

U.S.–Africa Standards, Conformance, and Trade

ANSI in AFRICA

NEWSLETTER



African Stakeholders | SPRING 2025



INTRODUCING THE *ANSI IN AFRICA NEWSLETTER*

ABOUT THIS PUBLICATION

The *ANSI in Africa Newsletter* is a new engagement tool that has been added to the Institute's catalog of information-sharing resources, in addition to the *ANSI in China Newsletter* that was launched in late 2015. The newsletter is distributed to the membership and constituency of the **American National Standards Institute (ANSI)**.

The *ANSI in Africa Newsletter* includes two different versions: a special publication targeting ANSI members in the U.S., and another targeting public- and private-sector partners and relevant standardization bodies in Africa. The *ANSI in Africa Newsletter* for stakeholders in the Africa region is intended to increase understanding of the U.S. standards and conformity assessment system, and will provide the latest updates on ANSI's activities in Africa, U.S.-based standards and regulations, and share other relevant information of interest to national and regional stakeholders in Africa. The intention is for this publication to expand into a more developed newsletter in the future, depending on additional input from ANSI members and ongoing information-gathering efforts.

DISCLAIMER

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

CONTRIBUTE

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

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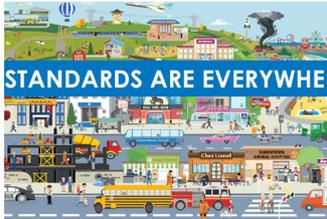
TOPICS IN FOCUS

1



ABOUT ANSI
Introducing the Institute

4



SPOTLIGHT TOPIC: STANDARDS RESOURCES
Supporting Emerging Professionals in Standardization

6



IN THE U.S:
Public- and Private-Sector Standardization Activities



The **American National Standards Institute (ANSI)** is the official U.S. private-sector organization that administers and coordinates the U.S. voluntary standards and conformity assessment system. Founded in 1918, ANSI is a private, membership-based, non-profit organization with its **headquarters in Washington, DC, and operations in New York.**

ANSI also has two affiliate subsidiaries, **Workcred**, which is focused on improving the U.S. credentialing system, and the **ANSI National Accreditation Board (ANAB)**, which provides accreditation services

and training services. The Institute works in close collaboration with stakeholders from industry, government, standards developing organizations, consumers, academia, and others to identify and develop standards and conformance-based solutions to national and global priorities.

At the global level, ANSI is the sole U.S. representative to the **International Organization for Standardization (ISO)**, and, through the U.S. National Committee (USNC), the **International Electrotechnical Commission (IEC)**. Learn more about ANSI's role at ansi.org.

ANSI'S MISSION

To enhance both the global competitiveness of U.S. business and the U.S. quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems, and safeguarding their integrity.

FREQUENTLY ASKED QUESTIONS

What is an American National Standard?

An American National Standard (ANS) is a voluntary consensus standard that is developed in accordance with the [ANSI Essential Requirements: Due process requirements for American National Standards](#) and subject to ANSI's neutral oversight and approval. These requirements are designed to assure that development of American National Standards is a fair and responsive process that is open to all directly and materially interested parties. More information is [available here](#).

Who can sponsor American National Standards (ANS)?

While anyone can participate in the ANS process, only [ANSI-Accredited Standards Developers](#) (ASDs) can submit standards for approval as American National Standards (ANS). An ANSI-Accredited Standards Developer is an organization that has voluntarily submitted its standards development procedures to ANSI for review and accreditation. ASDs' procedures must comply with the [ANSI Essential Requirements](#), including provisions for demonstrating openness, balance, lack of dominance, due process, and consensus. Once accredited, an ASD agrees to comply with ANSI's oversight when submitting individual standards for approval as ANS.

Can non-U.S. stakeholders participate in the development of American National Standards (ANS)?

Yes. The [ANSI Essential Requirements](#) require openness and consideration of all persons who are directly and materially affected by the activity in

question. Additionally, many standards developers work proactively to seek input from international (non-U.S.) stakeholders. The essential requirements require participants from diverse interest categories with the objective of achieving balance.

For more information on the U.S. standards system and ANSI's role internationally, read [ANSI FAQs](#).

Can an American National Standard Be an International Standard?

Yes. All ANS meet the ANSI Essential Requirements, as described above, which meet the criteria for international standards laid out by the World Trade Organization Technical Barriers to Trade Committee (WTO/TBT).

How many standards developed by ANSI-Accredited Standards Developers are approved as American National Standards?

Today, there are more than 14,000 ANS that have been developed and approved in accordance with the [ANSI Essential Requirements](#). These ANS have been developed by approximately 235 ASDs. The number or percentage of standards approved by ANSI as ANS varies for each ASD.

ANS are voluntary and serve a wide range of stakeholder interests because all materially affected stakeholders have the opportunity to work together to create them. ANS only become mandatory if they are adopted or referenced in government regulations. ANSI does not choose standards to be considered for approval as ANS; each technical committee decides for itself whether to submit a standard for approval as an ANS.



In our rapidly evolving and interconnected world, the role of standards often goes unnoticed, yet they are the unsung heroes behind the safety, quality, and efficiency of the products and services we rely on daily. Think about it: from the smartphones we can't live without, to the buildings we inhabit, standards form the invisible backbone that keeps everything functioning smoothly.

Why are Standards Important?

Standards are truly omnipresent, quietly shaping every facet of our lives. They assure that the medical devices we trust are safe and effective, that our food and beverages meet high-quality benchmarks, and that our technology products can seamlessly connect and work together. On a larger scale, standards promote international trade, support product safety, and champion environmental sustainability.

The Next Generation

The demand for skilled standards professionals is skyrocketing. Building a standards-literate workforce that is tuned into the opportunities that standards knowledge and participation can open up

is vital. ANSI and its members are keenly focused on building that capacity, enhancing resources, and fostering participation by new, diverse stakeholders across activities. In this article, we take a look at some of the U.S. standardization community's efforts—from scholarships to games—to support emerging professionals in standardization within the United States only.

- » **Young Professionals Committee: The International Association of Plumbing and Mechanical Officials (IAPMO)** has created a Young Professionals Committee aimed at pairing emerging talents with seasoned experts. This partnership not only brings new ideas into the profession but also supports the ongoing evolution of the industry.
- » **Emerging Professionals Program:** ASTM International offers an exciting opportunity for new members to gain leadership training, participate in professional development workshops, and join technical committee meetings alongside a mentor—all while receiving financial assistance for relevant travel and accommodations.

ASTM also recognizes exceptional young professionals contributing to additive manufacturing technology through its **Additive Manufacturing Center of Excellence Young Professional Awards**.

- » **Next Generation Engineers Campaign:** The **American Society of Mechanical Engineers (ASME)** is on a mission to cultivate a diverse generation of engineers and technicians at every stage of their careers. Their ambitious campaign includes a \$50 million fundraising effort to double the number of women and minorities in engineering by 2030.
- » **Student Scholarship Programs:** Organizations like **The Society for Standardization Professionals (SES)** and the **American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)** are committed to supporting students involved in standards-related education through robust scholarship programs. More information on both programs can be found on the following links: [SES Scholarship](#) and [ASHRAE Scholarship](#).
- » **Emerging Leaders Membership Council (ELMC):** The **International Code Council (ICC)** supports newer professionals through ELMC, which focuses specifically on professionals age 35 and under and/or those who have been in a codes enforcement-related profession for less than 10 years. The program offers networking opportunities and guidance on how to become more active and impactful in ICC activities.
- » **Internship Programs:** The **Interstate Renewable Energy Council (IREC)** recently launched its formal internship program for each of its program areas—regulatory, workforce, local initiatives, and communications.
- » **Games:** In addition to its resources for parents, teachers, and students, the **National Institute of Standards and Technology (NIST)** offers an

engaging way to learn about standards with its **Adventures in Standards game**, which provides a fun, non-competitive way to reinforce positive ways in which participants should interact when developing voluntary consensus standards. This game is freely available for anyone to download and play in their own organization, committee, or other standards-related setting. The downloads include: **Game board** (game board should be printed at 24" x 24") and **Instructions**, as well as other card games.

- » **Competence Development:** The **ISO IWA 30 series** sets forth specifications for developing the competencies and skills of standards professionals, identifying the essential tasks and expertise needed for success in companies and standardization organizations. More information on the IWA is available [here](#).

ANSI also supports the next generation of standards professionals with comprehensive resources on its **Standards Boost Business** web page and through various **training courses and webinars**.

Continued Resources for Standards are Critical

As technology continues to advance at a rapid pace, the need for up-to-date standards becomes more critical. Economies that are unable to access the latest standards or lack the legal and policy frameworks and standards workforce may find themselves at a disadvantage. Assuring that standards keep pace with technological advancements requires collaboration and funding. When governments, industries, and organizations allocate the resources to support the standardization process, standards can continue to safeguard lives, fostering a safer, more efficient, and more innovative world. For more information on how ANSI can support African National Standards Bodies (NSBs) and regional bodies, and get connected to ANSI's accredited standards developers, please contact africa@ansi.org.



75



of the Thousands of Standardization Solutions Supporting Infrastructure

1. ASCE MOP 107-2005, Ship Channel Design and Operation
2. ISO 20858:2007, Ships and Marine Technology - Maritime Port Facility Security Assessments and Security Plan Development
3. NFPA 307-2016, Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves.
4. ISO 28005-2:2011, Security Management Systems for the Supply Chain - Electronic Port Clearance
5. ASCE MOP 130-2015, Waterfront Facilities Inspection and Assessment
6. ASTM E1889-97(2015), Standard Guide for Pavement Management Implementation
7. ASME B30.19-2016, Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings
8. ASME B30.22-2016, Articulating Boom Cranes
9. AWWA M28-2014, Rehabilitation of Water Mains
10. ANSI/ASSE A10.47-2015, Work Zone Safety for Highway Construction
11. IEC 60287-2-3 Ed. 1.0 b:2017, Electric Cables - Part 2-3: Thermal Resistance - Cables Installed in Ventilated Tunnels
12. ANSI/ASSE A10.16-2009, Safety Requirements for Tunnels, Shafts, and Caissons for Construction and Demolition Operations
13. NSF/ANSI 53-2016, Drinking Water Treatment Units - Health Effects
14. ASTM F2363/F2363M-12, Standard Specification for Sewage and Graywater Flow Through Treatment Systems
15. ISO 24516:2016, Guidelines for the Management of Assets of Water Supply and Wastewater Systems
16. ISO 24518:2015, Activities Relating to Drinking Water and Wastewater Services - Crisis Management of Water Utilities
17. AWWA J100-2010 (R2013), Risk and Resilience Management of Water and Wastewater Systems
18. APTA SS-ECS-RP-001-14 [2014], Cyber-security Considerations for Public Transit
19. ASME Y32.7-1972 (R2014), Graphic Symbols for Railroad Maps and Profiles
20. IEEE 2030.2-2015, Guide for the Interoperability of Energy Storage Systems Integrated with the Electric Power Infrastructure
21. IES LM-71-14, Photometric Measurement of Tunnel Lighting Installations
22. IEEE 1570-2002 (R2008), Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection
23. IEC 62279 Ed. 2.0 b:2015, Railway Applications - Communication, Signalling, and Processing Systems - Software for Railway Control and Protection Systems
24. SAE AIR 5387-2006, Airport Electrical Power System Harmonics
25. APTA SS-SIS-RP-016-15 [2015], Recommended Practice for Tunnel Security for Public Transit
26. ASTM D2940/D2940M-15, Standard Specification for Graded Aggregate Material for Bases or Sub-bases for Highways or Airports
27. SAE J 1939-1-2012, On-Highway Equipment Control and Communication Network
28. NFPA 424-2018, Guide for Airport/Community Emergency Planning
29. NFPA 1003-2015, Standard for Airport Fire Fighter Professional Qualifications
30. ASTM A709/A709M-16a, Standard Specification for Structural Steel for Bridges
31. ASCE 31-03, Seismic Evaluation of Existing Buildings
32. CSA S448.1-2010 (R2015), Repair of Reinforced Concrete in Buildings and Parking Structures
33. ISO 22325:2016, Security and Resilience - Emergency Management - Guidelines for Capability Assessment
34. ATIS-0100026, Methodology for Design of End-to-End Network Reliability for Proactive Reliability Planning
35. ASCE/SEI 49-2012, Wind Tunnel Testing for Buildings and Other Structures
36. ATIS-03000202.2015, Internetwork Operations Guidelines for Network Management of the Public Telecommunications Networks under Disaster Conditions
37. ASTM E3032-15e1, Standard Guide for Climate Resiliency Planning and Strategy
38. ANSI/IES RP-3-13, American National Standard Practice on Lighting for Educational Facilities
39. ISO/TR 37152:2016, Smart Community Infrastructures - Common Framework for Development and Operation
40. ISO 37101:2016, Sustainable Development in Communities - Management System for Sustainable Development
41. ASCE MOP 60-2007, Gravity Sanitary Sewer Design and Construction
42. NSF/AWWA/ANSI 375-2016, Sustainability Assessment for Water Contact Products
43. NEMA EWS 1.2-2016, Use of Performance Contracts for Advancing Efficiency in Water Infrastructure
44. ASME A13.1-2015, Scheme for the Identification of Piping Systems
45. ANSI/APMO UPC 1-2015, Uniform Plumbing Code
46. ISO 13140-2016, Electronic Fee Collection - Evaluation of On-board and Roadside Equipment for Conformity to ISO 13141
47. ISO/TS 21219:2017, Intelligent Transport Systems - Traffic and Travel Information via Transport Protocol Experts Group, Generation 2 (TPEG2)
48. ICC A117.1-2017, Accessible and Usable Buildings and Facilities
49. IEC 62056-1-0 Ed. 1.0 b:2014, Electricity Metering Data Exchange - The DLMS/COSEM Suite - Part 1-0: Smart Metering Standardization Framework
50. ANSI/NEMA SG-H 1-2013, Smart Grid Interoperable and Conformant Testing and Certification Scheme Operator Guidelines
51. NEMA SG-AMI 1-2009 (R2015), Requirements for Smart Meter Upgradeability
52. ASHRAE Guideline 32-2012, Sustainable, High-Performance Operations and Maintenance
53. NFPA 502-2017, Standard for Road Tunnels, Bridges, and Other Limited Access Highways
54. AASHTO/AWS D1.5M/D1.5:2015, Bridge Welding Code
55. ASTM D6092-14, Standard Practice for Specifying Standard Sizes of Stone for Erosion Control
56. ASCE MOP 122-2011, Sediment Dynamics upon Dam Removal
57. IAPMO IGC 287-2012, CPVC Pipe, Tubing, and Fittings for Hot and Cold Water Distribution Systems
58. ICC/ASHRAE 700-2015, National Green Building Code
59. ASCE MOP 125-2013, Pipelines for Water Conveyance and Drainage
60. ASME B31Q-2016, Pipeline Personnel Qualification
61. ISO 28842:2013, Guidelines for Simplified Design of Reinforced Concrete Bridges
62. ANSI/SIA A92.8-2012, Vehicle-Mounted Bridge Inspection and Maintenance Devices
63. ACI 301-16 Specifications for Structural Concrete
64. APTA-RT-OP-S-013-03 Rev 1 [2014], Standard for Training of Rail Operating Employees
65. APTA-RT-RGC-S-004-03 Rev 1 [2005], Standard for Rail Transit Grade Crossing Warning System Design Criteria, Installation, and Operation

And many more!

ANSI-Accredited Certification Programs for:

66. Training Certificate Issuers
67. Crane Operators
68. Certified Hazardous Materials Practitioners
69. Building Products
70. High-Performance Building Design Professional
71. Waste Water Treatment
72. Greenhouse Gas Validation/Verification
73. Marine Products
74. Industrial Hygienists
75. Superior Energy Performance

And much more!

www.ansi.org/membership
www.ansiaccrreditation.org

Figure 1: Image illustrating a small sample of the voluntary international standards developed by thousands of experts in diverse forums that are working to assure the products, processes, and systems we rely on every day are safe, reliable, efficient, and work effectively together.

STANDARDS BEHIND THE HEADLINES



IN THE U.S. Public- and Private-Sector Standardization Activities

ANSI HOSTS DELEGATION FROM THE GHANA STANDARDS AUTHORITY IN WASHINGTON, DC



Figure 2: Gift exchange between Prof. Alex Dodoo, GSA director general, Joseph Tretler, ANSI senior vice president, international policy

On December 12, 2024, the American National Standards Institute (ANSI) hosted a **Ghana Standards Authority (GSA)** delegation at its Washington, DC office. This bilateral meeting included exchanges on the U.S. and Ghana's

standardization systems, key priority initiatives, and potential collaboration opportunities.

The meeting was attended by participants from **ASTM International**, **IAPMO**, the **American Concrete Institute (ACI)**, the **Personal Care**

Products Council (PCPC), the **U.S. Environmental Protection Agency (EPA)**, and the **U.S. Department of Commerce (DOC)**.

Joseph Tretler, ANSI senior vice president, international policy, welcomed the delegation and ANSI members, expressing appreciation for their interest in enhancing technical exchange with ANSI and its membership. ANSI provided a brief overview of the U.S. standards system and highlighted potential areas for bilateral partnership in the bio-fuels market segment and critical and emerging technologies space. ANSI members also had the opportunity to discuss cross-cutting issues in sustainable raw materials, plumbing, and cosmetics standards, among other topics.

Professor Alex Dodoo, GSA director general, together with his accompanying delegation, provided a detailed overview of Ghana's standardization and conformity assessment system. GSA highlighted areas where Ghana needs capacity-building assistance and access to the latest standards, including the construction, information and communications technologies (ICT), and telecommunication sectors.

The participants also exchanged insights on potential areas for future collaboration, including:

- ◆ Cybersecurity
- ◆ Bioethanol
- ◆ Concrete building codes
- ◆ Market access for small- and medium-sized enterprises (SMEs)

As ANSI and GSA work on next steps in these priority areas, ANSI members with interest or relevant activities to share are invited to reach out to africa@ansi.org.

A related ANSI news item is [available here](#).

DR. LAURIE E. LOCASCIO NAMED PRESIDENT AND CEO OF THE AMERICAN NATIONAL STANDARDS INSTITUTE

Laurie E. Locascio, Ph.D., has assumed the role of president and chief executive officer of the American National Standards Institute (ANSI), a private non-profit 501(c)(3) organization that administers and coordinates the U.S. voluntary standardization and conformity assessment system.

Locascio, who previously served as Under Secretary of Commerce for Standards and Technology and director of the **National Institute of Standards and Technology (NIST)**, was elected at a special meeting of the **ANSI Board of Directors**. Her appointment followed a robust search to identify a successor to Joe Bhatia, who retired from ANSI in 2024 after nearly two decades of service.

"Laurie Locascio embodies the right mix of visionary leadership, knowledge, and skills that will build on ANSI's incredible successes and lead the Institute into the future," said Christian Dubay, chair of the Board Search Committee. "She brings an impressive background in science and technology, in-depth knowledge of standardization, and unwavering commitment to the public-private partnership that forms the backbone of the U.S. private-sector-led standardization system."

"I have the deepest respect for ANSI, its mission, and its people having worked with the organization throughout my career. I am thrilled to be entrusted with the leadership of this renowned institution with such incredible national and global impact," said Locascio. "I am also proud to be following Joe Bhatia, who has been an incredibly strong and impactful leader for ANSI for almost two decades."



Figure 3: Former ANSI Board of Directors Chair David Miller (left) and Laurie E. Locascio, Ph.D. (right)

During her tenure as Under Secretary of Commerce for Standards and Technology and NIST director, Locascio oversaw NIST in its mission to promote U.S. innovation and competitiveness through measurement science, standards, and technology, including NIST's implementation of the **U.S. Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET)** and implementation of the **CHIPS for America** program at the Department of Commerce.

Prior to her appointment as NIST director, Locascio served as vice president for research at the University of Maryland College Park and University of Maryland Baltimore, also serving as a professor of bioengineering. Prior to that, Locascio

had a stellar career at NIST, rising from a research biomedical engineer to lead the agency's Material Measurement Laboratory and finally acting as associate director for laboratory programs and principal deputy director.

Locascio is a fellow of the National Academy of Engineering, National Academy of Inventors, the American Association for the Advancement of Science, the American Chemical Society, and the American Institute for Medical and Biological Engineering. She earned a B.S. in chemistry from James Madison University, an M.S. in bioengineering from the University of Utah, and a Ph.D. in toxicology from the University of Maryland Baltimore.

A related ANSI news item is [available here](#).

FEEDBACK WANTED

We would appreciate your input on this newsletter and the topics you want to learn more about. Please send your feedback and questions to africa@ansi.org.



ONLINE RESOURCES



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AND TRAINING



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STANDARDS PORTAL

ABOUT ANSI



The American National Standards Institute (ANSI) is a private, non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system. For more than 100 years, the Institute has overseen the U.S. private-sector-led standards and conformity assessment system, working in close partnership with government, industry, and others to enhance the global competitiveness of U.S. business and quality of life.

ANSI represents the interests of more than 270,000 companies and organizations and 30 million professionals worldwide, through its membership, partnerships, and diverse programs and activities. More than 240 ANSI-accredited organizations develop standards that support all industry sectors and address national and global priorities.