

### What is an American National Standard (ANS) anyway? *And how can I participate in the ANS development process?*

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- What is a standard?
- A bit about the U.S. Standards System
- What is ANSI? For more: <a href="https://www.ansi.org/WhatIsANSI">www.ansi.org/WhatIsANSI</a>?
- Why do standards matter and who creates them?
- What are American National Standards (ANS)?
  - What requirements apply to the ANS consensus process?
  - Who develops ANS?

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- How can you participate in the development of ANS?
- Where to learn more/training: www.standardslearn.org
- Standards Boost Business: over 30 partners working together on this campaign. SBB concepts are woven throughout this webinar

www.standardsboostbusiness.org







# So let's get started with some context relevant to today's focus...







#### What is a standard? A VCS? An ANS?

Standard\*: a document that tells you how to do or say or make or test or organize or design something



- Voluntary Consensus Standard (VCS)\* (next slide): a private sector standard developed in a specifically defined open and fair environment with general agreement by stakeholders (OMB A-119, NTTAA) see <a href="https://www.nist.gov/standardsgov/what-we-do/federal-policy-standards/key-federal-directives">https://www.nist.gov/standardsgov/what-we-do/federal-policy-standards/key-federal-directives</a>
  - American National Standard (ANS): a VCS developed in accordance with the "ANSI Essential Requirements: Due process requirements for American National Standards" and subject to ANSI's unique: 1) accreditation of consensus procedures; 2) neutral oversight; 3) approval process; 4) appeals process; and 5) procedural audit.



\* Simplified definition

# Definition of VCS from OMB Circular A-119





What Are Voluntary, Consensus Standards?

"Voluntary consensus standard" is a type of standard developed or adopted by voluntary consensus standards bodies, through the use of a voluntary consensus standards development process as described in Section 2e. These bodies often have intellectual property rights (IPR) policies that include provisions requiring that owners of relevant patented technology incorporated into a standard make that intellectual property available to implementers of the standard on non-discriminatory and royalty-free or reasonable royalty terms (and to bind subsequent owners of standards essential patents to the same terms). In order to qualify as a "voluntary consensus standard" for the purposes of this Circular, a standard that includes patented technology needs to be governed by such policies, which should be easily accessible, set out clear rules governing the disclosure and licensing of the relevant intellectual property, and take into account the interests of all stakeholders, including the IPR holders and those seeking to implement the standard.



# Definition of VCS Body OMB Circular A-119





- e. "Voluntary consensus standards body" is a type of association, organization, or technical society that plans, develops, establishes, or coordinates voluntary consensus standards using a voluntary consensus standards development process that includes the following attributes or elements:
- (i) Openness: The procedures or processes used are open to interested parties. Such parties are provided meaningful opportunities to participate in standards development on a non-discriminatory basis. The procedures or processes for participating in standards development and for developing the standard are transparent.
- (ii) Balance: The standards development process should be balanced. Specifically, there should be meaningful involvement from a broad range of parties, with no single interest dominating the decision-making.
- (iii) Due process: Due process shall include documented and publically available policies and procedures, adequate notice of meetings and standards development, sufficient time to review drafts and prepare views and objections, access to views and objections of other participants, and a fair and impartial process for resolving conflicting views.
- (iv) Appeals process: An appeals process shall be available for the impartial handling of procedural appeals.
- (v) Consensus: Consensus is defined as general agreement, but not necessarily unanimity. During the development of consensus, comments and objections are considered using fair, impartial, open, and transparent processes.









# Let's briefly review some background about standards development...

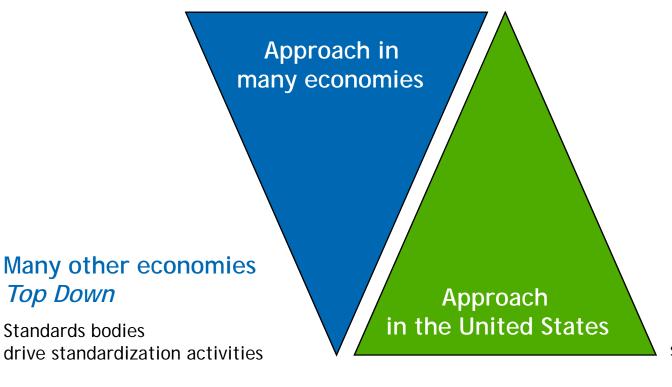












#### United States Bottom Up

Standards users drive standardization activities



## Let's look at some key actors in standards development in the U.S.







	ANSI	Standards Developers*	Companies Stakeholders	Consumers 	Government 	NIST
Coordinates U.S. system and policy development	Х					
Independently runs standards development activities		X				
Coordinates and monitors USG use of and participation in VCS activities. Develops NIST standards.						Х
Legal metrology and WTO-TBT enquiry point						X
Provides technical input for standards development			Х	X	Х	X
Participates in U.S. policy development	X	X	X	X	X	X











#### Let's take a minute now to review ANSI's roles...

- ANSI coordinates standards, conformity assessment, and related activities in the United States of America.
  - Founded in 1918, ANSI is a private, not-for-profit organization (501(c)3)
  - ANSI is not a government agency, standards developer or certifier
- ANSI's mission is to enhance the global competitiveness of U.S. business and the American quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems and ensuring their integrity.











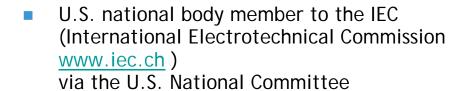
- ANSI represents the U.S. globally
  - ISO, IEC, Regional (next slide)
- Accredits standards developers and conformity assessment bodies
  - Ensures the integrity of related systems

- Approves Voluntary
   Consensus Standards (VCS) as
   ANS (more on this soon)
- Offers neutral forum to address issues of national importance
- Coordinates partnerships between U.S. public and private sectors
  - In support of standardsbased solutions









- a U.S. member of IAF and ILAC (International Conformity Assessment)
- member of regional forums in the Pacific Rim and the Americas
- liaison with groups in Europe, Africa and the Middle East

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bilateral agreements with other national standards and conformity assessment bodies





































As the bridge between public-sector policies and private-sector solutions, ANSI has a vital role to play in strengthening U.S. competitiveness and quality of life.

Let's look at some examples...



#### ANSI Collaboratives and Workshops...a bridge

Addressing issues of national importance via standards and conformity assessment solutions

1994

Information Ho
Infrastructure
Standards Panel S

2003

Homeland Defense and Security Standardization Collaborative 2004

Nanotechnology Standards Panel 2005

Healthcare Information Technology Standards Panel 2006

ID Theft Prevention and ID Management Standards Panel 2007

Biofuels Standards Coordination Panel 2007

ANSI Network on Chemical Regulation















2009

Workshop Toward Product Standards for Sustainability 2009

ANSI-NIST Nuclear Energy Standards Coordination Collaborative 2010

The Financial Management of Cyber Risk 2011

ANSI Electric Vehicles Standards Panel 2012

ANSI
Energy Efficiency
Standards Coordination
Collaborative

2013

ANSI Network: Smart and Sustainable Cities 2016

America Makes & ANSI Additive Manufacturing Standardization Collaborative























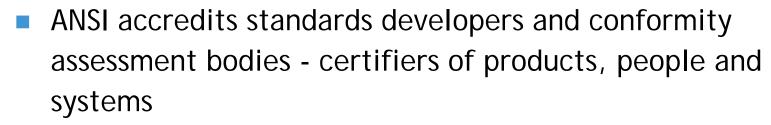
Now we will narrow our focus to ANSI's role as an Accreditor and what this means in the standards world...



# 1



#### ANSI as an "Accreditor"





- ANSI is not a standards developer or certifier
- To clarify, in a nutshell, "Conformity Assessment" relates to:
  - An activity concerned with determining directly or indirectly that relevant requirements (including specified standards) are fulfilled (see ISO/IEC 17000:2004)
  - For example, a label on a product might make a statement of conformance with a standard: x satisfies the requirements of standard: ANSI/ABC 1-2013 How to build a widget

#### **ANSI Accreditations (Sample)**

		client	standard
	Standards	SDO	ANSI Essential Requirements
		US TAG (ISO)	ANSI International Procedures
ACCREDITED	essment (ISO 17011)	Product CB (Certification Body)	ISO/IEC 17065
		Ecolabel Programs/Declarations	ISO 14025
		Personnel CB	ISO/IEC 17024
		Certificate Issuer	ANSI-ASTM E2659
		GHG Validation/Verification Body	ISO/IEC 14065
ANAB	Conformity Asse	Management Systems CB	ISO/IEC 17021
		Laboratory; Medical Lab	ISO/IEC 17025; ISO 15189
		Inspection Body	ISO/IEC 17020
		PT Provider; Reference Mat'l Producer	ISO/IEC 17043; ISO Guide 34



# ANSI as an Accreditor: Conformity Assessment







- "Conformity assessment" provides assurance and confidence
  - to consumers, businesses and government when personnel, products, systems, processes, or services are evaluated against the requirements of a voluntary standard
- ANSI offers many accreditation options for conformity assessment programs:
  - www.ansi.org/accreditation (next slide)
  - many standards, including some ANS, form the basis of conformity assessment programs
- While standards are among the documents used in conformity assessment, at ANSI, the accreditation requirements are distinct...



# ANSI as an "Accreditor" of standards developers





- Accreditation by ANSI as a standards developer is a pre-condition for submitting a standard for approval as an ANS
- ANSI accreditation as a standards developer is based on a defined process that is overseen by neutral standards experts who are ANSI Members
  - Open Process: Application, public review & comment, approval of compliant consensus procedures, appeal, reaccreditation when procedures are revised, annual compliance certification, audit of ANS

# Accreditation as a Standards Developer: for American National Standards (ANS)







#### At ANSI:

- Accreditation as a standards developer relates to the procedures used in relation to American National Standards (ANS) only.
- Accreditation means that a standards developer's procedures with respect to ANS meet the due process based criteria established in the "ANSI Essential Requirements".
- Once accredited, a standards developer uses those procedures to develop evidence of consensus with respect to the content of a proposed ANS.









Let's remind ourselves why all standards are important...









- Standards facilitate trade, commerce, and innovation
- Standards help to advance scientific discovery and keep people safe by minimizing injuries and protecting key environmental resources
- Standards reduce costs in the public and private sectors
- Standards support interoperability in all areas of life
- Standards make everyday life and the economy work, for example:
  - Product standards: banking cards, washing machines
  - Safety standards: lifejackets, eyewear, boiler pressure vessel code, national electrical code
  - Performance standards: food and toy safety
  - Prescriptive & performance standards (some can be both): indoor air quality
  - Management systems standards: quality, environmental & energy management
  - Personnel standards: food handlers, crane operators, welders
  - Built environment standards: plumbing and building codes

ICT standards: underpin almost everything

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#### Who creates standards?

- Companies, government, consortia and other standards developers, like trade associations, create standards (domestic international):
  - stic & 🔣
  - some are for limited or internal use, e.g., in a company or within a government agency
  - some are produced for broader use
  - some are created as voluntary consensus standards (VCS)
    - an American National Standard (ANS) is a voluntary consensus standard
      - Unless mandated by law, compliance is voluntary
- In the US, the standards process is market driven, sector based, industry led, and government supported
  - All materially affected and interested stakeholders, including consumers and the general public, have a voice in the ANS process

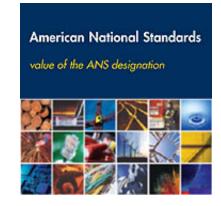
#### Let's focus on: American National Standards (ANS)







- 235 ANSI-accredited standards developers (ASD) <u>www.ansi.org/asd</u>
  - ANSI Essential Requirements: due process requirements for American National Standards (<u>www.ansi.org/essentialrequirements</u>)
    - "ANSI Essential Requirements" governs ANS process
  - Only ASDs may submit standards for approval as ANS
    - Accreditation by ANSI is a pre-condition for submitting a standard for approval as an ANS
    - All ANS are maintained on a regular cycle to ensure currency
  - Approximately 11,500 American National Standards
  - All ASDs are subject to ANSI's neutral third-party oversight including a regular procedural audit
    - Not all standards developed by these organizations are approved as ANS
- Learn more: www.ansi.org/ansvalue





#### Where can I find ANS information?







#### www.ansi.org/asd

- List of ANSI-Accredited Standards Developers (ASD) with a scope and contact
- List of proposed ANS
  - See ANSI Standards Action for open public comment opportunities (www.ansi.org/StandardsAction)
- List of approved ANS



#### Who makes decisions about ANS actions?





# 3 main committees populated by ANSI members:

- ANSI Executive Standards Council (ExSC)
- ANSI Board of Standards Review (BSR)
- ANSI Appeals Board
  - All serve as neutral, knowledgeable professionals
    - Oversight role is subject to conflict of interest procedures



# What is ANSI's role in the ANS process? ANSI Members/Program Oversight Committees





- Oversee the integrity of the ANS consensus process by assessing evidence of procedural compliance with ANSI's Essential Requirements
- Accredit (and reaccredit) standards developers (procedures)
- Approve individual standards as American National Standards (ANS)
- Audit ANS for procedural compliance
- Hear procedural appeals related to ANS
  - Were procedures followed?

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- Was a comment afforded due process?
- Is a developer in compliance with ANSI's requirements?
- Consider whether an ANS designation should be withdrawn for cause (at any time)
- Maintain and revise the procedures that govern the ANS process







Let's take a quick look at the "ANSI Essential Requirements: Due process requirements for American National Standards"







#### www.ansi.org/essentialrequirements



- All ASDs are bound by the ANSI Essential Requirements and their ANSI-Accredited Procedures
- Broad flexibility in consensus process models used by ASDs, some variables:
  - Layers of review and approval
  - Numerical requirements
  - Votes at meetings or via ballot
  - In-person meetings, webinars, teleconference, mail/hard copy
  - Concurrent or sequential steps
  - Use of electronic systems to support the consensus process
  - Starting with a draft or from scratch
    - Any document that is not yet an "ANS" is "draft" or "proposed"



### Overarching Consideration of ANS Process: Due Process





- Due process means that any person (organization, company, government agency, individual, etc.) with a direct and material interest has a right to participate by:
  - expressing a position and its basis
  - having that position considered
  - appealing if adversely affected
- Due process allows for equity and fair play
  - Fairness and consistency are safeguards



#### ANSI Essential Requirements - Criteria for ANS consensus







- ANSI's Essential Requirements (see clauses 1.0 & 2.0)
  - Openness
  - Lack of dominance
  - Balance
  - Coordination and harmonization
  - Notification of standards development
  - Consideration of views and objections
  - Consensus vote
  - Procedural appeals
  - Written procedures



#### **ANSI Essential Requirements**





- All ASDs and accredited procedures must comply with ANSI's requirements related to:
  - ANSI Patent Policy (3.1)
  - Commercial terms & conditions (3.2)
  - Antitrust policy (3.3)
  - ANS record retention/evidence of compliance (3.4)
  - Metric policy (3.5)
  - Interpretations policy (3.6)
  - Publication (4.4) & maintenance requirements (4.7)



#### What rules apply to the ANS process?







- In addition to the ANSI Essential Requirements:
  - The Standards Developer's ANSI-accredited procedures
    - Often available from ASD's website (must be available)
    - Provide the details of processes related to public notice, voting, comment consideration, appeals, etc.
    - ANS consensus body participation requirements
  - Standards Developer's electronic tools: requiring use of online systems or specific forms/formats is acceptable
  - Membership application, code of conduct, etc.
  - Typical default when procedures are silent:
     Roberts Rules of Order









# What does the ANS development process entail?

2 summary views follow

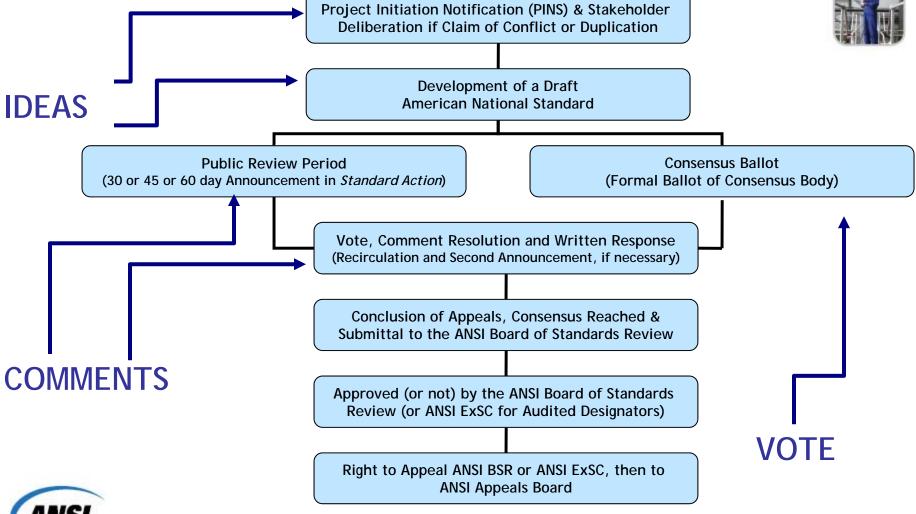


#### **ANS Development Cycle - Routine**









#### **ANS Key Steps**







#### www.ansi.org/anskeysteps













## ANSI recognizes "multiple paths" to standards development

 Not every standard needs to be an ANS, but this presentation highlights the basis for the credibility, integrity and confidence an ANS designation reflects



### Approval as an American National Standards (ANS)







- Approval as an American National Standard (ANS)
  - Means the sponsoring standards developer VOLUNTARILY subjects a standard to ANSI's
    - Neutral oversight and approval process
    - Public notice and comment requirements
    - Document maintenance requirements documents are current, regular review required
    - Appeals process: time-tested, credible and fair procedural review
    - Procedural audit process, which addresses the integrity and the "plumbing" of the consensus process
    - Short-hand for compliance with OMB A-119 and the NTTAA











- American National Standards
  - Many ANS are used globally
  - "National" and "International" are not mutually exclusive
  - ANSI's requirements are consistent with the World Trade Organization (WTO) Code of Good Practice (CGP)
  - ANS designation indicates compliance with globally accepted criteria for openness, transparency, fairness and more
  - ANS serve as the basis for many ISO, IEC or other international standards
  - Many ISO, IEC and ISO/IEC JTC-1 standards are adopted as ANS
  - Standards that hold the ANS status are used around the world successfully, every day...









# Recap...and then, how to participate...



## US Standards System Model: Strength through Diversity







- "Standards are the building blocks for innovation and competitiveness"
- No matter the challenge, solutions cannot be developed in a vacuum
- The robust U.S. standards and conformance systems are a powerful example of how a consensus-based public-private partnership can work to develop concrete solutions to real-world problems
  - For Consumers
  - For Companies
  - For Organizations
  - For Government





### American National Standards - Hallmarks of the ANS process matter







- Integrity and inclusiveness of the ANS process result in high quality standards that help to protect the public interest and foster commerce
- ANS designation indicates market and stakeholder recognition and acceptance: "quality"
- ANS designation = open, credible and fair process with respect to an individual standard
- ANS process provides potential legal safeguards: avoid antitrust and tort liability issues (see <a href="www.standardslearn.org">www.standardslearn.org</a> for "Legal issues in standards setting")



## American National Standards - Why they matter...





 Standards address important topics; users and the public should have confidence that they are based on a consensus of views arrived at through a fair and open process



- Consistent with our democratic principles,
   i.e., everyone who chooses to participate can have a voice
- Consensus and comment consideration in a due process based (fair) environment lead to standards that will be better accepted and more widely used
- ANSI's oversight is unique: ASDs who voluntarily participate are subject to regular review and procedural audit by ANSI
- ANS = short-hand that the consensus process satisfies the Federal Government's definition of voluntary consensus standard (VCS)









 On almost any given day, a standards group or technical committee (consensus body) is meeting and making decisions that could affect the bottom line of our national economy, safety, innovation - and your organization

Shouldn't you be involved?









Let's review some tools and data that will help you decide where you need to be represented...









### How to ID the sponsor of the ANS?

- Identify the standard(s) via the unique alphanumeric designation, e.g., ANSI/ABC 123-2013
  - Not all ANS include "ANSI" in the designation
  - All ANS are labeled on the cover or front matter
    - "an American National Standard" or use the ANS logo
- Designations frequently include the acronym of the ASD: e.g., ASHRAE, ASME, NFPA, UL, IAPMO, INCITS, ASTM, NSF, NEMA, IEEE, ASIS, IESNA, CSA, ATIS, ISEA, API, SCTE, Acoustical Society of America (ASC S1, S12, etc.)...

www.ansi.org/asd

- Visit <u>www.ansi.org/asd</u> to identify standards that are or are intended to become ANS
  - "BSR" in the designation of a standard on ANSI's website, indicates that the standard is proposed as an ANS, but not yet approved as such



## ANSI-Accredited Standards Developers







List of ANSI-Accredited Standards Developers with a scope and contact for each:

www.ansi.org/asd







#### How to search for ANS?

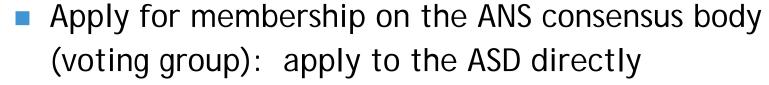
- www.ansi.org/asd
  - Contact an ASD directly, identify an ANS or proposed ANS
- www.ansi.org/StandardsAction
  - Published every Friday & it's free
  - Open public comment opportunities, recently approved ANS
- http://ibr.ansi.org/ ANSI IBR Portal
  - Posting of some standards referenced in regulations or urls to link to developer sites
- http://webstore.ansi.org ANSI Webstore
  - many ANS available for sale
- ANS questions, E-mail: <u>psa@ansi.org</u>







#### How to participate?





- Some ASDs also offer participation on a sub-group
- Reasonable fees for participation may apply (fees vary)
- Submit public review comments during an open ANSI public review period (www.ansi.org/standardsaction):
  - submit comments to the ASD directly and copy <u>psa@ansi.org</u>
  - many ASDs charge a fee to obtain a copy of a draft to defray development and production costs
  - electronic submittal of public comments may be required in a specific format or via an online system

comment deadline dates apply and are enforced







#### How to participate?

- Submit proposal to develop an ANS or revise an existing ANS
  - Submit to the ASD in accordance with its procedures
- Research other options that <u>may</u> be available through the ASD including:
  - Informational member
  - Liaison, Affiliate, etc.
  - Working group or task group or drafting group participation, etc. (contributor, but non-voting option)







#### ANS Participation tips...

- Review and familiarize yourself with the ANSI Essential Requirements (www.ansi.org/essentialrequirements)
- Obtain a copy of the ANSI-Accredited Standards
   Developer's (ASD) accredited procedures
  - Check online or contact the ASD staff
- Review the sponsoring ASD's website (websites are included at <u>www.ansi.org/asd</u>)
- Identify a staff person/E-mail at the developer who is able to serve as a resource, e.g., "committee secretary"







#### ANS Participation tips...

- Review ANSI Standards Action
   (www.ansi.org/standardsaction) each Friday to see
   what standards are open for review
- Understand which portions of a standard are under review (not always the entire document)
- Adhere to deadlines and formatting requirements to ensure that your comments are properly received and considered
  - When a public comment/public review period is announced, deadlines for commenting are specified and matter!







### **ANS Participation tips...**

- Participate in good faith
- Submit public comments during open comment periods
- If you are a voting member, submit votes by established deadlines
  - Respond to ballots per ASD's instructions
- If you have a concern, speak with ASD staff to understand your rights to informal dispute resolution options and appeals rights
  - all ASDs offer a procedural appeals option
  - to preserve your right to appeal to ANSI concerning a specific ANS, you must conclude the procedural appeals process at the ASD first
- For information about ANSI's appeals options, go to <u>www.ansi.org/ASD</u> for guidance documents or <u>psa@ansi.org</u>









Interested in working together as part of a public-private partnership to develop standards based solutions to all kinds of challenges?





## Consider joining ANSI...







- Support a strong U.S. public-private partnership
- Network with strategic thinkers
- Contribute to solutions for standardization and conformity assessment issues of national importance
- Learn more about standards and conformity assessment and how they influence trade and the public interest every day
- Gain exposure to standardization and conformity assessment issues that affect trade, business, consumer protection, the environment, and everyday life - domestic & international
- membership@ansi.org or www.ansi.org/membership



### **ANSI Engagement Vehicles**





#### **Accreditation**

- Standards Developers
- U.S. Technical Advisory Groups to ISO
- Product Certification Bodies
- Personnel Certification Bodies
- Management Systems Registrars
- Inspection Bodies and Laboratories
- Greenhouse Gas Verification Bodies
- Certificate Programs

#### **Coordination Activities**

- Standardization Coordination / Collaboratives
- Member Forums / Issues-based Meetings
- Workshops and Networks

#### **International Connectivity & Policy**

- International Trade Policy
- Advocacy and Business Facilitation
- Secretariat and US/TAG Management
- ISO & IEC P Membership Support
- Regional and Bilateral Activities in
   Asia Pacific / Americas / Europe / Africa
- China Programs

International Development Activities
International Consumer Interest Activities

#### **Legal Issues**

- Intellectual Property Rights (IPR)
- Patents
- Copyrights
- Legal Issues Forum

#### **Government Outreach and Relations**

- Congressional Presentations
- Legislative Issues Monitoring
- ANSI Caucus Meetings
- Joint ICSP/GMF Meetings
- IBR Standards Portal

#### Sales, Marketing and Distribution

- Retail & Subscription Publications Sales
- Advertising, Marketing & Distribution
- Social Media & Networking Activities
- Digital Rights Management (DRM) Solutions
- Customized Partner Solutions

#### Editorial and Publishing Services

#### Education and Training

- Instructor Led on-site Training
- Online and Webinar Training

Registration Programs



### Helpful Resources







- ANSI Essential Requirements: <a href="https://www.ansi.org/essentialrequirements">www.ansi.org/essentialrequirements</a>
- List of approved ANS and proposed ANS: <u>www.ansi.org/asd</u>
- Summary of ANS process steps: <a href="www.ansi.org/anskeysteps">www.ansi.org/anskeysteps</a>
- List of ANSI-Accredited Standards Developers: www.ansi.org/asd
- ANS Value Brochure: www.ansi.org/ansvalue
- ANSI Standards Action (weekly information about proposed and approved ANS): <a href="https://www.ansi.org/standardsaction">www.ansi.org/standardsaction</a>
- Standards Boost Business: <u>www.standardsboostbusiness.org</u>
- Online and in-person training options: www.standardslearn.org
- Staff are available via <u>psa@ansi.orq</u>









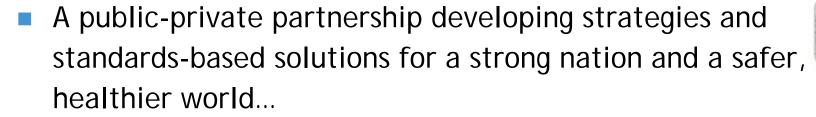
## Some closing thoughts...







#### ANSI and the US Standards System...



- STRENGTH openness, fairness and diversity make the US standards system strong
- ➤ INNOVATION standards spur and support innovation
- ACTION standards are responsive to human and market needs
- GROWTH standards facilitate economic growth and keep us competitive
- PRODUCTIVITY standards promote and support productivity
- SOLUTIONS standards-based solutions address issues of national, regional and international importance
- PARTNERSHIP everyone has a voice and all are welcome

COLLABORATION - stakeholders work together to develop solutions







We hope that you will decide to participate in standards development and be part of the solutions being developed every day...









Thanks so much for your interest...please keep my contact information if ANSI can help you or your organization...



















#### for more information

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