compilation of the key documents and forms that facilitate their work:

- USNC Reference Documents
- IEC Reference Documents
- Education Resources
- Staff Contacts

Suggestions of additional documents to be incuded can be sent to Tony Zertuche at tzertuche@ansi.org.

The Who, What, When, Why, and How of USNC Operations *(continued)*

OFFICERS' CORNER

President
Philip M. Piqueira, UL

Vice-President – Technical
Alec McMillan,
Rockwell Automation

Vice-President – Membership and Development Recruitment
Kevin Lippert,
Eaton Corporation

Vice-President – Finance
Robert A. Williams, UL

Vice-President - Electrotechnical Conformity Assessment
Timothy Duffy,
Rockwell Automation

Past-President
James E. Matthews, III,
Corning Incorporated

General Secretary
Charles T. Zegers,
ANSI

USNC/IEC Officers

"The USNC is the United States member of the International Electrical Commission and, as such, provides its members the unique opportunity to influence the strategic direction of standards and conformity assessment issues which are critical to the growth of both U.S. industry and the U.S. economy.

"The USNC Council serves as the Board of Directors for the USNC and provides leadership to the representatives of industry, academia, government, consumers, and associations – all of which comprise the broad range of U.S. stakeholders involved in the development of international standards. The USNC Council provides leadership to nearly 150 technical committees and, consequently, its members influence critical areas such as smart grid, electric vehicles, renewable energy technologies, and energy efficiency. The USNC is the preeminent member of the IEC. Participation in the USNC Council will ensure that the United States will maintain its significance in the development of international standards."

– Phil Piqueira, USNC President

"As manager of Eaton's codes and standards, I'm proud to be part of a company that recognizes the value of standardization! Standards involvement is directly related to business opportunities, applicable to both domestic and international standards and business. Standards promote interoperability, with harmonized standards providing global opportunities. Early involvement, and the ability to influence standards requirements, presents advantages over those not involved, who must then ultimately "react" to new requirements. No single company can go it alone in these efforts, but collective cooperation in organizations such as the USNC results in innovative products that compete in the marketplace to meet and exceed customer needs."

– Kevin Lippert, USNC Vice-President – Membership and Development Recruitment

"As an added value, USNC members gain knowledge of the IEC Conformity Assessment Systems, its market offerings, and participation opportunities. The wide stakeholder involvement in the USNC Council and CAPCC offers members the benefit of seeing the challenges and market solutions from various industries and regulatory agencies."

– Tim Duffy, USNC Vice-President - Electrotechnical Conformity Assessment

The Who, What, When, Why, and How of USNC Operations *(continued)*

USNC Secretariat Staff

General Secretary – Charlie Zegers
35 years at ANSI *(photo, page 4)*

ANSI provides the staff support for the USNC via the General Secretary who is nominated by the ANSI President and, if the USNC President concurs, approved by the USNC Council. As the principal ANSI staff person providing support to the USNC, the General Secretary also participates directly in USNC management committee meetings as an ex officio member, without vote.

Responsibilities:

- The General Secretary serves as the USNC point of contact on all administrative matters and the backup point of contact for the USNC President.
- Ensures the provision of administrative support, including preparation of the minutes of meetings, to the USNC management committees.
- Ensures the availability and control of IEC documents to the relevant USNC participants and the processing of ballots and other communications from the USNC to the IEC.
- Ensures the collection and disbursement of funds according to the USNC budget.
- Alerts the appropriate USNC management committee(s) to any unexpected events or issues that might affect their work.
- Manages assigned USNC staff.

Deputy General Secretary – Tony Zertuche
8 Years at ANSI

The Deputy General Secretary provides overall staff administrative support for the technical work of the USNC, including the USNC Technical Management Committee (TMC) and its standing committees and task forces. This includes development and implementation of USNC and ANSI positions in relation to IEC technical work, and representation of the interests of the U.S. voluntary standardization community as Alternate Representative on the IEC Standardization Management Board (SMB).

Responsibilities:

- Assists the Vice President – Technical in his/her duties as Chair of the USNC TMC, including facilitation of all TMC meetings.
- Provides primary staff responsibility for the USNC Communications and Continuing Education Committee (C&CE); serves as editor for the USNC quarterly newsletter, *USNC Current*.
- Serves as the secondary USNC point of contact on all administrative matters and backup point of contact for the USNC General Secretary.

USNC/IEC Department Supervisor – Kevin Sullivan
20 years at ANSI

Oversees the daily work of the USNC coordinators to ensure the department is following procedure while providing accurate and timely information to the constituency.

Responsibilities:

- The Department Supervisor is responsible for administration of the USNC funding program in cooperation with the ANSI accounting, IT, and membership departments.
- Maintains USNC Technical Advisory Group (TAG) rosters.
- Makes available published IEC Standards to authorized users.
- Manages distribution of IEC documents and subscriptions to NewDocs and/or MyDocs. *(continued)*

The Who, What, When, Why, and How of USNC Operations *(continued)*

IEC Voting Coordinator – Mary Johnson
29 years at ANSI

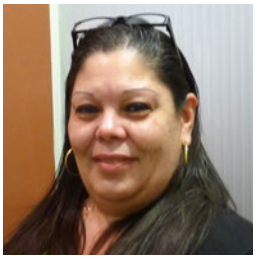
Responsibilities:

- The Voting Coordinator processes submission of votes/comments to the USNC Office (including use of official comment template and USNC Box).
- Assigns usernames and passwords to USNC constituents.
- Distributes advisory and management committee documentation.

USNC/IEC Meeting Coordinator – Debra "Debbie" Negron
28 Years at ANSI

Responsibilities:

- The Meeting Coordinator downloads administrative circular announcements for Technical Committee/Subcommittee (TC/SC) meeting registration and circulates to TAG Leadership.
- Coordinates with TAG Leadership on obtaining TC/SC meeting approvals and venues for meetings to be held in the United States.
- Uploads TC/SC meeting venues for meetings held in the U.S. in the IEC meeting registration system (MRS).
- Approves U.S. delegation via IEC MRS, and accredits delegation to all TC/SC meetings.



USNC/IEC Experts Coordinator – Elizabeth "Lisa" Pomales
23 Years at ANSI

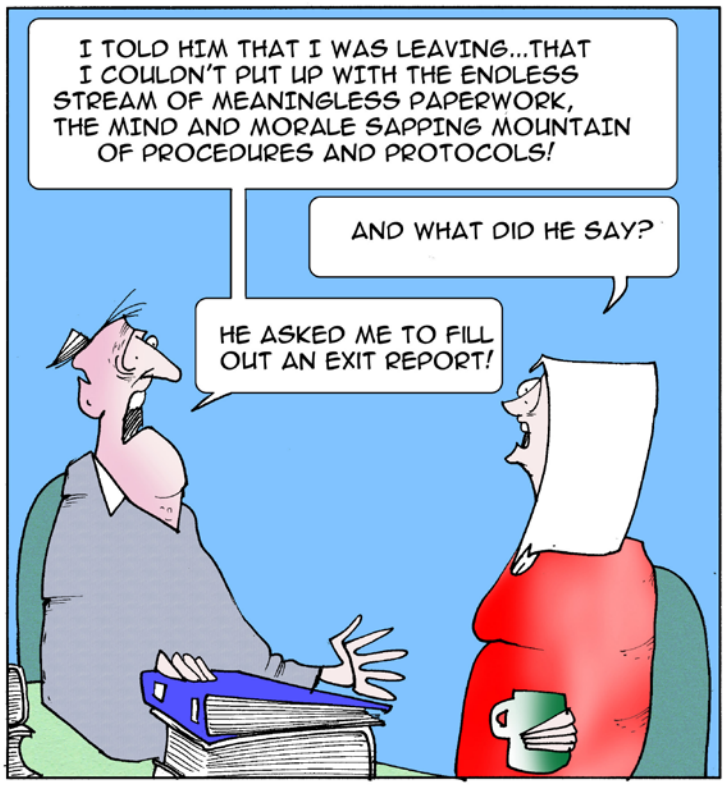
Responsibilities:

- Officially appoints USNC Experts to IEC Working Groups (WGs), Maintenance Teams (MTs), Project Teams (PTs), etc., through the expert management system (EMS).
- Maintains and updates USNC TAG rosters and appoints new TAG members.
- Assists with the USNC/IEC invoicing for all members who are billed an annual fee for TAG participation.
- Downloads revisable documents from the IEC server and sends out to those requesting them for adoption.

More Information

For more details on the structure and organization of the USNC, event information, training opportunities, documents of interest, and other resources, visit the USNC website at www.ansi.org/usnc.

LAUGH TRACK



The Ins and Outs of USNC Membership

The broad-based USNC/IEC constituency represents the stakeholders in the U.S. electrotechnical community. Members include representatives from (among other areas):

- Industry
- Academia
- Consumer interests
- Government agencies
- Professional societies
- Testing organizations
- Trade associations

USNC Sponsoring Membership

Organizational, Company, Government, and Educational Members of the American National Standards Institute (ANSI) may become Sponsoring Members of the USNC upon determination of material interest, provided that they are also:

- Organizations serving as U.S. Technical Activity Group (TAG) Administrators and/or Technical Committee (TC), Subcommittee (SC), or Systems Committee (SyC) Administrative Secretariats and having paid the requisite fees; **or**
- Entities that have expressed interest in participating in the USNC and have paid the USNC Organizational fee.

USNC Sponsoring Membership represents a variety of stakeholders in the U.S. electrotechnical community, including industry, academia, consumer interests, government agencies, professional societies, testing organizations, and trade organizations. To become a full USNC Sponsoring Member, a company or organization is required, as a prerequisite, to become an ANSI Member. ANSI and USNC memberships are based upon a calendar-year billing cycle. An organization can join the USNC any time throughout the calendar year. The current USNC membership annual fee is $6450.

Some of the benefits of becoming a USNC Sponsoring Member include the following:

- The ability to leverage your organization's position internationally and increase global influence via engagement in the IEC.
- Unlimited individual participation for all employees in any of the USNC-approved Technical Advisory Groups (TAGs).
- The ability for the member to nominate an individual from their organization to the USNC Council, TMC, and CAPCC.
- Oversight and direct input on IEC policy and technical issues.
- The ability to shape the ongoing dialogue on standards and conformity assessment as tools for the facilitation of trade and international commerce.

2015 USNC Sponsoring Members

ABB Inc.
Agilent Technologies
Apple Inc.
Corning Incorporated
Dell Inc.
Eaton Corporation
ECC Corporation
Emerson Electric
FM Approvals
General Electric Company
Hubbell Inc.
Intertek
Itron Inc.
Legrand/Pass & Seymour
National Electrical Manufacturers Association (NEMA)
National Institute of Standards and Technology (NIST)
Philips Healthcare
Qualcomm
Rockwell Automation
Schneider Electric
Siemens Industry, Inc.
Sony Electronics
Telecommunications Industries Alliance
Underwriters Laboratories
U.S. Coast Guard
U.S. Department of Defense
U.S. Food and Drug Administration

USNC TAG Membership

U.S. positions on technical issues are developed by USNC TAGs. **Neither ANSI nor USNC membership is required** to become a USNC TAG participant**.** The annual fee to participate is $295 per TAG, or $590 for TAGs serving two or more TC/SCs. Exemptions are considered on a case by case basis within a few categories (e.g., financial hardship, consumer advocate, resource expert).

To request TAG participation, interested parties must contact the Technical Advisor and/or TAG Secretary of the relevant committee. If you are not sure whose the individuals are, please contact the USNC Office at USNC@ansi.org.

JOIN US!

For further information, contact USNC General Secretary Charles T. Zegers (czegers@ansi.org; 212.642.4965).

A New Set of Keys for the USNC

In 2007 as part of its Communication, Education, Marketing, and Promotion Plan, the USNC adopted a set of Key Messages to be included in communications to effectively promote USNC activities. Many of those messages still hold relevance today, and can help accomplish our goal of developing a broad-based communications plan which demonstrates and promotes the USNC value propositions. But to ensure that the messages line up with the latest evolution of the IEC's standards and conformity assessment activities, the USNC Communications and Continuing Education (C&CE) Committee felt that a revision was needed.

The following updated Key Messages are intended for use in USNC-related press releases, presentations, publications, websites, advertising, articles, and other communications.

USNC KEY MESSAGES

1. The USNC is the voice to the global electrotechnical standards-setting and conformity assessment communities.

2. Internationally harmonized standards are expressions of how to make a product, process, or system deliverable on a global basis.

3. Globally relevant standards and conformity assessment systems promote international cooperation and facilitate world trade.

4. Standards-setting bodies are responsive to shifting technology needs, bridging the space between innovation and standardization.

5. Voluntary consensus standards for products, processes, and services are at the foundation of the U.S. economy and society.

6. The USNC supports market-driven methods of assessing the conformance of products, systems, and personnel to standards.

7. ANSI and its USNC/IEC serve standardization efforts in the United States by providing and promoting a process aligned with the principles of the World Trade Organization (WTO) Technical Barriers to Trade (TBT) Agreement: openness, consensus, balance, coherence, flexibility, and transparency.

8. Standardization is everywhere, and obtaining the commitment of all stakeholders to support that concept will reap benefits for society; these stakeholders include, but are not limited to, industry, regulatory agencies, electric utilities, and the academic community.

9. An essential goal of the USNC's communication and education program is conveying the value and benefits to society of voluntary consensus standards and related conformity assessment programs.

10. One of the most important and significant challenges faced by the USNC is ensuring the continued availability of well-qualified and financially supported standards and conformity assessment professionals.

USNC C&CE Committee Chair Elaina Finger emphasized the importance of the first Key Message – the USNC's role as the voice to the global electrotechnical standards-setting and conformity assessment communities. "We have a responsibility to accurately communicate to our constituency any current standardization and conformity assessment activities of interest," she said.

"In an effort to do this, we not only publish this quarterly newsletter," she continued, "we also send out frequent email messages, maintain a website with links to many tools and educational materials, and provide online and live training opportunities for our USNC members."

More Information

Visit the USNC website at www.ansi.org/usnc.

IEC Celebrates International Women's Day with a Focus on USNC Standouts

Excerpted from an article originally published by the IEC on IEC.ch

Worldwide, women account for 41% of the workforce; however, when it comes to STEM (science, technology, engineering, and mathematics) careers, they hold less than 25% of positions in the United States and only 13% in the UK, with similar rates around the world. On International Women's Day, celebrated on March 8, the IEC highlighted the outstanding leadership shown by some key women in electrotechnical standardization and conformity assessment, and calls for moves to encourage more women to get involved in the STEM fields.

Two of USNC's Finest

The excerpts below focus on two outstanding women who are part of the USNC family: Elaina Finger is the Chair of the USNC Communications and Continuing Education Committee (C&CEC); Manyphay Viengkham was voted one of the 2012 IEC Young Professional Leaders and serves as the USNC Representative to IEC Systems Evaluation Group (SEG) 1 on Smart Cities.

ELAINA M. FINGER

Elaina M. Finger holds the position of global standards process coordinator, Corning Incorporated. She has been the Assistant Secretary of IEC SC 86C, Fibre optic systems and active devices, *since 2002, and Assistant Secretary of IEC TC 86,* Fibre optics, *since 2003. She received the 2014 Thomas A. Edison Award in recognition of her support of IEC standardization work, actions in collaboration, knowledge sharing, training, teaching, and proactive work across many fronts.*

How did you start working in standards or conformity assessment?

Almost 18 years ago, I accepted a position in Corning Incorporated's Standards Engineering Department. Like many who find themselves working in the standards arena, this was a mid-career change for me. The job encompassed many of the skills I had acquired in variety of industries – finance, education, and international trade – and offered the opportunity to gain others.

What advice would you give to other women wanting to work in electrotechnical standardization?

Historically, standardization has been a male-dominated field, but I see more women getting involved at each meeting I attend. Yes, worldwide attitudes have changed, but it is more than that. Without generalizing too much, I think women are well-suited to standardization work because they tend to be good collaborators with the ability to transcend cultural differences and the drive to bring projects to successful completion.

My advice is to become involved and take on high-level positions within technical committees where there will be the opportunity to make powerful contributions to industry.

What can be done to encourage more women and girls to work in this area?

Electrotechnical standardization is a rapidly expanding field that offers women the opportunity not only to employ their technical expertise, but to acquire the skills necessary for advancement in the business world. As participants in the standards process, women become talented negotiators, striving to achieve consensus in a multi-cultural environment. At standards meetings, they will meet with many other experts in their particular field, who offer unique perspectives and collaborate to find good solutions that affect global industry as well as everyday consumers. The networking opportunities are endless! In addition to career enhancement, working in standards gives women a chance to travel the world, experience a multitude of cultures, and form life-long friendships.

(continued)

IEC Celebrates International Women's Day with a Focus on USNC Standouts *(continued)*

MANYPHAY VIENGKHAM

Manyphay Viengkham has contributed significantly to global Smart Grid rollout and is now involved in Smart Cities as USNC representative to the IEC SEG 1 – Smart Cities*. She holds the postition of client implementation manager at General Electric – Power & Water.*

How did you start working in standards or conformity assessment?
I started my journey working with standards as a consumer very early in my career as a system integrator where standards are critical in building interoperable systems, especially for complex systems. It was not until 2011 that I jumped over the fence and worked directly with IEC through the USNC on the Smart Grid initiatives, which was very exciting for me. Applying my systems engineering methodologies expertise, I helped build what is now the IEC Smart Grid Standards Map. I currently am the USNC representative to the IEC SEG 1 – *Smart Cities*, where I continue to provide my systems thinking expertise.

What advice would you give to other women wanting to work in electrotechnical standardization?
Just as Facebook COO Sheryl Sandberg said "Lean In," I would give the same advice to ladies across the electrotechnical standardization community. "Lean in" and sit at the table with your male peers, and voice your perspective and thoughts on matters to help drive IEC into the future. "Lean in" and be bold to build the relationships and network with your male peers and share with them the value you bring to the organization. "Lean in" and pull in your fellow female peers to help build their confidence at the table too.

I can't express how important it is for women leaders to "lean in" at the table with confidence. Women hold only a small number of seats – but don't let the statistics scare you away. We have domain knowledge, industry experience, and a unique perspective that creates a tremendous amount of value to the electrotechnical standardization – knowledge and input that can build a stronger organization and future for all things that standardization touches.

What can be done to encourage more women and girls to work in this area?
I believe this starts with being a role model ourselves to help pave the road for the next generation of girls who want to be more involved in standards and conformance organizations. It's not an easy journey, especially with an organization that has decades of old, outdated traditions. As trailblazers we need to grind the path and recruit other female members to follow along in the journey.

It's a journey that requires us to be engaged in local educational communities that will encourage girls in the fields of science and engineering and nourish their confidence; to be mentors and sponsors for young female professionals and find opportunities for them to practice and apply their potential; to knock down barriers within the organization and build a healthy culture to embrace diversity.

About International Women's Day

International Women's Day, celebrated on March 8, is an opportunity to celebrate the achievements of women while calling for greater equality. "Make It Happen" was the International 2015 Women's Day theme, encouraging effective action for advancing and recognizing women. Visit www.internationalwomensday.com.

New USNC TMC Subcommitee on Model Operating Procedures

By Sonya M. Bird, Program Manager - International Standards, Underwriters Laboratories

For several years, a task force responsible for the update of the USNC Model Operating Procedures (MOP) for U. S. Technical Advisory Groups (TAGs) has been operating under the leadership of the USNC Technical Management Committee (TMC). The initial intent was for the task force to update the procedures, verify implementation as needed, and then disband. However, in 2014 the USNC determined that the work of the task force was critical to the ongoing maintenance of the MOP, as well as for the validation both of new U.S. TAGs and of TAGs undergoing process revision. As a result, the USNC approved the formation of a formal Subcommittee (SC) on *USNC TAG Operating Procedures*.

In general, the responsibilities of the SC include the following:

1. Developing and maintaining, as appropriate, the Model Operating Procedures for USNC/IEC TAGs.
2. Overseeing the TAG Validation Process using the MOP and making appropriate recommendations to the USNC TMC.
3. Reviewing unique operating procedures developed by TAGs and making appropriate recommendations to the USNC TMC.

The MOP for USNC/IEC TAGs was updated and re-issued in September 2014. Some of the changes are as follows:

- Clarified that TAG administrator is appointed by the TMC, and that nominations are invited through ANSI's *Standards Action*.
- Included information on how a TAG may request approval for additional resource experts, and clarified that resource experts count towards the number for TAG viability.
- Indicated that USNC conveners, experts, delegates, and TAG members are all expected to conduct themselves in a professional manner.
- Indicated that consumers count towards the number for TAG viability.
- Expanded the text to allow for liaisons from each full IEC member country of FINCA (previously just indicated Mexico and Canada).
- Clarified that resource experts and consumer advocates are voting members of the TAG.
- Updated the procedure for coordinating a position where two or more TAGs have an interest.
- Clarified that a negative vote on an IEC ballot must be technical in nature.
- Modified text on meetings to indicate:
  - A TAG meeting can be either face-to-face or virtual.
  - A guest at a meeting is an individual with particular expertise who is invited to help the TAG, and is not a permanent fixture.
  - Meetings may be recorded only with prior agreement of all attendees.
- Each TAG is to define its quorum, using suggested criteria in the MOP for consideration.

The updated MOP also addressed the validation process for U.S. TAGs. When a new TAG is formed, or when a TAG must be revalidated, the following is needed:

- TAG assertion that the TAG uses the MOP or unique procedures.
- Copy of TAG minutes showing the approval.
- Copy of unique procedures, if used.

Revalidation is required if:

- TAG no longer uses the MOP and develops unique procedures instead.
- TAG with unique procedures substantively revises those procedures.
- For all TAGs, if the MOP are revised substantively (TAGs will be notified).

During the development of the updated MOP, a few items were identified that need consideration at this point. These include:

SONYA M. BIRD

- **Incorporation of new anti-trust policy.** ANSI states the following in A11 Antitrust Policy: "U.S. positions developed by ANSI-Accredited U.S. TAGs shall be developed in accordance with applicable antitrust and competition laws and meetings amongst competitors to develop U.S. positions are to be conducted in accordance with these laws." Changes have been incorporated into the *ANSI Procedures for U.S. Participation in the International Standards Activities of ISO*, and the SC needs to consider how to further address this in the MOP.
- **Adding new members to TAGs.** Some questions have been raised regarding how/when new members can be added in relation to the receipt of payment by ANSI. This process needs to be better defined.
- **International participation on TAGs.** Questions have been raised regarding when it is appropriate to have participation by representatives in other countries on the U.S. TAG. Additional clarification is needed.
- **USNC TMC has been working to better define the role of the Group Manager.** The MOP need to include or reference this description.

Now that the updated MOP has been in use for 6 months, the SC anticipates that other questions may have been identified. Suggestions for clarification or improved text may be sent to Tony Zertuche at tzertuche@ansi.org.

Breakthrough in Practically Applying IEC Global Relevance Toolbox: IEC TC 23 MT 11 Research Provides Case Study Approach

By Dennis Oddsen, Director of Engineering, Hubbell Inc.; USNC SC 23B Chair and Member of the USNC IEC Council; and Tim McNeive, Manager, Technical Liaison Group, Thomas & Betts; USNC SC 23A Chair and Member of the USNC IEC Council

Arguably the "poster child" for the global relevance discussion in IEC is the long-sought inclusion of the North American Standard UL498, *Attachment plugs and receptacles*, in IEC 60884-1, *Plugs and socket-outlets for household and similar purposes*.

For years preceding the publication of the IEC Global Relevance Toolbox (AC/22/2007) and the IEC Global Relevance Policy (AC/17/2008), U.S. and Canadian interests in IEC Technical Committee (TC) 23, *Electrical accessories*, and Subcommittee (SC) 23B, *Plugs, socket-outlets and switches*, diligently appealed for equal treatment in IEC 60884-1. Even then, SC 23B struggled to employ the new toolbox and policy, which explicitly called for IEC standards to "…have the widest possible acceptance on the global market," and "To allow products complying with IEC standards to meet the different needs of major segments of the global market, essential differences in requirements may, in well specified cases, be included on an equivalent basis…."

In 2010 TC 23 proposed use of "parallel standards" in their Strategic Business Plan, as a means of dealing with differences from the status quo in IEC 60884-1. In October 2010 the IEC Standards Management Board (SMB) stated: "The SMB believes that the use of the term 'parallel standards' is confusing and is not a term referenced in the Global Relevance Policy or Toolbox…." The SMB further stated that "TC 23 and its SCs may use any of the tools referenced in AC/22/2007 to address this matter and to ensure that future TC standards meet the different needs of major segments of the global market in accordance with the IEC

Global Relevance Policy, IEC basic safety standards, and the SMB Decision 136/6."

Following this SMB directive, TC 23 gave the task to TC 23 Maintenance Team (MT) 11 (formerly TC 23 MT 61916) to make a very deep analysis in order to:

- define the most appropriate (global relevance) tools to be used in order to meet the different needs of major segments of the global market; and
- analyze the IEC basic safety publications in order to agree on the relevant safety levels for appropriate parameters but without defining the methodology for compliance.

The planned actions identified by MT 11 for 2011 through 2013 included:

1. Analysis of ISO/IEC Guide 104 to identify rules to be used in applying safety publications.

Results: MT 11 actually evaluated the following ISO/IEC Guides:

- **Guide 50 Safety aspects** – Guidelines for child safety in standards and other specifications
- **Guide 51 Safety aspects** – Guidelines for their inclusion in standards
- **Guide 71** – Guide for addressing accessibility in standards
- **Guide 104** – The preparation of safety publications and the use of basic safety publications and group safety publications

2. Identify the list of IEC safety publications and submit for review by TC 23 MT 11 experts.

Results: MT 11 provided very detailed feedback on the degree of importance in TC 23 standards for each pertinent aspect presented it by MT 11. It also provided valuable suggestions for the continuation of the review. MT 11 then prepared a list of the basic safety publications and group safety publications used in IEC standards within the scope of each SC of TC 23.

3. Prepare a list of proposed appropriate safety parameters for IEC TC 23 based on MT 11 comments.

Results: MT 11 then generated a list of appropriate parameters for each of the basic safety and group safety standards identified as important in TC 23 standards.

4. MT 11 would define the relevant safety concerns expected in IEC for TC 23. U.S. members would prepare a similar list of safety concerns relevant in the U.S.

Results: Given the complexity and scope of this undertaking for all TC 23 standards, MT 11 at this point agreed to the U.S. proposal to take a practical approach and focus on comparing the IEC safety concerns with those of North America relevant to each identified parameter, in the specific context of the IEC 60884-1 and UL 498 standards. For this purpose an Ad Hoc Working Group was formed of MT 11 experts to complete the review.

(continued)

Breakthrough in Practically Applying IEC Global Relevance Toolbox: IEC TC23 MT 11 Research Provides Case Study Approach *(continued)*

5. MT 11 Ad Hoc Working Group would identify the most appropriate (global relevance) tool for each of the safety parameters.

Results: The Ad Hoc Working Group of MT 11 concluded that of the five tools in the Global Relevance Tool Box, the following are the most appropriate options for achieving the objectives laid out in the Global Relevance Policy; for each option, the MT 11 Ad Hoc Working Group suggested *when* each option might be considered and *how* each option might be implemented in the standard:

Tool 1: Inclusion of text concerning particular conditions existing in certain countries (exceptions), or "In some countries clauses"

Tool 3: Integration of regional requirements as part of the standards with clear identification of the geographic regions or markets concerned

Tool 4: Integration of regional requirements as part of the standard without identification of the geographic regions or markets concerned

6. MT 11 would prepare a final report for TC 23 finalizing the conclusions reached for all tasks.

Results: MT 11 delivered its final report and recommendations at the November 2014 TC 23 Plenary Meeting in Mexico City (23/707/MTG). The report strongly recommended that TC 23 agree to the identified list of standards, relevant parameters, and identified global relevance tools for use throughout TC 23 committees in addressing the global relevance of differences in markets, infrastructure, and technologies.

Of course, the application of the recommendations must be considered for each standard at the subcommittee level.

With respect to the practical application of IEC 60884-1 and UL 498, MT 11 agreed on the relevant safety levels for IEC and the United States, and concluded that although safety is achieved and verified by different practice, there are no safety issues. MT 11 asked TC 23 to inform SC 23B of these conclusions.

MT 11 agreed on the following definitions:

Parameter: "Product safety characteristic addressed in the corresponding basic safety or group safety publication."

Safety Concern: "Essential requirement to address the corresponding parameter which has to be covered in the product standards."

Safety Level: "Product requirement corresponding to a safety concern."

Perhaps the most groundbreaking aspect of this model approach was the high level focus on "safety parameters", "safety concerns," and safety levels," and not on "methodology of compliance."

Infrastructure: "The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise" [Oxford English Dictionary].

"The infrastructure enables the safe and proper function of an electrical installation system, which includes the construction practice and installation practice, wiring rules, environment conditions, voltage, frequency. Regulation can also be included as the way used to protect the infrastructure.

- Organizational structure includes the available goods on the local market.
- Construction practice includes the construction methods which might be different due to difference in environmental conditions, habits….
- Regulation includes fire protection rules.
- Proper function includes availability of the power supply.
- The electrical installation is a subset of the building architecture.
- The electrical installation includes: power supply, distribution boards, cable management, protective devices, switches, socket outlets, and shall take into account the infrastructure in place."

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TIM MCNEIVE

The characteristics of typical electrical infrastructures were defined to give guidance to TC 23 committees regarding essential considerations for safe installation of products in electrical systems.

There was unanimous approval by TC 23 committee members at the 2014 Plenary meeting supporting the TC 23 MT 11 report, conclusions, and recommendations. The TC 23 endorsement and recommendations are being forwarded for ratification to the SMB.

Looking Ahead

The approach taken my TC 23 MT 11 should be scalable to any IEC TC or SC that is serious about meeting the objectives of the IEC Global Relevance Policy. Clearly, a great deal of work is needed in such an investigation. On the flip side, this model may be very useful, and necessary, when considering adoption of an IEC standard in North America, where well established levels of safety are expected.

IEC CISPR Serves Manufacturers and Test Labs: Overview of a Unique Committee

By Don Heirman, Chair of CISPR; Member, USNC Technical Management Committee; Group Manager for USNC Technical Advisory Groups Dealing with EMC; Chairman of the U.S. Coordinating Committee on EMC

CISPR, the International Special Committee on Radio Interference, is a technical committee in the IEC. You may know of CISPR for its publication CISPR 22, which provides the measurement method and emission limits for information technology equipment, or CISPR 11, which provides measurement methods and emission limits for industrial, scientific and medical products. But CISPR is much more than two publications. It is a committee that not only has basic measurement method, test instrumentation, and generic emission standards, but has applications to a wide array of products and product families used by all of us everyday.

The IEC website has good background material on CISPR at http://www.iec.ch/emc/iec_emc/iec_emc_players_cispr.htm. In addition, CISPR's operation is contained in Annex SM of the supplement to the ISO/IEC Directives, at http://www.iec.ch/members_experts/refdocs/iec/isoiecdir-iecsup%7Bed8.0%7Den.pdf.

CISPR Scope

The scope of CISPR is to provide standardization in the field of electromagnetic compatibility (EMC), including:

1. Protection of radio reception in the range 9 kHz to 400 GHz from interference caused by operation of electrical or electronic appliances and systems in the electromagnetic environment.
2. Measurement instrumentation, facilities, methods, and statistical analysis for the measurement of disturbance.
3. Limits for radio disturbances caused by electrical or electronic appliances and systems.

For further information about CISPR standards, see the CISPR Guide at http://www.iec.ch/emc/pdf/cispr_guide_2010.pdf.

CISPR Makeup

CISPR is a unique committee in that it has membership and liaisons beyond that of National Committees. CISPR participation includes the following additional bodies, among others:

- CIGRE (International Council on Large Electric Systems)
- EBU (European Broadcasting Union)
- ETSI (European Telecommunications Standards Institute)
- IARU (International Amateur Radio Union)
- ITU-R (International Telecommunications Union – Radio-communications Sector)
- ITU-T (International Telecommunication Union – Telecommunication Standardization Sector)

CISPR PROVIDES STANDARDIZATION IN THE FIELD OF ELECTROMAGNETIC COMPATIBILITY (EMC).

CISPR Subcommittees

CISPR's work involves equipment and methods for measuring interference, establishing limits and immunity requirements, and prescribing (in liaison with other IEC technical committees) methods of measuring immunity, as the scopes of the various subcommittees listed below indicate. The committee also takes account of the impact of safety regulations on interference suppression of electrical equipment.

The CISPR Subcommittees are:

CIS/A – covers radio-interference measurements and statistical methods

CIS/B – handles interference relating to industrial, scientific, and medical (ISM) radio frequency (RF) apparatus

CIS/D – deals with EM disturbances related to electric and electronic equipment on vehicles and devices powered by internal-combustion engines

CIS/F – covers interference relating to household appliances, tools, lighting and similar equipment

CIS/H – sets limits for the protection of radio services

CIS/I – formed in 2001 from the former CIS/E and CIS/G; deals with EMC of information technology equipment (ITE), multimedia equipment, and receivers

Note: Subcommittee C has been disbanded. Subcommittees E and G have been disbanded and their activity moved to Subcommittee I.

CISPR Plenary

The plenary is a general meeting where each national committee (country) has a delegation. The head *(continued)*

IEC CISPR: Overview of a Unique Committee *(continued)*

of delegation speaks for the national committee in any deliberation during the plenary half-day meeting. There are several functions that the plenary performs, which are captured in the Supplement to the ISO/IEC Directives, Annex SM, noted above.

In clause 4.2 of Annex SM, the Plenary Assembly shall be the supreme body of the CISPR. Its responsibilities are as follows to:

a) Elect (ratify) the Chairman and Vice-Chairman of the CISPR;
b) Allocate the Secretariat of the CISPR;
c) Appoint (ratify) Chairmen of subcommittees;
d) Allocate Secretariats of subcommittees;
e) Approve changes in membership of the CISPR;
f) Modify, as necessary, the structure and organization of the CISPR;
g) Consider matters of policy and general interest referred to it by the Steering Committee; and
h) Consider technical matters as requested by National Committees and Member Bodies, the Chairman of the CISPR, or Chairmen of the subcommittees.

Items a) and c) were accomplished recently, as these chairmen were ratified for an extension of their term of office for three years, to conclude at the plenary meeting in 2016.

CISPR Chairs

The following are CISPR committee and subcommittee chairs as of March 2015:

CISPR Chair: Don Heirman, U.S.
CISPR Vice Chair: Martin Wright, UK
Subcommittee A Chair: Manfred Stecher, Germany
Subcommittee B Chair: Bernd Sisolefsky, Germany
Subcommittee D Chair: Mike Beetlestone, UK
Subcommittee F Chair: Uwe Kampet, Germany
Subcommittee H Chair: Beniamino Gorini, Italy
Subcommittee I Chair: Martin Wright, UK

Typical Reports Received

Time is reserved at plenary meetings for reports from the CISPR liaison organizations that are present. Typically, presentations are given or received from ITU-T, ECMA International, CIGRE, and IARU. As an example of an issue that one of these organizations has brought to the attention of CISPR, the IARU is looking for the outcome of CISPR's work on plasma TV interference, DC network interference, and wireless power transfer including large inductive coils used to charge electric vehicles. The IARU has had cases of interference from these sources and wants that to be abated.

IEC Technical Committee (TC) 77, *Electromagnetic compatibility,* meets in parallel with the CISPR meetings every other year at the same venue. Both organizations put into operation an agreement to have representatives on each of their respective Chairman's Advisory Groups by attending each other's meetings, most recently in Frankfurt, Germany, in 2014.

The CISPR Chairman's Advisory Group (CAG) does not meet at CISPR plenaries, but its steering committee does. The CISPR chairman extends an invitation to those meetings to the secretary and assistant secretary of TC 77. The chair of TC 77 then extends an invitation to the CISPR chairman for the TC 77 CAG meeting. Both committees are very pleased to have this closer association in presenting EMC to the IEC and the users of each other's IEC standards.

DON HEIRMAN

The next meeting of CISPR will be in Stresa, Italy, at the invitation of the Italian National Committee. It will spread over a two week period starting September 21 and going until October 2, 2015.

CISPR and SmartGrid

One activity of note is the role of CISPR in supporting the IEC and, in particular, Systems Evaluation Group (SEG) 2 on Smart Grid. CISPR Steering Working Group 1 prepared a CISPR Guidance document on EMC of equipment connected to the Smart Grid. The document suggests definitions and requirements of EMC on equipment to be used in the Smart Grid – for example, definitions of port and requirements in the existing standards of CISPR and TC 77. The "Guide to EMC on Smart Grid" is available on the IEC website at http://www.iec.ch/emc/smartgrid/.

More Information

Please address any questions to Don Heirman, CISPR chair, at d.heirman@ieee.org. An additional contact is Stephen Colclough, CISPR secretary, at s.colclough@samsung.com. Information and links regarding CISPR and all other IEC work in EMC are available at http://www.iec.ch/emc/.

United States to Host IEC General Meeting in 2022

During its 1904 World's Fair, the city of St. Louis hosted a week-long International Electrotechnical Congress that set the stage for a permanent International Commission on electricity. In 1926, the meeting returned to the United States with a hosting in New York, then Philadelphia in 1954, Washington, D.C., in 1970, Houston in 1998 and most recently Seattle in 2010. Once again, seven years from now, the U.S. will again welcome dignitaries from around the globe as we will host the General Meeting of the International Electrotechnical Commission.

A Planning Committee has been established under the Chairmanship of Steve Margis, UL, LLC, to plan and execute the 86th IEC General Meeting in the US in 2022. The Committee will shortly begin the process of selecting the venue for this meeting.

The USNC is undertaking this endeavor and setting it as one of our strategic goals. The Planning Committee will draw on experience and information from the last U.S.-hosted General Meeting in Seattle as well as the generously shared experiences of the other countries who have hosted the meeting in recent years. So save the date!

IEC Immediate Past President Jacques Régis (1), IEC Vice-President (SMB) Jim Matthews (2), and ANSI President and CEO Joe Bhatia (3) address the Opening Ceremony crowd of thousands

USNC 2022 General Meeting Planning Committee

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Vice Chair:
Veronica A. Lancaster

Advisor Emeritus:
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SAVE THE DATE

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.

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HOW TO CONTRIBUTE

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Mark Your Calendar for Upcoming Meetings & Events

2015

Monday – Friday
12 – 17 April 2015
COPANT General Assembly
Mexico City

Monday – Friday
4 – 8 May 2015
PASC 38
New Delhi, India

Tuesday – Thursday
19 – 21 May 2015
CAPCC/TMC/Council
UL, Research Triangle Park, NC

Monday, 15 June 2015
CAB Meeting
Geneva

Tuesday, 16 June 2015
SMB Meeting
Geneva

Tuesday – Thursday
22 – 24 September 2015
CAPCC/TMC/Council
AAMI, Arlington, VA

Friday, 25 September 2015
7Th USNC TAG Leadership Workshop
AAMI, Arlington, VA

12 – 16 October
79th IEC General Meeting
Minsk, Belarus
Monday 12: SMB, CAB
Wednesday 14: CB
Friday 16: Council
(Technical meetings 5–16 October)

2016

10 – 14 October
80th IEC General Meeting
Frankfurt, Germany
Monday 10: SMB/CAB
Wednesday 12: CB
Friday 14: Council

2022

86th IEC General Meeting
USNC Expression of Intent submitted to and accepted by IEC Council

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

UPCOMING ISSUES OF THE *USNC CURRENT*

Q II Safety & Security
Q III Hot Topics
Q IV Health & Fitness

www.ansi.org/usnc