Setting the standard: Grange members can be voice of rural users in standardization system

By Cleo Stamatos

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Not many organizations have roots as deep and priorities as broad-reaching as the National Grange – but the American National Standards Institute (ANSI) is one of them. So it's time we had an official introduction.

Standards are behind the scenes making our world safer. They may establish size, shape, or capacity of a product,



process, or system – like lithium-ion batteries, cybersecurity, or quality management.

They can specify performance of products or personnel – like energy-efficient appliances, or construction inspectors.

Across the full spectrum of U.S. industries and communities large and small, standards for performance, interoperability, and safety help protect the public and foster commerce and innovation by influencing the design, manufacturing, marketing, distribution, and use of nearly every product, process, and system we use every day (see some examples in the "Day in the Life..." graphic on the following page).

But the strength of standards also depends on the active participation of all relevant interests, including volunteer consumers. So it's important that standards development activities include rural voices.

I'm grateful for this opportunity to share a brief background on ANSI and the standards community, and some of the ways Grange members and rural advocates can get involved.

A Brief History of the (ANSI) Universe

Tight on the heels of the Industrial Revolution, the United States sought to increase the efficiency, interoperability, and reach of its manufacturing and mechanical processes. In 1917 the U.S. standards system was established – with its initial work specifying size requirements for railroad tracks and pipe threads.

Recognizing standardization's power and the need for a coordinated approach, in 1918 a group of private-sector engineering associations and U.S. government departments

STANDARDS 101

A standard is defined as a document that provides requirements, specifications, guidelines, or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose.

These are voluntary consensus standards developed via the combined expertise and cooperation of all those with a stake in the technology working collaboratively to agree upon requirements and best practices for voluntary adoption by industry and others.

"Standardization" encompasses a broad range of activities, from the actual technical development of a standard, to its promulgation, acceptance, and implementation, to the methods of evaluating whether products, processes, systems, services, or personnel comply with the standard – conformity assessment.

Standards and conformity assessment work hand-in-hand, and without effective conformity assessment, standards are just good ideas. Standards rely on broad collaboration and input from all those with an interest to have their voice heard when decisions that shape future products, processes, systems, and markets are being made.

came together to found an impartial national body to coordinate standards development and approve national consensus standards. Known at the time as the American Engineering Standards Committee (AESC), the organization now known as the American National Standards Institute officially approved its first standard for pipe threads in 1919.

In the more than 100 years since, that collaborative work has expanded into a vast system of responsive standardization solutions supporting everything from the machines we operate, food we grow, and stores we shop at, to the software platforms, programming languages, and infrastructure that connect us, to the medical devices, systems, and technologies that protect our health and security – and everything in between.

ANSI coordinates the system and accredits the procedures of standard-setting organizations, but does not develop standards. However, those developed through this facilitation are relied upon by industry, trade, and professional associations, government, and consumers across the United States and globally.

ANSI brings together individuals representing these different interests, so that as standards are set, their voices are heard and perspectives are considered. ANSI works hard to ensure voices of specific populations are not left out, partnering with organizations that represent a diverse mix of expertise and end-users. Current members of our Consumer Interest Forum include representatives from consumer groups, local county consumer affairs offices, and former state regulators.

A Visibility Problem

Even though standards are literally everywhere, helping nearly everything around us work safely and effectively, they are invisible to most people.

Oftentimes industry or product standards only garner attention when something goes wrong – typically in the use or conformance to the standard, and not with the standard itself.

Many people don't realize what standards can do or how they are developed. So ANSI is working hard to get these messages out to key community organizations like the National Grange.

"Standards are actually powerfully positive strategic tools that can drive U.S. competitiveness and innovation, open markets, improve quality of life, and strengthen the workforce," according to Mary Saunders, ANSI's vice president of government affairs.

But to gain the greatest advantages

CALL TO ACTION

There are countless ways to get involved, and ANSI can help you find the right opportunity to have your voice heard and make an impact.

If you are interested in participating in collaborative standards work, please contact Cleo Stamatos, ANSI consumer and legislative outreach manager, at cstamatos@ansi.org.

of standards, you have to get informed and, ideally, involved.

Collaboration is key.

With the broad-reaching priorities of both the Grange and ANSI and our many common goals, the two organizations are poised to increase quality of life, and to do so even more effectively, when working together and with other stakeholders in standardization.

It is vital that the interests of our nation's rural communities be among the voices heard when standards are developed. By virtue of their communities, rural individuals often have unique insights, and a breadth of experience and expertise that is fundamental across many industries.

Grange members, well known as "doers," are welcome to join us at the table to contribute to or improve standards for everything from household appliances to power tools.

Standards have the power to help ensure that innovative technologies and tools can be translated and implemented efficiently and effectively to benefit rural communities, but the vibrancy and effectiveness of the U.S. standards system depend on the strength of stakeholder engagement – your engagement.

Together – through consensus, cooperation, and collaboration – we can help improve the quality of life, safety, sustainability, and economic strength of rural communities across the nation.

Get Involved in Standards-Based Solutions

There is a whole world of opportunity in standardization that could benefit you, and make great use of your expertise in turn. Here's a quick list of ideas to get your thinking started:

- You can identify the ANSI-accredited standards developer(s) whose work aligns with your interest and volunteer to participate in a specific technical committee or activity (see www.ansi. org/american-national-standards/info-for-standards-developers/accredited-standards-developers).
- You can join one of ANSI's standardization collaboratives or workshops if your interests align with one of our current focus areas, which include unmanned aircraft systems (drones), additive manufacturing (3-D printing), nanotechnology, homeland defense and security, and artificial intelligence in healthcare (see www.ansi.org/standardscoordination).
- You can explore U.S. stakeholder engagement in specific international standardization activities relevant to you for example, in International Organization for Standardization (ISO, see www.ansi.org/iso) or International Electrotechnical Commission (IEC, see www.ansi.org/usnc) technical committee work focused on smart farming, autonomous machinery, or off-highway vehicles, for just a few examples.
- You can search www.ANSI.org for the above and many, many more resources and information.



A Day in the Life of **Standards in Rural America**





15 of the Thousands of Standards Supporting Rural Communities

- 1 IEC/TS 62257, Recommendations for Renewable Energy and Hybrid Systems for Rural Electrification
- 2 ANSI/ASABE S629 (R2021), Framework to Evaluate the Sustainability of Agricultural Production Systems
- 3 ISO 22000:2018, Food Safety Management Systems – Requirements for Any Organization in the Food Chain
- 4 ISO 21479:2019, Soil Quality Determination of the Effects of Pollutants on Soil Flora
- 5 ISO 18497:2018, Agricultural Machinery and Tractors – Safety of Highly Automated Agricultural Machines – Principles for Design

- 6 UL 4600 Ed.1-2020, Standard For Evaluation Of Autonomous Products
- 7 NSF/ANSI 61, Drinking Water System Components – Health Effects
- 8 ISO/TS 34700:2016, Animal Welfare Management – General Requirements and Guidance for Organizations in the Food Supply Chain
- 9 ANSI/ASAE EP403.4 (R2020), Design of Anaerobic Lagoons for Animal Waste Management
- 10 ISO 15878:2021, Road Construction and Maintenance Equipment – Paver-Finishers – Commercial Specifications
- 11 NFPA 1142-2022, Standard on Water Supplies for Suburban and Rural Fire Fighting

- 12 IEEE 802.16-201, Air Interface for Broadband Wireless Access Systems
- 13 ATIS-0500012, Local Acquisition for Internet Access Networks in Support of Emergency Services
- 14 ASTM E3130-21, Standard Guide for Developing Cost-Effective Community Resilience Strategies
- 15 ICC A117.1-2017, Accessible and Usable Buildings and Facilities

Get involved in standards activities! Contact ANSI Consumer and Legislative Outreach Manager Cleo Stamatos, cstamatos@ansi.org

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