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## THE FUTURE OF STANDARDS PARTICIPATION



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## **Transformations in Online Standards Development**

by Phil Beauchamp, PB Mechanical Consulting Service, LLC, USNC Deputy Technical Advisor IEC/TC 114 and Co-Convenor IEC/TC 114 Advisory Group 2: Publication Alignment Support



Consumers, manufacturers, commercial installers, and others purchase countless products each and every day. Standards provide assurance

to consumers and businesses alike that the products are safe and meet requirements. Standards are developed using a consensus building process in committees whose membership includes the affected stakeholders. International Standards development is coordinated by standards development organizations (SDOs) like the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO), and the International Telecommunication Union, (ITU).

## Guiding Development of a New Standard

The standards publication process involves many stages that starts with a Technical Committee (TC) proposal. Once the proposal is approved, a Working Group (WG), a Project Team (PT), or Maintenance Team (MT) is populated with subject matter experts (SME), and a Project Leader or Convenor is selected to oversee writing of the standard. The SMEs on the team are all very knowledgeable in the area of practice. However, unless they have worked previously on a WG, they are often unfamiliar with the rules required by the SDO to ensure consistency and a commonality across their publications. For standards developed by the IEC and ISO, these rules are codified in



the ISO / IEC Directives Part 2<sup>1</sup> which states "the general principles by which ISO and IEC documents are drafted and stipulates certain rules that shall always be applied in order to ensure that they are clear, precise and unambiguous."

Historically, WGs used Microsoft® Word templates as the basis for establishing document layout. Templates are good at enforcing the basic structure of the document. However, rules that are not structural are not covered by a template and must be handled manually. While SDO editors are useful in noting many of the non-structural errors, they are not SMEs; hence errors can be missed. As a result, coordination becomes a major focus of the Project Leader or Convenor.

Consequently, team leaders and SMEs often need to deal with issues like multiple document versions, conflicting equation editors, lack of real time content collaboration, and inadvertent violations of ISO/IEC Directives Part 21 formatting rules. While there are workarounds that any WG can use (e.g., Google Docs, equation editor software, a single person maintaining a "master" copy, and/or a manual publication rules violation review), these methods can incur extra cost, may not be consistent with SDO policy and most importantly increase the overall time required to reach publication. Other factors during the standardization process further complicate the difficulties. For example, National Committee (NC) comments are obtained on a template that is not integrated with the publication template. This often makes it untenable for the WGs to address NC comments at the enquiry stage because the line numbers quickly change with every edit

<sup>1</sup> The ISO/IEC Directives, Part 2 Edition 8 (2018), International Electrotechnical Commission, available at https://www.iec.ch/standardsdev/ resources/draftingpublications/directives/

between the revised document and the comment document.

To minimize these issues, some TCs have chosen to establish Advisory Groups or to create TC-specific informational documents to help new Convenors navigate the process. Examples of these include

- » IEC/TC 112's GOOD WORKING PRACTICE GWP/112
- » IEC/TC 114's Terminology Overview 114/231/INF
- » IEC/TC 114's Preferred Terminology Strategy 114/319/INF
- » IEC/TC 114's Advisory Group 2: Publication Alignment Support

While these measures help, the true solution lies in the implementation of an integrated online authoring tool within the SDOs' IT infrastructure.

#### IEC and ISO Online Authoring Tool

Starting over five years ago, IEC and ISO began to work internally with National Committees, TC Secretaries, Project Managers, Convenors, and SMEs, who were writing standards or collaborating in WGs, as well as with SMEs, who were commenting on drafts, to understand authoring needs. The IEC also began to explore with potential software vendors the possibility of implementing an Online Authoring Tool that was internal to the organization. From this, a collaborative joint project began in early 2018 between IEC and ISO to develop an online authoring tool for ISO and IEC publications.

The primary objective of the online authoring project is to improve the standards development process. It is expected to do this by providing an ISO and IEC customized tool to authors, simplifying the commenting and the comment resolution phases, increasing multi-author collaboration possibilities, and centralizing document storage with consistent version controls. The online authoring tool will also integrate the standards authoring process with other systems, like Collaboration Platforms, the Expert Management System, and Project Management Dashboards. Finally, the Authoring Tool will produce standards in a consistent format.

Teams at IEC and ISO were established to collaborate on the effort, and by mid-2018, Fonto was selected to develop an online authoring tool proof-of-concept (POC). Two Reference Groups (RG), one each for ISO and IEC, were established to solicit feedback on the evolving POC. The RGs initially participated in the evaluation of the evolving POC during the latter half of 2018.

The POC tool evaluations were generally positive and identified constructive enhancements and requirements which could be proposed to further develop an initial minimum viable project (MVP) pilot tool. Final requirements and specifications were agreed upon, and a project was initiated in late 2019 to develop the MVP pilot tool.

Development of the MVP pilot tool was planned in two phases. Phase 1 was used to validate basic feature functionality, assess tool performance (speed), and validate the new functional requirements resulting from the POC pilot tool feedback. Phase 1 was conducted during the first two quarters of 2020 and, although slowed by the pandemic, was well received by the RG participants.

Phase 2 of the MVP pilot tool intended to demonstrate its ability to produce publications by having a limited set of WGs from ISO and IEC use the MVP pilot tool on actual in-process documents during the latter half of 2020. Conversion to and from XML for the MVP pilot tool was provided by the ISO and IEC online authoring team.

Both phases of the MVP pilot tool utilized an AGILE project management style with multiple sprints and constant interactions between the RG users, the ISO and IEC online authoring team and the vendor. This process was highly effective, bugs and issues were quickly resolved, and ample opportunity existed to both improve the initial MVP pilot tool and suggest additional requirements that could be planned into future releases. The success of the initial two MVP phases resulted in ongoing development of the online authoring tool which is still being improved as of this publication.

IEC and ISO are doing four sprints over the course of a year of further development on the tool.

## TC 114 Experience with the Online Authoring Tool

IEC TC 114 (Marine energy - Wave, tidal and other water current converters) was established in 2007 with many new SMEs. During its first ten years, it struggled through many of the authoring issues outlined earlier. Over time, various TC 114 WGs began to leverage its MT 62600-1 Vocabulary team to assist with publication authoring details. MT 62600-1 eventually published the INFs noted above, 114/231/INF and 114/319/INF, which helped the WGs maintain ISO/IEC Directives Part 21 conformance.

Consequently, the TC 114 Chair along with most Project Leaders and Convenors recognized the need for a better authoring system early on. With the Chair's support TC 114 became an early advocate of the online authoring tool project and volunteered two Convenor SMEs for the IEC RG. The Convenors represented TC 114/MT 62600-1 (Vocabulary) and TC 114/MT 62600201 (Tidal energy resource assessment and characterization). Both MTs were in various draft development phases during the initial rollout of the POC tool in 2018. Consistent with other RG feedback on the POC tool, the TC 114 feedback was also very positive.

When assessment of the MVP pilot tool moved into Phase 1, both the in-process document drafts for MT 62600-1 and MT 62600-201 were utilized as part the effort. Again, the results were positive. As the MVP pilot tool Phase 2 got underway, TC 114 began to look at WGs that would be able to take advantage of Phase 2. MT 62600-1's in-process publication was issued just prior to the start of MVP pilot tool Phase 2, making it ineligible. MT 62600-201, on the other hand, was still under development and was selected as one of the initial WGs to exercise the MVP pilot tool in Phase 2.

Fortuitously, MT 62600-1 was transitioned into TC 114 Advisory Group 2, Publication Alignment Support (AG 2). The charter of AG 2 is to coordinate and assist in the publication process across all TC 114 WGs. Its membership consists of one representative from each TC 114 WG, most often a Project Leader or Convenor, and included the two original TC 114 online authoring tool RG members. Because of AG 2's unique focus on aiding publication development, the RG members were able to share their experiences with a broad number of SMEs responsible for publication development and then solicit and provide additional insight and feedback to the Online Authoring project.

Feedback during Phase 2 remained extremely positive, especially when the AGILE sprints resulted in the release of additional features. The initial MVP pilot tool included most

basic editorial needs, directly tied to a prepopulated template consistent with the ISO/IEC Directives Part 21. As the sprints evolved additional features were added in. Early on, this included automated numbering and in-text cross referencing, a feature allowing authors to incorporate document cross references which are then automatically renumbered for consistency. The ability to track changes and recover prior versions was added in another sprint. Later sprints began to add in features more specific to IEC and ISO documents. These included a content quality checker, allowing the authors to identify, for example, every use of "shall," "should," and "may" in a document to check for consistency. The MVP pilot tool also includes an online user help feature that not only includes specific help on the tool's features but also includes access to training exercises for new authors.

The addition of an inline document commenting, and resolution feature is one example that shows the outstanding usefulness of the online authoring tool. The feature allows commenters to add comments directly to specific text in the document, which the WG can then resolve. Aside from allowing multiple document authors to interact more effectively, the online authoring team is looking at the feasibility of incorporating NC access to allow for simpler input and resolution of voting comments.

To illustrate the usefulness of this feature, TC 114 AG 2 worked with the online authoring project to add the AG 2 RG member (former MT 62600-1 RG member) to the commenter role on the MT 62600-201 document. It was then possible for the commenter to go in and insert comments in the text alerting the team to subtle rules violations consistent with AG 2s charter. The MT 62600-201 Convenor could readily see and resolve these comments, speeding up the publication process—a feature TC 114 AG 2 looks forward to utilizing prior to releasing committee drafts of future TC 114 publications.

The continued positive impression from TC 114 of the online authoring tool initiative is confirmed by the fact that as of this writing a second WG, TC 114/MT 62600-2 (Design requirements for marine energy systems), has also been added to the next wave of pilot tool projects. A third WG, TC 114/MT 62600-103 (Guidelines for the early-stage development of wave energy converters), has been accepted and is currently being imported for inclusion in the next sprint of evaluations. As TC 114 Chair, Jonathan Colby notes, "The online authoring tool is an important advancement for the IEC and for the efficient development of international, consensus-based standards moving forward. IEC TC 114 has been eager for such a tool and I am very pleased to see the number of TC 114 Working Groups involved. TC 114 will continue to support the development of this tool and I am grateful for the leadership of Advisory Group 2 as both a champion for the needs of our Technical Committee and as a liaison back to our group at large. I am eager to see the full role out of this tool and I am committed to the adoption of this tool across the range of Marine Energy standardization activities." In summary, the Online Authoring Tool provides an advantage for SMEs and WG leaders by making the process of writing a new standard easier and is likely essential to the future of productive publications development.

## Future of Standards Participation for Young and Emerging Professionals

by Grace Callahan, International Standards Specialist at Underwriters Laboratories; Eric Franca, BS&EP Test Lab Lead -ASCA Program at US Food and Drug Administration; Ade Gladstein, Program Manager – International Policy at USNC/ IEC; Carrie Schmaus, Technology Manager at US Department of Energy; Nathan Tom, Researcher IV - Mechanical Engineering at National Renewable Energy Laboratory





The COVID-19 pandemic has significantly disrupted traditional workflows, limiting progress on standards development, conformity assessment activities, and the options for building and maintaining professional networks by transitioning these activities to a completely virtual environment. Despite the U.S. starting to turn a corner back into a more traditional work environment, the foreseeable future will contain more virtual and "hybrid" (both in-person and virtual participant) meetings, which present unique opportunities as well as challenges for the future of standards participation for young and emerging professionals.

Throughout the year, the Young and **Emerging Professionals Committee** (YEP Com) was able to establish many new connections through virtual meetings that can be reinforced in future in-person events. One value that has been difficult to replicate virtually is time-zone coordination; at any one time, only a third of the world is active during normal work hours which has made TCs/SCs/ WGs meetings difficult, virtually. By organizing in one location and time zone, in-person meetings allow all stakeholders to have the opportunity to be present at the discussion table



as we work towards consensusbased standards development and conformity assessment. Our society also recognizes the value of unstructured networking and introductions that are made at many in-person events through coffee breaks, lunches, and happy hours that can spur new ideas and collaborations: this is difficult to recreate in a virtual environment. However, in-person events can be costly and potentially exclude countries and experts with less resources to attend. Furthermore, with much of the world aiming to meet net-zero carbon emission promises, we may need to rethink the amount of business travel that is done the future.

The continued use of hybrid or virtual meetings offers new opportunities for increased YEP participation. Where lack of funds or inadequate support to attend in-person meetings may have limited YEP participation in the past, virtual meetings have made participation more accessible to all, and the YEP Com hopes to continue to build on this momentum moving forward.

Difficulties of the virtual work environment aside, during the past year, the YEP Com of the USNC





has been working to finalize a U.S. national YEP Program (see the article in the Fall 2020 edition of USNC Current entitled "A Decade in the Making: The U.S. National Young and Emerging Professionals Program"), to improve the visibility of the YEP program (see our new website), and to increase outreach aimed at new potential young and emerging professionals via virtual webinars (Establishing a National Young and Emerging Professionals Program, Opportunities for Young and Emerging Professionals in Standards: An Introduction to the USNC and IEC, and Regulatory Models Around the World).

In the Spring of 2022, the YEP Com is planning an official launch of the U.S. YEP Program which will focus initially on outreach to new members and provide opportunities for professional development that can be completed in a virtual environment. In particular, the YEP Program will begin outreach with a focus on diversity emphasizing the importance of having members with a variety of different backgrounds, perspectives, expertise, and experience, as partially informed by the IEC's Diversity Statement. The YEP Com also recognizes the immense value in partnership and

information sharing with other groups and plans to continue engagements with groups like FINCA (Forum of the IEC National Committees of the Americas) to foster connections at the regional level of the Americas. Finally, the YEP Com will support the competition for the IEC Young Professionals Programme, which is currently planned as a potential hybrid meeting in parallel with the IEC General Meeting in Dubai, UAE in October 2021.

#### **Opportunities for YEPs**

The USNC YEP Com has a standing open call for new members, with no previous knowledge or experience necessary. Members completely new to standards and conformity assessment are welcome to join the YEP Com where they will be connected to mid- and senior-level UNSC members to learn, engage, and get up to speed. The YEP Com provides an opportunity to grow your network, connect with USNC members in adjacent disciplines, build leadership skills, and increase opportunities for international collaboration through the USNCs ties in the IEC. For interested readers, the YEP Com would like to highlight several opportunities to become more involved within the USNC.

After the official launch of the U.S. YEP Program this Fall, the attention of the YEP Com will shift towards implementation through four task forces. These task forces will focus on 1) Outreach + Recruitment, 2) Programming + Events, 3) International Collaboration, and 4) Diversity, Equity, and Inclusion. Members of the Outreach + Recruitment task force will focus on national outreach to find and



engage interest with individuals outside of the USNC via other YP groups and standards organizations. The Programming + Events task force will be focused on developing webinars and content that support and engage with existing members of the USNC, such as promotion of the IEC Young Professionals Programme. The International Collaboration task force hopes to support preparations and programming for the 2022 IEC General Meeting, which the USNC is hosting in San Francisco, as well as engage and strengthen ties with other IEC member nations with active YP programs. Finally, the YEP Com has a strong commitment towards Diversity, Equity, and Inclusion (DEI) with this task force ensuring that all actions by the committee take an inclusive approach and how recruitment and engagement should move forward to ensure the USNC is fully representing all of its various stakeholders.

Another opportunity for interested USNC YEPs is the newly established USNC Professional Mentoring Program that supports one-on-one relationships between early career and more experienced members of the USNC community. The pilot for this program kicked off on January 27 with 11 mentor/protege pairs and will conclude at the end of June 2021. The pilot has been considered such a strong success that the USNC hopes this program will continue to foster YEPs to become more active in the standards and conformity assessment community for years to come. The USNC Professional Mentoring Pilot Program led to the one of the latest additions to the YEP Com, Alexis Bartels-Popelar (VIAVI Solutions), who was referred to the YEP Com by Elaina Finger (Corning Incorporated), and who recently joined as a member of TC 86/SC 86B/WG 4. Ms. Bartels-Popelar is quoted for wanting to join the YEP Com: "Although everyone I have met in the IEC space has been welcoming, I have found it can be intimidating as a young engineer and professional to participate in discussions while representing both my national committee and my company. As an early career professional, I would love to be able to connect and network with other young professionals, build confidence while participating in committee discussions, and have peers at a similar career level to collaborate

with while navigating standardization work." Ms. Bartels-Popelar is echoing the same concerns and issues that the YEP Com has heard from other early career members and the YEP Com's goal is to develop a supportive network and resources to give YEPs the knowledge and confidence to represent the USNC through their standards and conformity assessment work.

In addition, the USNC currently participates in 171 different TCs/ SCs/WG with the same number of corresponding USNC Technical Advisory Groups (TAGs). Many of the USNC TAGs are continually looking for new members and would be excited to welcome members of the YEP community who want to become more involved in the standards and conformity assessment process. This prospect may seem daunting to new and less experienced members, but the YEP Com can help make connections with the organizers of the USNC TAGs and promote new participants.

Regardless of the opportunity, the USNC YEP Com is here to support and help YEPs navigate the USNC landscape. Interested parties are welcome to reach out to Adelana Gladstein at agladstein@ansi.org with any questions or requests for more information. We look forward to continuing to grow our membership and the cohort of standards and conformity assessment professionals in the future!



#### **DECISION DEPOT**



This column provides easy access to recent decisions that have been made regarding IEC and USNC policies and procedures that directly affect our members. Click the link below to access the recent decisions.

See the Decision List below for decisions made at the IEC CAB web-meeting 49, held in Geneva on June 14-15, 2021 and IEC Council Board web-meeting held on June 17-21, 2021.

#### CAB: CAB/2098/DL

#### Council Board: CB/1210/DL

Please note that the next SMB meeting will be held on July 7-8, 2021.

## **Global Mindset for Standards Development**

by Muhammad Ali, CStd, Sr. Standards Strategy and Policy Lead, AMS, HP, Inc.



Cross-cultural competency has been named among the 10 most important skills for the future workforce by the Institute for the Future and this is going

to be a key to successfully working together in diverse teams. Standards Development is a collaborative activity and requires consensus to create novel solutions. International Standards Development Committees are diverse comprising of members from different countries with various cultures, perspectives, languages, areas of expertise, and way of working. Some of the most common challenges encountered in international standards development committee meetings include making decisions, expressing opinions, and presentations. Developing a global mindset in Standards Development requires cultural intelligence, building trust, and adaptability.

Cultural Intelligence is simply an ability and a skill set to function effectively in culturally diverse groups. The best way to develop cultural intelligence is to participate in international standards committee meetings. Usually, these committee meetings are held in different parts of the world and the participants not only get the chance to experience the culture of the host country and participants but also the participants attending from all over the world. The face-to-face meetings not only gives a chance to get to know meeting participants but also helps in understanding their thought process, the way they see things, and insights into their values and customs.



When you attend an international standards committee meeting, make an effort to utilize those coffee breaks, attend group dinners, and have informal conversations with meeting participants to improve on culture intelligence skills. These skills also help in negotiations and building consensus.

Building Trust in standards development committees can be achieved by being reliable, accountable and promoting transparency. It is important to participate actively in standards committee meetings, reviewing and providing feedback on drafts, voting on documents, and complying with applicable policies and procedures. If you take on a specific assignment as a committee member, such as contributing to a section in a standard, you need to make sure that you complete it on time and ensure that it gets presented properly. If you are proposing a new idea such as a proposed change in a standard or a

new work item proposal, be ready to explain how you came up with the idea, rationale, and any supporting data. As an officer of the committee, you should act in neutral capacity and should be driving the success of committee's program of work. It is imperative that you carefully and appropriately leverage national positions. For example, if you are acting as a delegate to the plenary of an international meeting, you need to make sure that your Head of Delegation is aware and educated on national positions and ensure that they deliver it. Another example of this would be if you are serving as an expert in a technical committee, be sure to not discuss or leverage any national positions at these meetings.

Adaptability is a personality trait that includes an ability to accept different perspectives, be open to new ideas and change, and willingness to cooperate. Many times, we experience committee members unwilling to even listen to or accept a counter proposal because either the idea or proposal they have agreed to have already worked somewhere else or they are familiar with it. However, it actually helps to have multiple proposals, review them thoroughly, and then make a decision. This is indeed how novel solutions are created within standards development. Committee members also need to be cooperative and willing to try new ideas. For example, if some members of the committee need assurance of whether a particular testing method would work before incorporating it in a standard, other committee members must be willing to have a round robin-testing or produce data to demonstrate and evaluate the testing method. ©

### **USNC LINKEDIN**



Would you like to stay updated with the news and events of the USNC? Join our LinkedIn Group to learn about and provide input on all issues electrotechnical that can affect your life, from your own home to the other side of the globe! If you have any information to share on LinkedIn, please contact Megan Pahl (mpahl@ansi.org).

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## USNC Concludes Professional Mentoring Pilot Program, to Launch Full-Scale Version this Fall

by Caitlyn Clark, Postdoctoral Researcher-Mechanical Engineering at National Renewable Energy Laboratory



In January of 2021, the USNC Communications Committee, with the support of the USNC Young and Emerging Professionals Committee, launched

a professional mentorship pilot program. This 6-month program hosted 11 pairs of mentors and protégés, across numerous technical subjects, with the intent to connect emerging and experienced professionals in the standards community to help retain and develop new members.

While international standards are an integral part of any functioning industry, knowledge around the standards development process is often not well understood by industry professionals. New and emerging professionals, meanwhile, have expertise in new technologies and methods that are integral to the continuation of standards development. As a standards community, we must "draw back the curtain" on standards to enable these new professionals to meaningfully contribute to their respective committees and thrive within the larger standards community. The **USNC** Professional Mentoring Program provides an informal avenue to achieving new member integration and success.

As a participating protégé, I can personally attest to the benefits of this pilot program. Despite being involved in a technical committee, an



advisory group, and the Young and Emerging Professionals Committee, I admit to feeling a bit disconnected to the grander landscape of standards development. My initial training a year ago consisted of reading the standards I would help maintain and attending meetings, volunteering for tasks in an ad-hoc fashion to get involved. Meeting with my mentor broadened my perspective to better understand how IEC operates as an organization, and also how different technical committees operate on their own. For instance, I learned how technical committees that write standards for consumer products require rapid development processes that align with industry progression, and have adapted their procedures to keep pace. My mentor was able to share her experience and connect me with resources that could help me better understand potential solutions

to challenges I see in my own industry. By understanding opportunities within IEC, I am able to better define how I can contribute to this vital organization.

The full USNC Professional Mentor Program will commence this fall, and is currently accepting applications for mentors and protégés. Mentorship pairs are required to meet monthly, with two additional check-ins with the other mentors and protégés. The program provides an opportunity for us all to connect with and learn from each other. If you are interested in participating this fall, please review the full program information and application here. Please contact Megan Pahl at mpahl@ansi.org with any questions. 🖨

# USNC Releases New Mission Statement and Exciting New Webpages

by USNC Staff

The U.S. National Committee (USNC) of the International Electrotechnical Commission (IEC) USNC released recently their new Mission Statement, with updates that are more inclusive of stakeholder groups, conformity assessment work, and global collaboration. As an action of the October 2020 USNC Council meeting, the USNC Mission Statement was circulated to the USNC policy committees for comment.

The approved USNC Mission Statement reads:

Coordinate the effective participation in the development of IEC standards and conformity assessment systems to facilitate trade and to promote global safety, efficiency, reliability and interoperability in the fields of all electrotechnologies. Provide a framework for USNC stakeholders to advocate for U.S. interests in international and regional electrotechnical related matters.

The USNC is also pleased to share two new exciting webpages: the USNC Hall of Fame and the USNC Young and Emerging Professionals webpage.

"Coordinate the effective participation in the development of IEC standards and conformity assessment systems to facilitate trade and to promote global safety, efficiency, reliability and interoperability in the fields of all electrotechnologies. Provide a framework for USNC stakeholders to advocate for U.S. interests in international and regional electrotechnical related matters."

#### **USNC Hall of Fame**

The USNC is proud to highlight its many members who have been recognized among a long, distinguished list of past honorees leaving their mark on the IEC, ANSI, and standardization community worldwide.

#### USNC Young and Emerging Professionals

USNC's new Young and Emerging Professionals webpage is a valuable resource, with updates on upcoming activities, recordings of past webinars, information about the USNC Professional Mentoring program, as well as the IEC Young Professionals Programme, and more.

For additional information on the USNC, please visit the USNC webpage.⊜

## IEC Officers from the U.S. Take the Lead

by USNC Staff

The USNC is thrilled to highlight USNC committee Officers from IEC TC 61 and IEC TC 82 who recently presented in IEC Academy webinars as part of the COPANT series.

On March 19, IEC TC 82 Secretary George Kelly, Assistant Secretary Liang Ji, and WG 6 Convenor Greg Ball provided an overview of IEC TC 82. Shortly thereafter, on May 6, IEC TC 61 Secretary Randi Myers and Assistant Secretary Grace Roh provided an overview of their technical committee, IEC TC 61. Each hour-long webinar gave viewers an overview of the history, scope, structure and list of published/under development standards of the respective TCs. A short Q&A session followed their presentations.

If you missed the webinars, the presentations and webinar recordings

are available via the IEC Academy website.

- » IEC TC 82 presentation and recording
- » IEC TC 61 presentation and recording

For a full list of webinars, please visit the IEC Academy website. 🗟

## **Call for Action and Participation in Standards!**

#### **USNC TAG Participants Needed**

IEC approved one (1) new Committee: IEC Technical Committee (TC) 129: Robotics for electricity generation, transmission and distribution systems

Individuals who are interested in becoming a USNC Technical Advisory Group (TAG) participant for the USNC TAG to TC 129: Robotics for electricity generation, transmission and distribution systems are invited to contact Ade Gladstein at agladstein@ ansi.org as soon as possible.

Please see the scope for TC 129 below:

Scope:

- » Standardization of robotics applied in power systems, i.e. power plants, substations, transmission and distribution lines, etc., mainly includes terminology, design, functions and performance, test methods, interfaces between robots and information systems, operation methods, and safety and security requirements.
- » Robot systems used in power systems shall include those travelling on rails, on ground (via unmanned ground vehicles), in the air (just like unmanned aerial vehicles based inspection robots), under water/liquid (via unmanned underwater vehicles), and on or inside equipment, etc.
- » Standardization of edge computing as well as diagnosis and analysis of information acquired by robot systems also falls in the scope of the TC.

This TC will coordinate with other relevant standardization organizations in the related fields, such as ISO/TC 299, and other IEC TCs which relate to industry specific applications, such as TC 82, TC 88, and TC 114. Robotics



for nuclear power applications is excluded from the scope of this TC.

#### International Electrotechnical Commission (IEC)

#### Strategic Group (SG) 12: Digital Transformation and Systems Approach – Participants Needed

Following the recommendations made by ahG 86 Future of Digital Transformation including system approaches in its final report, SMB approved to rename SG 12 as Digital Transformation and Systems Approach and revise its scope. Individuals who are interested in joining the USNC Virtual Technical Advisory Group (VTAG) to SG 12 are invited to contact Ade Gladstein at agladstein@ansi.org.

Please see the revised scope for SG 12 below.

Scope:

- » Define the aspects of Digital Transformation that are relevant to the IEC and its standardization activities.
- » Develop a Digital Transformation methodology for international standardization.

- » Act as Digital Transformation and Systems Approach competence centres within the IEC and provide associated expertise and advisory services to all IEC Committees.
- » Identify emerging trends, technologies and practices needed for the development, delivery and use of IEC's work.
- » Provide a platform for relevant discussion and collaboration with internal and external participation.
- » Coordinate IEC's activities with those of external entities (e.g. ISO, ITU).

#### Standardization Evaluation Group (SEG) 12: Bio-digital convergence – US Representatives Needed

During the February 2021 SMB meeting, a comprehensive

presentation on the topic of bio-digital convergence was provided and SMB recognized the importance of this research area for future IEC standardization activities. In order to investigate further the standardization potential of bio-digital convergence, SMB set up SEG 12 Bio-digital convergence. For additional information, please see the attached report and presentation for the upcoming SEG 12 meeting on July 8.

As this SEG is an open group, each National Committee is able to submit an unlimited number of experts to participate. Individuals interested in serving as a US Representative on SEG 12 and a member on the corresponding USNC Virtual Technical Advisory Group (VTAG) are invited to contact Ade Gladstein at agladstein@ ansi.org as soon as possible. Please see the scope for SEG 12 below.

#### Scope:

- Investigate current research and technology activities, identify critical challenges, and propose a roadmap for standardization in the area of bio-digital convergence.
  Ensure close cooperation with and encourage participation from MSB.
- » Engage with TC/SC/SyCs including JTC 1 and ISO, as well as with other market and policy relevant organizations, on existing standards and on the need for future standards related to biodigital convergence.
- » Formulate recommendations to SMB as appropriate. ☺



### **UPCOMING EVENTS**

Due to the ongoing health crisis, many upcoming events have been postponed or are being held remotely. Please check the website of the individual organization for up-todate information.

#### Save the date! IEC 2022 General Meeting, Host City: San Francisco

Sponsor the IEC 2022 General Meeting, hosted by the USNC

For only the seventh time since 1904, the United States is gearing up to host the IEC General Meeting, 31 October – 4 November, 2022, in San Francisco. 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 10-day event.

For more information, see the IEC 2022 Sponsorship Brochure or contact Adelana Gladstein at: agladstein@ansi.org or 212-642-4965.

## Thank you to the organizations already on board as 2022 IEC General Sponsors!





## **USNC 2021 IEC Young Professionals Competition**

Deadline: 16 July 2021

#### The 2021 IEC Young Professionals

Workshop will be held in conjunction with the 85th IEC General Meeting in Dubai, United Arab Emirates, 3 – 7 October 2021. An in-depth, five day\* workshop will bring together young professionals from around the world who are at the beginning of their careers in electrotechnical standardization and conformity assessment, and who have each been selected and recognized by their IEC National Committees. Due to the continued impacts of the pandemic and the uncertainty surrounding travel, this workshop will be held in hybrid format. If competition recipients choose to physically attend, they will be financially supported by the USNC for airfare and the IEC for five nights of accommodation. As we saw during the last in-person IEC General Meeting in Shanghai in 2019, there is a lot of enthusiasm surrounding the young professionals programs around the world. We are excited to continue this momentum in 2021!

\*In previous years, the IEC YP Workshop was held for only three days. This is the first year it has been extended to five days.

Interested parties should review the criteria and nomination process for this competition before completing the nomination form. Nominations should be submitted to Ade Gladstein (agladstein@ansi.org) no later than Friday, 16 July 2021.

## Get the most of your ANSI membership with a free webinar!

ANSI encourages you to take the first step to see what you are missing, and, more importantly, to find areas where we can work effectively together. Find out why so many people value their membership in ANSI. Join in our upcoming webinar and ask us!

These interactive 30-minute webinars — held on the first Friday

of each month and free of charge — are hosted live and provide an overview of ANSI's activities, as well as information on how to take full advantage of ANSI membership. A Q&A session encourages active dialogue between all participants.

For more details, visit our website!



#### **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

Contributions are gladly accepted for review and possible publication, subject to revision by the editors. Submit proposed news items to: Megan Pahl, mpahl@ansi.org.