A DECADE IN REVIEW, WHERE ARE WE NOW?

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FEATURED STORIES

A Decade in the Making

What Diversity Means at UL Standards

Inclusive Terminology in Standards Development

USNC Remembers Don Heirman

INCITS Technical Committee on Internet of Things and Related Technologies...

Utilizing Remote Assessments as a tool in the Accreditation Process

IN THIS ISSUE

8 Decision Depot

14 ANSI COVID-19 Response

16 Call for Action and Participation
A Decade in the Making: The U.S. National Young and Emerging Professionals Program

By: Ethan Biery, Design and Development Leader at Lutron Electronics Co. Inc.; Jonathan Colby, Director of Technology Performance at Verdant Power; Ade Gladstein, Program Manager – International Policy at USNC/IEC; Carolyn Hull, DICOM General Secretary at Medical Imaging and Technology Alliance, a Division of NEMA; Carrie Schmaus, Technology Manager at US Department of Energy; Nathan Tom, Researcher IV - Mechanical Engineering at National Renewable Energy Laboratory

The USNC’s young and emerging professionals (YEPs) have come quite a long way in the last decade. The USNC began participating in the IEC Young Professionals’ (YP) Program after the program’s inception at the 2010 IEC General Meeting that the USNC hosted in Seattle, Washington. Since 2010, the USNC has proudly sent 24 individuals to participate in the IEC YP Program. Four of those participants were elected as IEC YP Leaders: Jonathan Colby (2011), Manyphay Viengkham (2012), Ethan Biery (2013), and Carrie Schmaus (2018). After the USNC YEP Committee was formed in 2016, the group has grown to over 25 members who come from a variety of backgrounds, including government, academia, industry, standards developing organizations, and trade associations, among others. We facilitate and coordinate opportunities for individuals with an interest in participating in standardization and conformity assessment activities to become engaged with USNC and IEC programs, trainings, and events. The USNC YEP Committee appreciates the USNC leadership’s continued support of their efforts. “One of the ‘shining stars’ of the USNC has been the YEP Committee! These young and emerging professionals have increased their membership, while growing interactions with other international YP counterparts. They have been enthusiastically working towards establishing a formal US YP program, and I look forward to hearing their proposal in early 2021. I want to congratulate them on their efforts so far and encourage them to continue to expand their scope of activities. The USNC needs their innovative ideas if we are to continue to grow our global influence. Keep up the good work!,” said USNC President Kevin Lippert.

As Kevin mentioned, the USNC YEP Committee’s focus in 2020 has been to work to establish a national YEP program in the U.S. The goal of this program is to create a platform for active engagement among all YEPs with interests in standards development and conformity assessment in the U.S. A national YEP program would greatly expand the number of professionals the USNC’s YEP Committee could engage, beyond the few selected each year to represent the U.S. at the IEC General Meeting. USNC General Secretary Tony Zertuche noted that, “It is widely held that the IEC YP Program is the single most important initiative by the IEC in the past decade. We recognize the importance of succession planning, as well as the value of new perspectives and fresh ideas in the standards development and conformity assessment arenas. The USNC strongly believes in the current and future value of such programs to the work of the IEC as well as the U.S. standardization structure as a whole. That is why the work of the USNC YEP Committee is so vital to the health and success of IEC work in the U.S. After a couple of stalled attempts over the past few years, it now appears that the USNC YEP Committee is starting to take root and thrive. The efforts of the USNC YEP leadership and committee members have succeeded in establishing a true, national young professionals program in the United States that will strengthen our standards and certification infrastructure for many years to come.”

From the inception of the IEC YP program, U.S. participants have found great value in participating, both personally and professionally. The first US IEC YP Leader, Jonathan Colby (2011) from Verdant Power, can attest: “Attending the IEC YP Program in 2011 was an incredibly powerful and meaningful experience for me. While I was involved in IEC activities already, the experiences I had and connections I made at the 2011 IEC YP Program were invaluable. Since attending, my involvement in the IEC has grown in
ways I could have never imagined: serving as the Chair of IEC TC 114 (Marine Energy); helping to establish a new Conformity Assessment System for Renewable Energy (IECRE); joining a Council Board Working Group on Masterplan Internal Transformation; and serving in various USNC/IEC leadership positions, management boards and other committees. I have been able to travel the world to interact with a broad range of electrotechnical experts and I have been able to establish connections with the International Energy Agency (IEA) and the UN Group of Experts on Renewable Energy (UN GERE), among others. Further, I have been able to enhance the visibility of my company, Verdant Power, and the broader Marine Energy industry globally. Without exaggeration, the IEC YP Program was a life-changing experience for me.”

Ethan Biery (2013) from Lutron Electronics, agrees on the profound impact of the program: “When I was selected for the IEC YP Program in 2013, I had somewhat limited exposure to international standards. Most of my experience by that point was limited to working on a few narrow aspects of NEMA standards. Being exposed to the breadth of IEC standards through my experiences at the General Assembly was an experience that I could not have gained any other way. That workshop not only taught me the collaborative process that is required for effective standards work, but also the importance of networking and growing relationships with colleagues from other countries. My participation in the IEC YP Workshop, and subsequently attending it as a leader the following year, provided me with experiences and skills that I have used and built upon in my career following the event. Besides growing my involvement in the USNC by becoming a member of the Technical Management Committee (TMC), I have been able to apply what I gained at the Workshop to better answer standards-related questions within my own company. Having the knowledge of what goes on ‘behind the scenes’ in standards development enables me to better assist colleagues in their use and interpretation of completed standards. Having a ‘seat at the table’ in the standards-making process allows Lutron to get advance visibility into changes, as well as ensure our interests are properly represented on a national and global level.”

The impact of the IEC YP Program is clear, so a logical next step was turn our attention to the U.S. Inspired by the Young Professionals we met at the 2019 IEC General Meeting in Shanghai, and bilateral meetings with enthusiastic countries with robust young professional programming, future members of the USNC YEP Committee gathered to brainstorm at a roundtable during World Standards Week in November 2019. Around a table in downtown DC, former IEC Young Professionals from the U.S. and other interested World Standards Week attendees envisioned a U.S. national Young and Emerging Professionals program, including challenges and potential solutions to undertaking this exciting, but daunting, task. At the end of the day, having learned from other countries about their successful standards and conformity assessment programming for their future leaders, we asked ourselves: why shouldn’t the USNC do the same?

To begin, we decided to plan by drafting a framework. The framework outlines our goals, challenges, and action plans. Members of the USNC YEP Committee have drafted the framework together and discussed it in painstaking detail during hour-long monthly calls. Collaboratively drafting the document has helped the group establish its strategic objectives, value proposition, challenges, solutions, and perhaps most importantly, an action plan. We look forward to sharing this document with a wider audience early next year.

Although we are proud of our process so far, it is clear challenges remain in maintaining a strong United States program over the next decade. One major priority in the Committee’s process is expanding the diversity—gender and race/ethnicity, but also regional and discipline/expertise—of our committee, a process we began by taking stock.
of our current membership so we know where to focus future outreach efforts. Although one might assume this would be a relatively simple challenge to overcome, this is not an uncommon issue amongst other professional committees. One plan we have to address this challenge is to utilize our experience connecting electronically during COVID to host interactive, interesting events such as webinars, virtual meetings, and virtual networking events, ideally increasing the accessibility of potential YEPs to join from all over the country.

On an individual member level, one of difficulties stated by current YEPs is participation in the USNC YEP Committee is dependent on supervisor support. This can be difficult to get approval for the necessary time and travel to participate in day-long workshops, especially those geographically spread out, but virtual collaboration platforms are improving access for more YEPs.

Finally, we know a core element that will contribute to our success is encouraging involvement from the senior members of the U.S. standards community. The USNC YEP Committee will help educate and mentor future YEPs, but sustained involvement will be dependent upon opportunities for the YEPs and their organizations within the USNC. Enthusiasm and involvement amongst the USNC YEPs will diminish quickly if members do not observe examples of successful opportunities given to YEPs to demonstrate their capabilities within the standards community.

Therefore, it will be equally important for the USNC members to work with the YEP Committee to identify and commit to providing opportunities to the YEP network when available. Though these are real challenges, the YEP Committee is confident we can overcome them and cement our involvement within the USNC over the next decade.

Nationally, our goal is to increase the general interest and knowledge of standards and conformity assessment—a process central to our society’s safety and sustainability, but a topic often ignored. Ultimately, the YEPs integrated into the USNC and IEC today will be the innovative leaders of tomorrow, and we are proud to have a hand in advancing standards and conformity assessment around the globe. Over the next decade, our hope is to see increasing participation, diversity, and national and international leadership of YEPs in the U.S. Perhaps 2013 IEC YP Leader Ethan Biery said it best when he said, “As our societies, systems, and technologies become more interconnected and more business and supply chains become globalized, the need for up-to-date standards and the active participation in their development will only become more important. Having young professionals involved in the process is beneficial for all, for not only do they provide a fresh perspective and new ideas, but their experiences today will become the foundation for their leadership characteristics in the future. I am encouraged to see the continued growth of YPs in the USNC and IEC. Having a national YEP program will bring the U.S. in line with many other countries that have had similar programs for years, and ensure the US plays a leading role in standards development within the IEC and beyond for the coming decades.”

Current YEP Committee Chair, Carrie Schmaus, agrees and adds, “The future of the YEP Committee is bright!”

The USNC YEP Committee is currently welcoming new members. Please contact Ade Gladstein (agladstein@ansi.org) for information on how to join the Committee.
What Diversity Means at UL Standards
by Grace Roh, International Standards Specialist at Underwriters Laboratories, Inc.

At the end of 2019, my husband and I bought our children a photo box to create a 2020 time capsule. Since then, they have shoved a myriad of items into the box to remember this unusual year. We have also chosen one photo of them each week to include in their boxes. They are already anticipating looking back and laughing at themselves in their Star Wars pajamas hugging the Mickey Mouse doll they sleep with in their arms every night.

There is no physical time capsule here at UL Standards. Looking back, it’s easy to identify the changes that have been made over an extended period of time. Some on our staff remember a time when our standards development process was carried out quite differently. This involved lots of copied papers, red pens, rulers, envelopes and stamps. Our project managers would physically underline and cross out the changes proposed in a standard, send each proposal out by mail for review, vote, comment, and wait for all the ballots to be returned. I think our experienced project managers enjoy sharing this story to watch our mouths slowly drop in disbelief. This story also reminds me to pause and thank my inbox full of emails.

If there were a physical time capsule box we could open up from a decade ago, what would that look like? A current photo of the standards department would look vastly different from one taken a decade ago. On closer inspection, many of the faces would be the same. (To my friends here at UL, yes, you look exactly the same.) An analysis of our department shows that 37% of the staff worked in standards for over twenty years, a testament to the value and commitment of our mission of working for a safer world. 42% have worked for five years or less, bringing new energy as we look to the next 10 years of standard work. The organizational chart is no longer based on office locations, but rather displays growth in the variety of teams and areas of focus.

A mindful approach to building teams that work in standards is an important effort that, unlike our other initiatives, has no completion date. The end goal is not just to have a diverse group of people comprised of different races and ethnicities, educational backgrounds, genders, ages and other attributes, but to utilize diversity to further our mission. A diverse team challenges old assumptions and adds new perspectives. We know that innovation and new ideas rarely happen in isolation. Instead, differences can be a catalyst to make fresh connections that spur on new solutions and ideas.

Our overall department has not only grown in size, but has diversified in age, race and educational background. In the past decade, a shift was made to expand our teams and hire in fields outside of engineering. We value the strengths and skills that could be brought in by staff with diverse disciplines to impact areas such as project management, organization, and communications. Our ability to see our mission continue meant that while growing the department, it would need to include a younger staff that could glean from the experience of our seasoned staff and develop as new leaders.

A significant change at UL Standards are the women who have taken leadership roles such as our directors who lead our operations and international outreach efforts. Historically, the majority of leadership positions were held by men, which also extended to the makeup of the people that that served as chairs of
our consensus bodies, Standards Technical Panels (STPs), as well as those who served as secretaries of US Technical Advisory Groups (TAGs) and IEC Technical Committees (TCs). It was only about a decade ago that women were starting to take on more of these leadership positions. We are excited to have the opportunity to support women in leadership development and offer mentorships for them to take on STP roles and lead initiatives.

We have extended that philosophy to building diversity within our STPs and technical committees (TCs). Our STPs previously consisted of the three traditional categories of user, producer, and general interest and was then extended to nine separate categories to broaden the types of stakeholders participating and encourage a range of perspectives. We encourage diverse ideas to help us make the greatest impact in the development of standards and standards solutions.

We strive to leverage diversity to make the world a safer place. Our growing international standards staff is a great example of how diversity allow us to reach stakeholders around the world more effectively. This team helps to connect with stakeholders in their native language and local regions, allowing us to better understand and meet national and regional needs. Over the past decade, we are proud to have grown and diversified our team as we tackle challenges with new perspectives. In addition to Canada and the U.S., we have standards staff located in China, India, Singapore, Denmark, and Mexico.

Most recently, UL Standards has also taken steps to put diversity and inclusion at the forefront by establishing an internal council charged with overseeing and facilitating diversity and inclusion enhancements within the organization. We stand behind our commitment to diversity and inclusion, and we remain steadfast in our belief for equality, respect and inclusivity for all people. This is not to gloss over the reality that diverse teams require extra effort and make achieving consensus more difficult. In a year full of virtual meetings, I have had the experience of being able to attend IEC TC meetings as an assistant secretary for TC 108 and TC 61. I quickly learned that there is not much everyone will agree upon, especially in the initial discussion. Opinions change. Questions are asked. Clarification is needed. Further questions are asked. Many times, it means that more research, data, and work is necessary. Trying to come to consensus with national committees represented from all over the world is a feat of its own, and I marvel that TC Chairs volunteer to take on this position. At the end, the standards that are produced are more robust, representative of international interests, and are widely accepted worldwide.

Diversity in all forms allows us to build stronger teams to pull from. It is expected that the deliberate steps in this area will yield committee members and leaders that bring a variety of strengths to further safety in standards. Our team photo 10 years from now should reflect growth and a few new faces as we grow and continue to become more diverse but with the same mission-based commitment to standardization and working for a safer world.

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Diversity and Inclusion at all levels drives innovation and performance. Language and terminology in Standards, procedures, and relevant documentation is a powerful tool for building inclusion and supporting diversity. Language that is racially, ethnically, and culturally inclusive is effective in promoting respect, reflecting diversity, and avoiding negative stereotypes. In addition to incorporating inclusive terminology, gender specific language should be avoided.

The United Nations Sustainable Development Goals (SDGs) are a universal call to action to protect the people, planet, and community along with improving the lives and prospects of everyone, everywhere. The 17 Goals were adopted by all UN Member States in 2015, as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals. The SDG 5 specifically calls out to achieve gender equality and empower all women and girls. United Nations Economic Commission for Europe (UNECE) Declaration for "Gender Responsive Standards and Standards Development" took place on May 14, 2019. The declaration acknowledges Goal 5 of SDG, the influential role of standards in society, and recognizes that the content of standards and engaging in the standards development process are opportunities for women’s empowerment. To date, many standard bodies including ISO, IEC, and ITU have become signatories on the declaration.

Gender equality is a key component of social responsibility, and the empowerment of women and their equality in society is underlined in ISO 26000, Guidance on social responsibility. IEC has recently published its diversity statement. IEC and ISO have also jointly created a strategic advisory group on diversity to create tools ensuring that standards are gender responsive. The expected outcomes from this JSAG would be procedural revisions, gender responsive data in standards development, guidance for technical committees, and recommendations to improve gender responsiveness of the standards development process. ISO has also published a Gender Action Plan (2019-2021) outlining five priority areas which includes collecting data on gender representation, collecting case studies and best practices on standards in support of gender equality, assessing gender responsiveness of the standards development process, raising awareness on standards in support of gender equality and women’s empowerment, and publishing ISO’s policy on gender. Standards, guidelines, procedures, and other relevant documentation should use inclusive language that is gender neutral whenever possible. For example, using chair instead of chairman, using people/human beings/public/society instead of mankind, using first language/native language instead of mother tongue etc. Similarly, inclusive language must also be using affirmative terms whenever possible. The use of idioms, jargons, and acronyms not properly defined should be avoided. For example:

» The terms “master/slave” to describe a model where one device or process controls another as subordinate should be avoided. Alternatives such as “main/secondary,” “primary/secondary,” “primary/replica,” “host/target,” “leader/follower,” “orchestrator/worker,” “initiator/responder,” or similar descriptive terminology should be used as applicable and where possible.

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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 the decision at SMB 169, Council, CB, and CAB 48 held virtually during the week of November 9, 2020.

SMB: SMB/7140/DL
Council: C/2315/DL
CB: CB/1165/DL
CAB: CAB/2037/DL
USNC Remembers Don Heirman

by USNC Staff

Donald N. Heirman, former U.S. Navy Commander, internationally known expert in the field of electromagnetic compatibility (EMC), and president of Don Heirman Consultants, passed away on October 30, 2020 in Lincroft, New Jersey at 80 years old. The USNC extends its condolences to the family, friends, and former colleagues of Don, and remembers him for his significant contributions to EMC and the electrotechnical standardization community.

Don was an Honorary Life Member of the USNC and respected leader of a number of U.S. and international EMC standards organizations including chair of the IEC International Special Committee on Radio Interference (CISPR), ANSI ASC C63 immediate past chair, and chair of the C63.4 (emission measurements) Working Group, the Institute of Electrical and Electronics Engineers (IEEE). He was the chair of the IEC’s Advisory Committee on EMC and sat on many USNC technical advisory groups including TC 22, TC 77, and TC 106. He was also the past president of the IEEE Standards Association (SA), past member of the SA Board of Governors, and past member of the IEEE’s Board of Directors and Executive Committee. He taught the practical application of EMC compliance measurement standards at Purdue University in West Lafayette, Indiana.

Don’s contributions to his EMC discipline were so far-reaching that he donned the moniker “Mr. EMC Standards.” Of his many international awards, in 2008, Don was honored with the highest award in the IEC—the prestigious IEC Lord Kelvin award—at the IEC General Meeting in Sao Paulo, Brazil, for his countless contributions to global electrotechnical standardization in the field of EMC. In 2017, as an esteemed leader in the electrotechnical sector worldwide for several decades, Don was awarded with ANSI’s Elihu Thomson Electrotechnology Medal, which honors an individual who has contributed in an exceptional, dedicated way to the field of electrotechnology standardization, conformity assessment, and related activities at the national and international levels. In 2018, he received the IEEE Richard M. Emberson award for leadership and service to industry and the IEEE and for distinguished service to the development, viability, advancement, and pursuit of the technical objectives of the IEEE. He was a life Fellow of the IEEE and an honored life member of the IEEE EMC Society and past member of its Board of Directors, chair of its technical committees on EMC measurements and Smart Grid, past vice president for standards, past IEEE EMC Society president, and past chair of its standards development committee.

Don was also a consultant on Smart Grid matters for the Conformity Assessment Section of the American Council of Independent Laboratories. He was a voting member of the U.S. Smart Electric Power Alliance (SEPA) and vice chairman of its Testing and Certification Committee. He also chaired the SEPA Electromagnetic Interoperability Issues Working Group, which provides EMC recommendations for Smart Grid equipment and systems. Don retired from the military in 1985. A video highlighting his career and advice, “A Professional Life,” is posted on his website.

USNC celebrates the life of Don Heirman for his many contributions and achievements.
INCITS Technical Committee on Internet of Things and Related Technologies Work, including Trustworthiness

by INCITS Staff

INCITS/IoT, the U.S. Technical Advisory Group for ISO/IEC JTC 1/SC 41 on the Internet of Things and Related Technologies, represents U.S. interests in the development of international standards. The committee is actively working on foundational standards, interoperability, applications and use cases for the Internet of Things (IoT) and related technologies. These include applications in industrial IoT, wearables, Smart Cities, utilities & Smart Grid, agriculture, societal and human factors in IoT based services, Integration of IoT and distributed ledger technologies (blockchain), and other vertical-specific applications.

The scope of the Internet of Things is vast, and its applications transcend economic sectors and can be integrated into seemingly endless end user markets, including home-based consumers, manufacturing processes, and industry.

» The combined IoT market is comprised not only of devices, such as soil temperature/moisture sensors, actuating stepper motors in manufacturing equipment, webcams and home voice controllers, but also a variety of software solutions, including cloud-based infrastructure, communications platforms, analytics platforms, and Operating Systems. Trustworthiness within IoT systems therefore can be incredibly complex, requiring the protection of end users’ privacy and data by protecting the device and accompanying communications networks, cloud providers, data aggregators and analytics platforms, and any number of other related applications that are required for device functionality.

Risk, therefore, must also be assessed across the IoT value chain, in ways that differ from traditional IT devices.

» For example, unlike conventional IT systems, many IoT systems can interact with devices and modify device properties in the physical world in response to remote commands, such as in the case of a smart thermostat or an insulin pump. In the latter example, the risk of a ransomware or malware attack may have significant consequences on human health.

» While there is no one internationally accepted definition of IoT, many definitions have arisen within economies, standards development bodies, think tanks, and industry associations. For example, the International Standards ISO/IEC 30141 and ISO/IEC 20294, developed by ISO/IEC JTC 1/SC 41, provide a reference architecture for IoT as well as a set of common terms and definitions. However, other bodies and alliances such as IETF, IEEE, IPSO, Open Interconnect Consortium, and Thread Group, among others, have diverging definitions, potentially changing the scope of trustworthiness across the IoT value chain because of possible inconsistencies.

» A key activity is to address IoT Trustworthiness concerns. IoT devices can be used by unauthorized third parties as access points to form networks of Internet-connected externally controlled devices, or “botnets.” Devices
The complexity of securing each component, sometimes across borders, existing global standards pertaining to trustworthiness risk management in conventional IT may not adequately address the unique challenges of IoT systems. Members of INCITS/IoT have the unique opportunity to make their voices heard on the development of standards and uses cases on IoT and related technologies. This group also provides the opportunity to collaborate with experienced peers while serving the broader community of service organizations.

Join the current INCITS/IoT members Avail Medsystems, Dell, Discover Card, DoD, Evanhoe & Associates, Farance Inc, Hitachi Vantara, Intel, ITRI, John Deere, Lockheed Martin, Microsoft, Oracle, NIST, NSA, VMware and WSN Technologies, in this work.

Membership provides the opportunity for international leadership roles for project leader/editor, Convenors. Members participate in virtual meetings and one to two face-to-face meetings per year and are encouraged to contribute to the development of international standards related to IoT. All members are also eligible to attend national and international meetings; the INCITS/IoT meetings are scheduled monthly. To learn more about membership in INCITS/IoT visit http://www.incits.org/participation/membership-info.

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Utilizing Remote Assessments as a tool in the Accreditation Process

by Dr. George Anastasopoulos, VP, Global Development & Compliance, International Accreditation Service, Inc.

Organizations around the world have pivoted to remote work amid the COVID-19 pandemic. And to a remarkable extent, many of them have been able to successfully carry out much of their business operations. Among those organizations are accreditation bodies that have chosen to replace a significant part of their onsite assessments by remote assessments. My colleagues at IAS and I have implemented these remote practices in the past due to extraordinary circumstances. Still, it was only the last few months, during the COVID-19 pandemic, that we at IAS systematically utilized remote management system assessments as a standard practice for a considerable number of carefully selected assessments, based on the complexity of the scope of accreditation.

A remote management system assessment is when electronic means are used to collect assessment evidence by utilizing electronic communication tools. A remote assessment means assessing from a remote location. According to IAF ID 12:2015, remote assessment is defined as “…the facilitation of assessment of a Conformity Assessment Body from a location other than that being physically present.”

The methods used to converse from a remote location may include one or a combination of technologies such as telephone communication, videoconferencing, e-mailing, online chat rooms etc. The new ISO 19011:2018, Guidelines for auditing management systems has already incorporated language to address remote management system audits.

The obvious benefit of remote assessments is more efficient use of resources. Remote assessment techniques can save assessor travel time and expenses. It will also facilitate situations where a site is not easily accessible, or when there is an urgent need for assessment, and in extraordinary situations such as medical emergencies, quarantines, pandemics, etc. On the other hand, remote assessments need more time for preparation and implementation and in many cases, they don’t provide the same flexibility as the on-site assessments.

Collecting Data, Information

The primary concern when performing remote management system assessments is to ensure that whatever means are used, the credibility of the assessment results is maintained. The outcomes/deliverables of the remote assessment are expected to be the same as the ones collected by an assessment in which on-site or direct means are used to identify evidence. The same agenda assessment report and checklist documents should be used.

During the remote assessment, appropriate data is collected to verify conformity to the assessment criteria. The data must be enough to verify conformity, free of bias and representative of the current status of the area/activity being assessed.

In order to achieve assessment efficiency by recording and analyzing information provided electronically, the client should provide as much information as possible in advance of the assessment. We recommend using checklists requesting specific records, reporting on the controls in place, and outlining any recent changes in systems or processes.
Three elements of an assessment are affected when the assessment is performed remotely:

**Interviewing**
This can be conducted remotely using teleconference technology. In preparation for the remote interview, it is important to agree well in advance on which types of software will be utilized. Ensure that both parties have access to compatible operational instrumentation, software/apps, microphones, speakers, and video cameras. Time differences and ensuring a quiet place in your home are other things to consider.

IAS has also found it helpful to have a pre-interview questionnaire for the client to answer. This practice has allowed for better preparation of the actual interview questions. In addition, the following remote assessing issues should be considered:

» Thorough preparation so interviews are punctual.

» The room to be used for the interview is suitable.

» Become familiar with the communication equipment/software/app.

» Beware of weak or unstable internet connection. (Be prepared to use telephone if internet connection is not stable).

» Considerations regarding usage of cameras and video equipment that could be banned due to security issues.

**Reviewing and verifying documents and records**
This process can be performed off-site if the assessor has access to any kind of electronic document control system. Records can be forwarded to the assessor, as requested, using different methods like email, Skype, WebEx etc.

Since the assessor may need to select records to be verified during the interview, such as test reports, inspection or calibration reports, certificates, or personnel files, off-site document verification could be just as effective as on-site assessment, and could even save time.

The potential issues to consider and resolve before the remote assessment are the need for scanning equipment for paper copies (if any) gaining remote access to the documents used by the client, and the time it takes to be trained on accessing and navigating the document control software/app.

**Witnessing**
Remote assessment practices for actual witnessing (of a process such as a test, or inspection, or audit) can be used to collect data online. Collecting data remotely is more demanding than in real time or on-site. It is possible to use a camcorder or a digital camera to observe the process and review related evidence. Surveillance cameras could be used, though we recommend against them because their quality or functionality could be inadequate.

Each situation should be evaluated based on data access and importance of the process or assessment risk. For some remote assessments, data collection may need to be skipped or verified during a later on-site assessment.

For remote assessments, observing specific processes may not be important for certain areas. For example, setting up cameras to watch the human resources or purchasing department at work is not going to yield new information than asking the required data directly by the auditee.

But watching the lab’s specimen conditioning area or observing the testing area surroundings could be important because there may be physical signs effecting testing implementation. Similarly, during process implementation, ongoing process controls or process outputs need to be observed and appropriate real-time video surveillance may be needed.

**Remote Assessment Considerations**
The following questions should be answered when preparing a remote assessment:

**Assessment scope and objectives or purpose.**
Can the remote assessment be performed during an initial accreditation, a surveillance, a reassessment and/or scope expansion?

It is important to consult the respective program manager for instructions per case.

**Nature of the processes to be assessed.**
Does the process to be assessed involve oral communication or documentation, retrieval of records and document control?

**Type of instrumentation, equipment and materials involved in the process to be assessed.**
Which parts of the (testing/calibration/inspection etc.) process should be demonstrated?
Define which parts of the operation need to be observed and are critical for verification of conformity.

**Number of client facility areas that the assessor wishes to observe.**

Which areas should be covered?
Identify the areas to observe in advance.

**Scheduling**

What is the preferable time to schedule the remote assessment?
Be mindful of time zone issues.

**Time management**

How long will the remote assessment take?
IAS has performed a series of pilot remote assessments in the past.
What we found was that additional time is required to perform a remote assessment at the same level of quality as a regular assessment. Therefore, we recommend to schedule additional time and be well prepared before the on-site assessment, addressing the issues noted above.

**Communication tools**

Will the communication tools be adequate?

Consider the availability of appropriate electronic communication equipment, as well as the capability of the team and client to operate electronic communication equipment and address any applicable security requirements.

A trial meeting with the client using the agreed-upon media platforms could be conducted to ensure that the scheduled assessment will perform as planned.

**Conclusion**

A remote assessment for accreditation purposes can be considered in many cases (depending on the applicable accreditation standard and the scope of accreditation) as an acceptable alternative to on-site assessments during extraordinary circumstances such as a pandemic. Accreditation bodies around the world have implemented such assessments during the COVID-19 pandemic successfully carrying out much of their accreditation operations. Success is heavily dependent on the availability of the appropriate instrumentation and software, the careful preparation and the adequate training of involved staff. While on-site assessments are still a superior auditing tool for accreditation purposes, in these extraordinary times, being mindful of key considerations can lead to a successful remote assessment.

**Bibliography**

» IAS SOP 28, Conducting Remote Assessments, October 2019

» IAS Remote Assessment Guide, v1, April 2020


» ISO 19011:2018 Guidelines for auditing management systems


» Remote Control, is e-auditing the next logical step? by J.P. Russell

» Remote Audit: Out of Sight but Not Out of Mind, by David Ade

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ANSI Offers First-Ever IEC Commented Redline Version of IEC Standards

by ANSI Staff

The American National Standards Institute (ANSI)—the U.S. member body to the International Electrotechnical Commission (IEC) via its U.S. National Committee (USNC)—announced the availability of a new IEC value-added product, the Commented Redline Version (CMV). Three versions have been released at this time:


An additional CMV will be published by IEC and made available through ANSI: IEC 60079-10-1:2020, Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres, and is expected to be available through ANSI before the end of 2020.

The Advantage of Commented Redline Versions

With the Commented Redline Version, stakeholders can view comments on the major changes between the previous edition and the new edition of the publication, including the committee's explanation and rationale for changes. CMVs can also include information on the impact on the changes on the application and usability of the standard. CMVs consist of a package, which includes both the new edition of the publication, and the Commented Redline Version.

With the addition of comments on the major changes, CMVs are an enhanced version of the traditional IEC Redline Version (RLV), which highlight only the changes between the previous edition and the new edition.

SEE THE UPDATED USNC WEBSITE!

The USNC has a fresh and new look to our website!

Go to www.ansi.org/usnc and check it out.

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).
USNC Participants Needed For:

USNC Virtual Technical Advisory Group (VTAG) for Strategic Group (SG) 11: Hot Topic Radar

Since the inception of SG 11 in 2017, its task has been to proactively monitor emerging issues, including technological changes and other challenges to the technical work of the IEC. SG 11, which reports to the IEC Standardization Management Board (SMB), observes major trends and identifies hot topics based on the need for potential new standardization activity.

SG 11 has identified the following seven areas as hot topics:

» Energy efficiency via electrification of transportation
» Electrification
» Next generation virtual technologies
» Next generation batteries and storage
» Smart systems
» Risk management
» Climate change

Individuals with expertise in the areas listed above as well as individuals with expertise in additional areas they believe to be current hot topics are encouraged to join the USNC VTAG. Anyone who is interested in participating in the USNC VTAG for SG 11 is invited to contact Ade Gladstein at agladstein@ansi.org as soon as possible.

Please see the scope for SG 11 below.

Scope

SG 11 to proactively monitor emerging issues, including technological changes and other challenges to the technical work of IEC.

Its tasks include the definition of a process and its implementation to:

» detect and maintain a list of hot topics
» recommend further steps to SMB.

In the future SG 11, will communicate closely with corresponding initiatives in MSB and CAB.

SG 11 is invited to report back at least once per year to SMB, starting with SMB 162 meeting in June 2018.

USNC TAG to IEC/TC 85

The USNC TAG Officers for the USNC TAG to IEC/TC 85 would like to grow the membership of the TAG. Individuals who are interested in joining the USNC TAG to IEC/TC 85 are invited to contact Ade Gladstein at agladstein@ansi.org as soon as possible.

Please see the scope for IEC/TC 85 – Measuring equipment for electrical and electromagnetic quantities below:

Scope

To prepare international standards for equipment, systems, and methods
and the mentor provides guidance to the protégé in order to assist in achieving the latter’s goals. A mentoring program would foster the growth of emerging standards and conformity assessment professionals and enable them to be successful in their endeavors, whether their goals are to take on leadership roles in US or international programs or to be successful contributing experts or delegates. The mentoring program can be seen as a way to retain new standards and conformity assessment professionals and as a means of filling the pipeline for future leaders in the USNC.

Our pilot program will span a six month period. Program participants are asked to hold, at a minimum, monthly calls with your mentor or protégé, however time spent shall not exceed five hours per month. There will be two formal check-ins with program administrators, one around the mid-point and one as the pilot wraps-up.

Individuals who are interested in joining the USNC Professional Mentoring Pilot Program either as a mentor or protégé, are encouraged to reach out to Megan Pahl (mpahl@ansi.org) for further information.
Case Studies Wanted for Standards Boost Business Portal

As we all look for ways to successfully navigate in this new environment, ANSI is interested in hearing your thoughts and ideas on updating some important information on the Standards Boost Business (SBB) portal, that includes adding (or updating) your testimonial or case study. These success stories represent a cross section of stakeholders that know the value of standardization and conformity assessment. With recent efforts to increase dialogue about the current U.S. voluntary standardization system, now is the time for the standards community to showcase the strategic value of the system to U.S. businesses, organizations, and government, and help corporate decision makers and senior public policy officials understand the critical importance of their participation.

The SBB campaign was launched in 2013 as a public awareness campaign intended to inform and educate C-suite (e.g., CEO, CFO, COO, etc.) executives, senior public policy officials, and upper/middle managers about the ways that standards and conformity assessment activities boost business performance and innovation, lower costs, and help U.S. industry to be more competitive in the global marketplace. Its goal is to increase awareness and understanding amongst businesses, organizations, government, young or emerging professionals, and students about the U.S. voluntary standardization system, and to promote a culture that values the infinite contributions standardization and standards professionals make to society.

To that end, ANSI has gathered various case studies and testimonials across industry to articulate the value of these activities. If you haven’t had the opportunity to review those and other important information on the SBB portal, a few key links are included below.

» Home Page: https://www.standardsboostbusiness.org/default.aspx
» Toolkit: https://www.standardsboostbusiness.org/toolkit.aspx
» Business Leader Video Testimonials: https://www.standardsboostbusiness.org/video.aspx

ANSI encourages you to consider adding your own success story to SBB by providing us a testimonial and/or case study on how "standards boost business" for your organization. We appreciate your consideration and welcome your participation. Please send your testimonials or case studies to sbb@ansi.org.

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-to-date 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 IEC 2022 sponsors!

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.

DISCLAIMER

The opinions expressed by the authors are theirs alone and do not necessarily reflect the opinions of the USNC or ANSI.

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.