USNC CURRENT

Vol. 18, No. 3 - Fall 2023

ARTIFICIAL INTELLIGENCE

ARTIFICIAL INTELLIGENCE

FEATURED STORIES

IN THIS ISSUE

STANDARDS VIEW ON GENERATIVE AI

Muhammad Ali, CStd Sr. – Standards Strategy and Policy Leader at HP, Inc.
Member of IEC SEG 12, SEG 14, and SEG 15

Generative artificial intelligence refers to the technology that generates text, pictures, sounds, videos, codes, etc. based on algorithms, AI models, and rules. From a standardization perspective, a generative AI is an AI system that produces synthetic data. In medicine, generative AI has the potential to provide advice to healthcare professionals. In the workplace, these tools speed up the writing of computer code, help with composing presentations, and perform summarization. These technologies can transform our lives in meaningful ways and bring benefits to consumers and businesses. As with any new, disruptive technology, there are also questions and concerns about the potential risks these models pose and what their application might mean for jobs, education, and the spread of misinformation.

AI vs ML vs DL vs GENAI

AI is broadly defined as the ability of machines to mimic human behavior. Common applications of AI are virtual assistants, healthcare, and AR/VR. Machine learning (ML) algorithms are a subset of AI that leverage statistical techniques to automatically detect patterns and make predictions or decisions based on historical data they are trained on, for example: credit scoring, the stock market, and weather forecasting. Deep learning (DL) is a subset of ML specific to artificial neural networks (ANNs) with multiple layers to learn hierarchical representations of data. Deep learning has shown tremendous success in various domains, including computer vision, natural language processing, and speech recognition. GenAI, a branch of AI and a subset of deep learning, focuses on creating models capable of generating new content that resemble existing data. Generative adversarial networks (GANs) are popular examples of generative AI models that use deep neural networks to generate realistic content such as images, text, or even music.

While no branch of AI can guarantee absolute accuracy, these technologies often intersect and collaborate to enhance outcomes in their respective applications. It's important to note that while all generative AI applications fall under the umbrella of AI, the reverse is not always true; not all AI applications fall under generative AI.

ARTIFICIAL INTELLIGENCE
Data and machine intelligence that mimics and scales human behaviors

MACHINE LEARNING
A subfield of AI where the "machine" is trained on historical data

DEEP LEARNING
A subfield of ML specific to ANNs where there are multiple layers of processing

GENERATIVE AI
A subfield of DL specific to generating content in a human-like way

Figure: Branches of Artificial Intelligence

RISK MANAGEMENT

There are inherent risks with GenAI applications. Risk management is a shared responsibility between stakeholders within the AI value chain. A key part of risk management is transparency in the AI value chain. Realistic risk management throughout the entire life cycle is critically important to identify risks and plan early corresponding mitigation approaches. Some of these risks include:

» **Misinformation:** Large language models (LLMs) present a number of challenges as their responses are not completely deterministic (the same prompt can generate different responses), making validation difficult.

» **Hallucinations:** As these models are essentially predicting the next word in a sequence, they often "hallucinate" and fabricate false information.

» **Bias:** Risk related to bias is not new or unique to GenAI models. Indeed, risk related to bias can be inherent to all AI models, especially when they are trained on data that reflects biases present in the real-world.

» **Security and Privacy:** Additionally, the ethical and legal implications of using synthetic data must be considered to avoid potential biases or misrepresentations. There are already concerns with generative models relating to the data used to train those models. Some of the issues include whether it violates intellectual property rights and the rights associated with the generated data, as well as the frequent examples of proprietary training data emerging unintentionally in generated results. For example, an LLM asked to produce computer code that accomplishes a particular task might output code that is very similar or identical to copyrighted code, or even code that has not been publicly released.

REGULATIONS

The G7 is an informal grouping of seven of the world's advanced economies, including Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States, as well as the European Union. Notably, the G7 digital and tech ministers called for collaboration on generative AI in the areas of governance, safeguarding intellectual property rights including copyright, promoting transparency addressing disinformation, and how to responsibly use these technologies.

The EU AI Act is a proposed European law by the European Commission announced in April 2021 on artificial intelligence—the first comprehensive law on AI by a major regulator anywhere. The goal is to increase trust and promote AI uptake. It has a targeted risk-based approach that aims to address risks of specific use cases of AI, categorizing them into four different levels: unacceptable risk, high-risk, limited risk, and minimal risk. It also covers general purpose AI applications. Like EU's General Data Protection Regulation (GDPR) in 2018, the EU AI Act could become a global benchmark, determining to what extent AI has a positive rather than negative effect on consumer lives.

The Cybersecurity Administration of China (CAC) has released the Measures for the Administration of Generative Artificial Intelligence Services, which included the following minimum requirements:

» Shall not infringe intellectual property rights

» If personal information is involved, legal basis shall be obtained.

» Guarantee the authenticity, accuracy, objectivity, and diversity of data

» Requirements for manual labeling in product development

STANDARDS

From a standardization perspective, synthetic data refers to artificially generated data that mimics real-world data and can be derived from real-world data or generated purely from algorithms or mathematical models. Synthetic data generation techniques include methods like generative adversarial networks (GANs), generative pre-trained transformers (GPTs), and large language models (LLM), such as ChatGPT and Google Bard.

Despite the significant progress that AI and machine learning have made in a number of different application domains, these technologies are also vulnerable to attacks that can cause spectacular failures with dire consequences. Generative AI models can also be used for malicious purposes. These attacks are defined in NIST AI 100-2e 2023 on Adversarial Machine Learning. This NIST AI report is intended to be a step toward developing a taxonomy and terminology of adversarial machine learning (AML), which in turn may aid in securing applications of artificial intelligence (AI) against adversarial manipulations of AI systems.

ISO/IEC JTC 1 TR 42103, Overview of synthetic data in the context of AI systems (ISO/IEC JTC 1 SC 42 project in progress), focuses on synthetic data and will aim to identify best practices for the generation, evaluation, and use of synthetic data in AI systems. This can help promote the responsible and effective use of synthetic data while addressing privacy concerns and improving the availability and diversity of data for AI research and development.

CEN and CENELEC, within their CEN-CLC/JTC 21 committee, have started developing standards in support of the future AI Act. The standards are expected to cover technical areas linked to the requirements covered in the AI Act proposal, as well as conformity assessment of AI systems and quality management systems. The focus is on risks that are common (horizontal) across AI systems. The standards should therefore contain implementable methods to verify compliance with technical specifications. These standards are to be published by April 30, 2025.

The U.S. Department of Commerce's National Institute of Standards and Technology (NIST) has released its

Artificial Intelligence Risk Management Framework (AI RMF 1.0), a guidance document for voluntary use by organizations designing, developing, deploying, or using AI systems to help manage the many risks of AI technologies. The AI RMF provides a flexible, structured, and measurable process that will enable organizations to address AI risks. Following this process for managing AI risks can maximize the benefits of AI technologies while reducing the likelihood of negative impacts to individuals, groups, communities, organizations, and society. NIST has established a Generative AI Public Working Group. The near-term goal in forming this Working Group is to gather public input to craft a cross-sectoral AI Risk Management Framework (AI RMF) Profile for Generative AI. Similar to AI RMF, the Profile is intended for voluntary use and to assist AI actors across the lifecycle in governing, mapping, measuring, and managing risks related to Gen AI. The four key areas include:

» **Content Provenance:** Provenance techniques can enable users to identify if the content they are consuming is AI generated or not. Provenance techniques can also enable individuals and organizations to trace protected content.

» **Governance:** Governance practices that are required to manage the risks of Gen AI.

» **Incident Disclosure:** Incident disclosure and information sharing are accepted practices when information system vulnerabilities are found.

» **Pre-deployment Testing:** Pre-release and pre-deployment testing techniques can enable developers to map, measure, and manage potential negative impacts prior to affecting users and consumers of AI technology. ⧉

USNC/IEC TRAINING & EDUCATION

New to USNC? The USNC provides education and training resources for electrotechnical standardization and conformity assessment.

We encourage you to take advantage of our training opportunities available now on the **USNC webpage**!

» USNC Constituency Training Modules

» USNC Effective IEC Participation Webinar (2023 Webinar now available!)

» Why IEC Standards Work Is Important to My Company

» Benefits of Standards Work for Emerging Professionals

Looking for more? IEC Academy & Capacity Building hosts frequent webinars. You can access past webinar recordings and register for upcoming webinars **here**.

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON STANDARDS DEVELOPMENT

ChatGPT, v3.5 – Chatbot, OpenAI
Not yet a member of any IEC committees
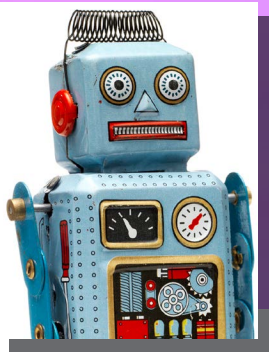
Artificial intelligence (AI) is transforming various facets of our society, and one area where its influence is increasingly pronounced is in the development of standards. Standards provide a framework for interoperability, safety, and quality across industries. As AI technologies continue to advance, their integration into the standards development process has the potential to revolutionize how we establish and adhere to benchmarks in various sectors. This essay delves into the ways AI is influencing standards development and its implications for industries ranging from healthcare to manufacturing.

EFFICIENCY AND AUTOMATION

AI has the capacity to streamline and automate many aspects of the standards development process. Machine learning algorithms can analyze vast datasets to identify patterns and trends, facilitating a more data-driven approach to setting standards. Automated processes can expedite the review of existing standards, ensuring that they remain relevant in a rapidly evolving technological landscape.

ADAPTIVE STANDARDS

The dynamic nature of AI technologies requires standards that can adapt quickly to changes. Machine learning algorithms can continuously monitor and analyze emerging technologies, helping standards evolve to accommodate innovations. This adaptability is crucial in industries such as telecommunications, where standards must keep pace with advancements in wireless communication technologies like 5G.

INTEROPERABILITY AND COMPATIBILITY

AI plays a pivotal role in enhancing interoperability and compatibility standards. With AI-driven systems, it becomes possible to create standardized interfaces that allow different AI applications and devices to work seamlessly together. This is particularly important in sectors like the Internet of Things (IoT), where a multitude of devices need to communicate and collaborate.

RISK ASSESSMENT AND MITIGATION

AI can assist in risk assessment and mitigation strategies during the standards development process.

Machine learning algorithms can analyze historical data to predict potential risks associated with certain technologies or practices. This proactive approach ensures that standards are designed to minimize risks and enhance overall safety in various industries.

PERSONALIZED STANDARDS

AI can contribute to the development of personalized standards that cater to specific needs. In healthcare, for example, AI can analyze individual patient data to recommend personalized treatment protocols. This approach could extend to the development of health-care standards that consider the unique characteristics and needs of each patient.

ETHICAL AND BIAS CONSIDERATIONS

The integration of AI in standards development necessitates a focus on ethical considerations. AI systems, if not designed and monitored carefully, can perpetuate biases present in their training data. Standards must be developed with a keen awareness of potential biases, ensuring fairness and equity in their implementation.

CONCLUSION

Artificial Intelligence is reshaping the landscape of standards development, offering unprecedented opportunities for efficiency, adaptability, and customization. As industries across the spectrum integrate AI technologies, the standards that govern them must evolve to meet the challenges and opportunities presented by these innovations. Striking a balance between embracing the transformative potential of AI and ensuring ethical considerations is essential to harness the full benefits of AI in shaping the standards that underpin our technological future. As AI continues to advance, its role in standards development will likely become even more central, guiding industries toward a future that is both innovative and responsibly regulated.

USNC ANNOUNCES DON HEIRMAN AWARD PROGRAM

The USNC is pleased to announce the launch of the new Don Heirman Award Program on EMC.

This new program gives students and young professionals the opportunity to compete in an annual paper competition on the topic of electromagnetic compatibility (EMC) for a **$1,000 cash prize.** Submission are due by 5 p.m. ET on **Friday, June 7, 2024**, to mpahl@ansi.org.

For more details, including how to apply, please see the program flyer.

The USNC would like to thank our generous donor, Mr. Bill Radasky, for making this award program possible.

IEC AND ISO JOINT COMMITTEE FOR AI EXPAND PROGRAM OF WORK

IEC Editorial Team

Joint IEC and ISO committee on AI, biannual plenary

New projects and liaisons for artificial intelligence (AI) were announced recently at the biannual plenary for the joint IEC and ISO committee on AI, SC 42.

The event in Vienna, Austria, brought together more than 250 world experts from 60 countries. Progress was also made on a number of key international standards, including the soon-to-be-published ISO/IEC 42001, which will be the world's first certifiable management system standard for AI.

Future regulations related to AI, such as the upcoming European Union AI Act, were also discussed in the context of how international standards can be key tools to support compliance.

New areas of work were announced and progress was made in a number of key areas:

» **Two new joint working groups established:** JWG4 with IEC TC 65/SC 65A, on functional safety in AI systems and JWG 5 with ISO TC 37 on natural language processing systems

» **New study areas agreed upon,** including operational design domain (ODD), human-machine teaming, evaluation metrics for AI use cases and applications, guidance on model training efficiency optimization of machine learning system, guidance for generative AI applications, AI maturity model, and more

"The expansion of our program of work reflects the importance of international standards as part of the solution set to enable responsible adoption. In addition, the continual increase of joint collaboration with sister IEC and ISO committees is reflective of the ever-growing opportunities for AI to benefit society across applications domains."

— Wail Diab, Chair of the joint IEC and ISO committee on AI

» **Amendments** to the foundational AI terminology and framework standards (ISO/IEC 22989 and ISO/IEC 23053) added generative AI concepts.

» **Approved the creation of a handbook** aimed at assisting SME organizations looking to use the highly anticipated ISO/IEC 42001 international standard, which will be the world's first certifiable management system standard for AI when it is published.

SC 42's working groups also undertook their annual strategic planning and road-mapping exercise to look at emerging areas for AI standardization.

SC 42 develops international standards for artificial intelligence. Its unique holistic approach considers the entire AI ecosystem, by looking at technology capability and non-technical requirements, such as business, regulatory and policy requirements, application domain needs, and ethical and societal concerns.

The committee organizes regular workshops on AI to discuss emerging trends, technology, requirements, and applications as well as the role of standards. They bring together innovators at the frontier of AI development from diverse locations, sectors, and backgrounds involved in research, deployment, standardization, startups, applications, and oversight.

The fourth bi-annual ISO/IEC AI Workshop will be held in December and will cover four content tracks: AI applications, beneficial AI, novel AI standardization approaches, and emerging AI technology trends and requirements. ⊜

U.S. RECIPIENTS OF THE IEC 1906 AWARD

Elaine Buck and Toby Gillespie, U.S. recipients of the 2023 IEC 1906 Award, were presented with their awards by USNC president Veronica Lancaster at the September USNC Management Meetings. To see the full list of U.S. award recipients, please visit our Hall of Fame.

THE INTERNATIONAL ELECTRICAL AND ELECTRONIC CONFORMITY ASSESSMENT COMMUNITY CONVENES IN THE MIDWEST

The USNC/IECEE, led by Tim Duffy (USNC/IECEE Chair) and Steven Margis (IECEE Chair), was honored to host the 26th meeting of the IECEE Certification Management Committee (CMC) in Milwaukee on June 28–29. The event welcomed nearly 80 delegates from 28 countries as part of the IECEE's annual governance meeting.

As a result of this meeting, the IECEE CMC officially launched a variety of new services, including its Aspect Certification Program and Component Certification Program, and confirmed the expansion of services in the area of cybersecurity, related to cybersecurity for consumer Internet of Things, functional safety, and software packages. In addition, a launch plan was agreed upon for the IECEE's new Certification of Personnel Competencies Scheme.

> *"The CMC meeting was an excellent event and wonderful opportunity to welcome other member countries to the U.S. and to Milwaukee. The event was a resounding success with a great deal of positive feedback."*
>
> — Tim Duffy, USNC/IECEE Chair

With respect to governance, the IECEE approved the expansion of membership groups to include 'Other Recognizing Bodies' in recognition of the regulatory landscapes of markets previously restricted from participation in the IECEE, in an effort by the community to further enable the facilitation of global trade. In addition, the CMC agreed upon procedures to enhance transparency and efficiency of service deliveries through greater clarity of reporting on national differences for standards of participating countries within the scope of the IECEE.

This event marks the fourth time that the USNC/IECEE has served as the host committee for this event. For inquiries regarding U.S. participation in the IECEE or for details on how to participate in the USNC/IECEE, please contact the USNC/IECEE Secretary at Mike.Leibowitz@nema.org.

The IECEE (iecee.org), the IEC System for Conformity Assessment Schemes for Electrotechnical Equipment and Components, is a multilateral certification system based on IEC International Standards. Its members use the principle of mutual recognition (reciprocal acceptance) of test results to obtain certification or approval at national levels around the world.

The scope of the IECEE consists of 23 product categories across electrical and electronic equipment sectors and includes 54 participating countries and over 90 national certification bodies (NCBs) that together issue over 120,000 certificates annually to facilitate global trade.

PHOTOS FROM THE IECEE CERTIFICATION MANAGEMENT COMMITTEE MEETING
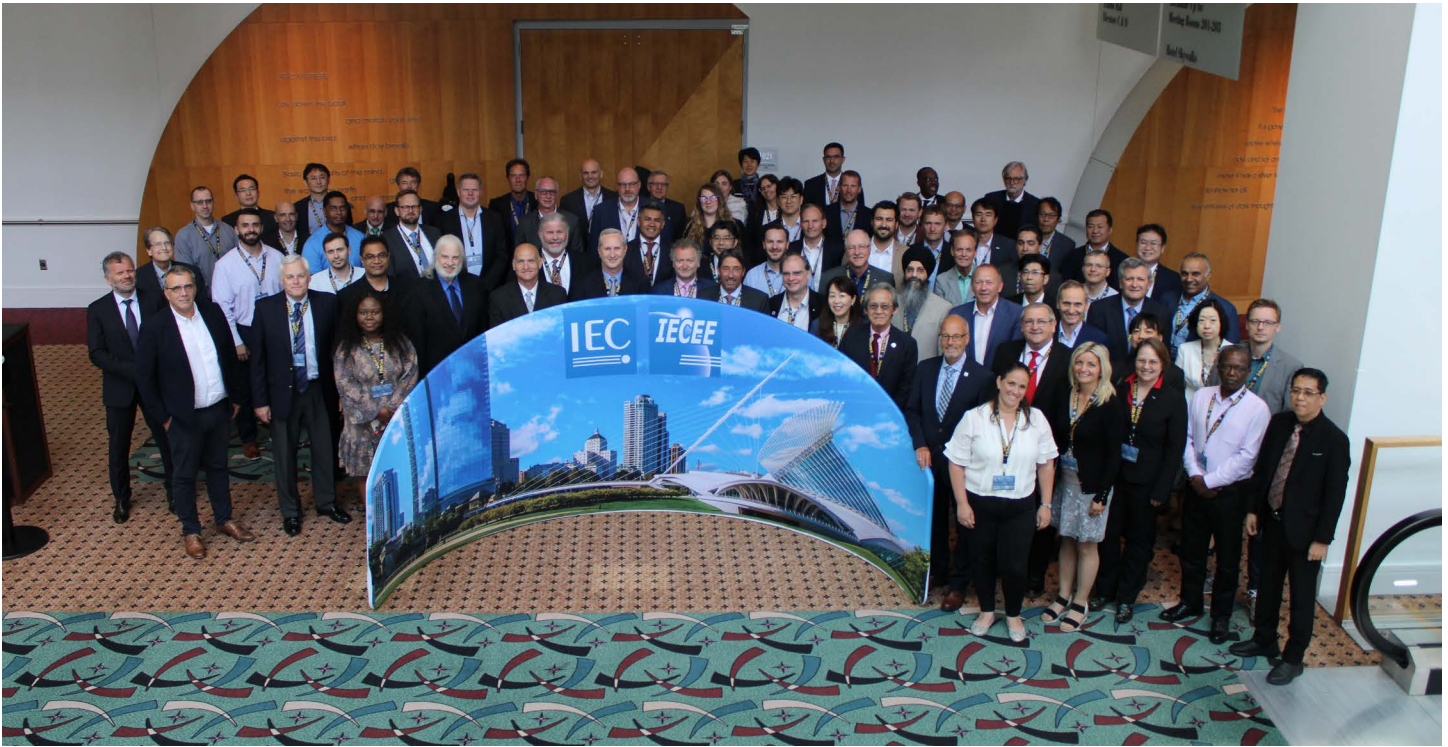
IEC STANDARDS – STRIVING FOR GLOBAL RELEVANCE AND ROLE OF THE USNC TAGS

Sonya Bird, VP International Standards – UL Standards & Engagement
Member of IEC Business Advisory Committee (BAC), IEC Board Task Force on SDGs, ISO/IEC Joint Task Force on Horizontal Deliverables, USNC Council, USNC Nominations Committee, and USNC Finance Committee.

I remember when I first got involved with the United States National Committee (USNC) Technical Management Committee (TMC), I kept hearing about the importance of global relevance. I remember thinking, "Of course, if we are working on international standards, those standards should be suitable for use globally." It really seemed like a bit of a no-brainer to the young and naïve me. Clearly, countries should work together to establish a standard that considers needs for all countries and not just the needs of one country or region.

But it wasn't that simple. I recall hearing about the many challenges that existed at that time for the U.S. Challenges with getting U.S. requirements into IEC standards. Challenges with having legacy U.S. requirements being seen as equal to those from other regions, such as Europe. Challenges with "being heard."

There was an IEC task group established to address these challenges, and work on a global relevance policy for the IEC. The resulting policy was published in administrative circular AC/17/2008.

GLOBAL RELEVANCE

The administrative circular published in 2008 provided for a framework for global relevance. Specifically, it included a formal IEC policy to provide for the implementation of essential differences in requirements in IEC standards. The document noted that to fulfill the IEC mission, TC/SC members need to be aware that they are developing "state of the art" standards, which must have the widest possible acceptance on the global market. To allow products complying with IEC standards to meet the different needs of major segments of the global market, the document indicated that essential differences in requirements may be included on an equivalent basis, as either normative requirements (included in the main body of the standard) or in an informative annex.

The document further noted that essential differences might be based on national (or regional) differences in technical infrastructures (frequencies, voltages, etc.), climatic conditions, or legal and

regulatory requirements. Essential differences were to be submitted by National Committees to the relevant TCs/SCs with technical and market justification.

IEC SMB AD HOC GROUP

While the AC noted above provided a good start to the topic of global relevance, in recent years it was made clear that a number of standards (and hence a number of technical committees) were not fully considering local country needs. Options that had been identified for national committees were not being fully utilized.

The IEC Standardization Management Board (SMB) established an ad hoc group (ahG 93) to further address the topic of globally relevant standards. As the SMB member from the U.S. at the time, I was pleased to join ahG 93 in its efforts to make changes to the technical processes to better drive for globally relevant IEC standards. The scope of the ahG included a number of anticipated deliverables, and work was split into three main areas, including:

» **Developing a guidance document on the global relevance toolbox.** The guide outlined content for the GRT Landing Page of the GRT toolbox. The content includes information on the challenges of global standards (including different climate conditions, different technical infrastructures, and different legal or regulatory requirements) and available tools to overcome those challenges. Options

to use the tools include the establishment of "in some countries" clauses, informative annexes, and essential difference requirements. Examples are provided in the tool.

» **Implementing the global relevance concepts through technical processes including standards devleopment platform.** A small group focused on the forms that are used during the standards devleopment process, and suggested modifications to the forms to encourage national committees to reflect the "concerns for local regulations or technical differences" early in the process. Changes were proposed to a number of IEC forms, including the NWIP, CD, CD for TS, CDV, and RR, to encourage National Committees to identify the need for any relevant "In some countries" clauses to be included in the draft standards.

» **Making information more easily accessible online.** A small group took the work of the first two groups and consequently worked with the IEC web development team to design and organize a dedicated web page to guide IEC technical committees and experts on when and how to apply global relevance clauses in the drafting of their deliverables.

TIPS FOR U.S. INFLUENCE

Where possible, and where the IEC approach is not aligned with legacy U.S. requirements, the U.S. experts and the U.S. TAG should attempt to incorporate legacy

U.S. requirements into IEC standards as essential differences. This will mean that U.S. requirements would be included in the body of the standard as an alternate approach, and is initiated via a proposal or comment from the U.S. TAG.

Where it is not possible to include the U.S. requirements as an essential difference (where there is not international support or perhaps the text is too extensive), then the U.S. experts and TAG should consider options for introducing the U.S. text as either an "in some countries" note, or in an annex. It is the prerogative of the requesting National Committee to indicate the preferred language of the national difference and the location.

In order to raise the most awareness about the specific U.S. requirements and ensure inclusion in the IEC standards, U.S. experts and U.S. TAGs should raise the topic as early as possible in the IEC standards development process. Such a statement can be included as early as the new work item proposal (NWIP) stage, but it absolutely must be identified prior to the issuance of the CDV.

Note that if the proposed U.S. requirements are derived from published material, experts and TAG administrators should reach out to the U.S. standards development organization (SDO) that has published the U.S. legacy requirements for permission to submit the copyrighted text.

ADDITIONAL INFORMATION

The IEC Global Relevance Toolbox is the best source for information, including all relevant Administrative Circulars issued to date, as well as information on the recent changes to the IEC forms. In addition, explanatory information has been included in the USNC Toolbox.
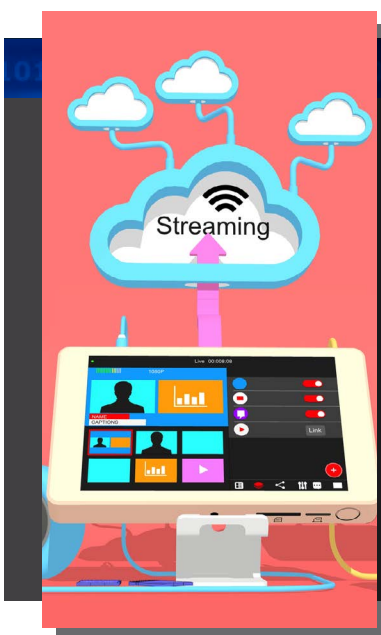
ANSI MEMBERSHIP WEBINARS

Membership in ANSI is the key to unlocking the benefits and opportunities that standardization can provide. Standardization and conformity assessment activities lead to lower costs by reducing redundancy, minimizing errors, and reducing time to market, resulting in enhanced profitability.

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**!

USNC STRATEGIC OBJECTIVES

USNC staff

The USNC, broadly comprising industry, SDOs, government, trade associations, test/certification organizations, academia, and consumers, has a long and successful history as the U.S. representative to the international community on all issues of standardization and verification of conformity to standards in the fields of electricity, electronics and related technologies.

The following five Strategic Objectives were approved by the USNC Council to meet the future demands of the domestic and international electrotechnical community:

ENHANCE US INFLUENCE

OPTIMIZE MEMBERSHIP, LEADERSHIP, AND PARTICIPATION

IMPROVE BUSINESS STABILITY

COMMUNICATE AND EDUCATE

DEVELOP FUTURE ROADMAP

The USNC is excited to share with our members how we are advancing in these areas. In future editions of the USNC Current, readers will find additional details on the above objectives and updates on USNC efforts to reach these goals.

For more information on the USNC Strategic Objectives, please reach out to the USNC staff at usnc@ansi.org.

JUST PUBLISHED

Check out the latest and greatest recently published standards by the IEC. A complete list of recently published documents can be found **here**. Here's just one (of many!) we think you'll find interesting:

IEC 62506:2023 CMV COMMENTED VERSION – METHODS FOR PRODUCT ACCELERATED TESTING

IEC 62506:2023 CMV contains both the official standard and its commented version. The commented version provides you with a quick and easy way to compare all the changes between IEC 62506:2023 edition 2.0 and the previous IEC 62506:2013 edition 1.0. Furthermore, comments from IEC TC 56 experts are provided to explain the reasons of the most relevant changes, or to clarify any part of the content.

IEC 62506:2023 provides guidance on the application of various accelerated test techniques for measurement or improvement of item reliability. Identification of potential failure modes that can be experienced in the use of an item and their mitigation is instrumental to ensure dependability of an item. The object of the methods is to either identify potential design weakness or provide information on item reliability, or to achieve necessary reliability and availability improvement, all within a compressed or accelerated period of time. This document addresses accelerated testing of non-repairable and repairable systems. It can be used for probability ratio sequential tests, fixed duration tests, and reliability improvement/growth tests, where the measure of reliability can differ from the standard probability of failure occurrence. This document also extends to present accelerated testing or production screening methods that would identify weakness introduced into the item by manufacturing error, which can compromise item reliability. Services and people are however not covered by this document. Developed by IEC TC 56.

CALL FOR STANDARDS ACTION AND PARTICIPATION

IEC SECRETARIAT—ORGANIZATION NEEDED

The International Society of Automation (ISA) is relinquishing its role as the IEC Secretariat for IEC SC 65E. The USNC is looking for a new organization to take on this IEC Secretariat position. If we cannot find a new IEC Secretariat for SC 65E, the USNC will have to withdraw from this international leadership role.

If any organizations are interested in the position of IEC Secretariat for SC 65E, they are invited to contact Adelana Gladstein at agladstein@ansi.org by **Friday, December 1, 2023**.

SC 65E SCOPE—DEVICES AND INTEGRATION IN ENTERPRISE SYSTEMS

To prepare international standards specifying:

» Device integration with industrial automation systems. The models developed in these standards address device properties, classification, selection, configuration, commissioning, monitoring, and basic diagnostics.

» Industrial automation systems integration with enterprise systems. This includes transactions between business and manufacturing activities which may be jointly developed with ISO TC 184.

USNC TAG TO IEC/TC 9

The USNC Technical Advisory Group (TAG) to IEC/TC 9 would like to grow its membership. Individuals who are interested in joining the USNC TAG to IEC/TC 9 as members are invited to contact Betty Barro at bbarro@ansi.org **as soon as possible**.

TC 9 SCOPE—ELECTRICAL EQUIPMENT AND SYSTEMS FOR RAILWAYS

To prepare international standards for the railways field, which includes rolling stock, fixed installations, management systems (including supervision, information, communication, signalling, and processing systems) for railway operation, their interfaces, and their ecological environment.

These standards cover railway networks, metropolitan transport networks (including metros, tramways, trolleybuses, and fully automated transport systems) and magnetic levitated transport systems.

These standards relate to systems, components, and software and they will deal with electrical, electronic, and mechanical aspects, the latter being limited to items depending on electrical factors.

These standards deal with electromechanical and electronic aspects of power components as well as with electronic hardware and software components.

IEC STANDARDIZATION EVALUATION GROUP (SEG) 16: STANDARDIZATION OF SUSTAINABILITY TECHNOLOGIES—U.S. PARTICIPANTS NEEDED

SMB set up SEG 16 to explore the needs for standardization and opportunities in the area of Standardization of Sustainability Technologies. 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 U.S. participant on SEG 16 are invited to register directly on the IEC site.

SEG 16 SCOPE

» Define Sustainability Technologies.

» Identify stakeholder interests in relation to sustainability technologies.

» Review existing IEC, ISO, and other relevant standards applicable to sustainability technologies and identify gaps.

» Make further recommendations to SMB as appropriate.

USNC TAG TO IEC SYC AAL—CALL FOR MEMBERS

The USNC TAG to IEC SyC Active Assisted Living (AAL) would like to grow its membership. Individuals who are interested in joining the USNC TAG to IEC SyC AAL as members are invited to contact Betty Barro at bbarro@ansi.org as soon as possible.

SYC AAL - ACTIVE ASSISTED LIVING SCOPE

» Create a vision of Active Assisted Living that takes account of the evolution of the market

» Foster standardisation which: enables usability and accessibility of AAL systems and services

» Enables cross-vendor interoperability of AAL systems, services, products and components

» Addresses systems level aspects such as safety, security, and privacy

» Communicate the work of the SyC appropriately to foster a strong community of stakeholders

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 following meetings: IEC Board meeting held on 2023-10-24; SMB meeting 178 held on 2023-10-22 & 23; and CAB meeting 54 held on 2023-10-22 & 23.

IEC BOARD: IB/265/DL

SMB: SMB/8000/DL

CAB: CAB/2430/DL

JOIN THE USNC LINKEDIN GROUP

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**).

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**.