



An Introduction:

American National Standards Institute United States Standards System



Key Terms



- **Standards**
 - **Market-driven** product and service specifications (e.g., technical requirements, management systems, etc.)

- **Regulations**
 - **Mandatory** technical specifications, which may include particular standards or conformity assessment procedures

- **Conformity Assessment**
 - **Processes and systems** used to verify the compliance of a product, person, process or system to either a standard or a regulation (e.g., testing, certification)



- The American National Standards Institute leads standards, conformity assessment, and related activities in the United States of America.
- Founded in 1918, ANSI is a private, non-profit organization.
- ANSI is not a government agency or a standards developer.



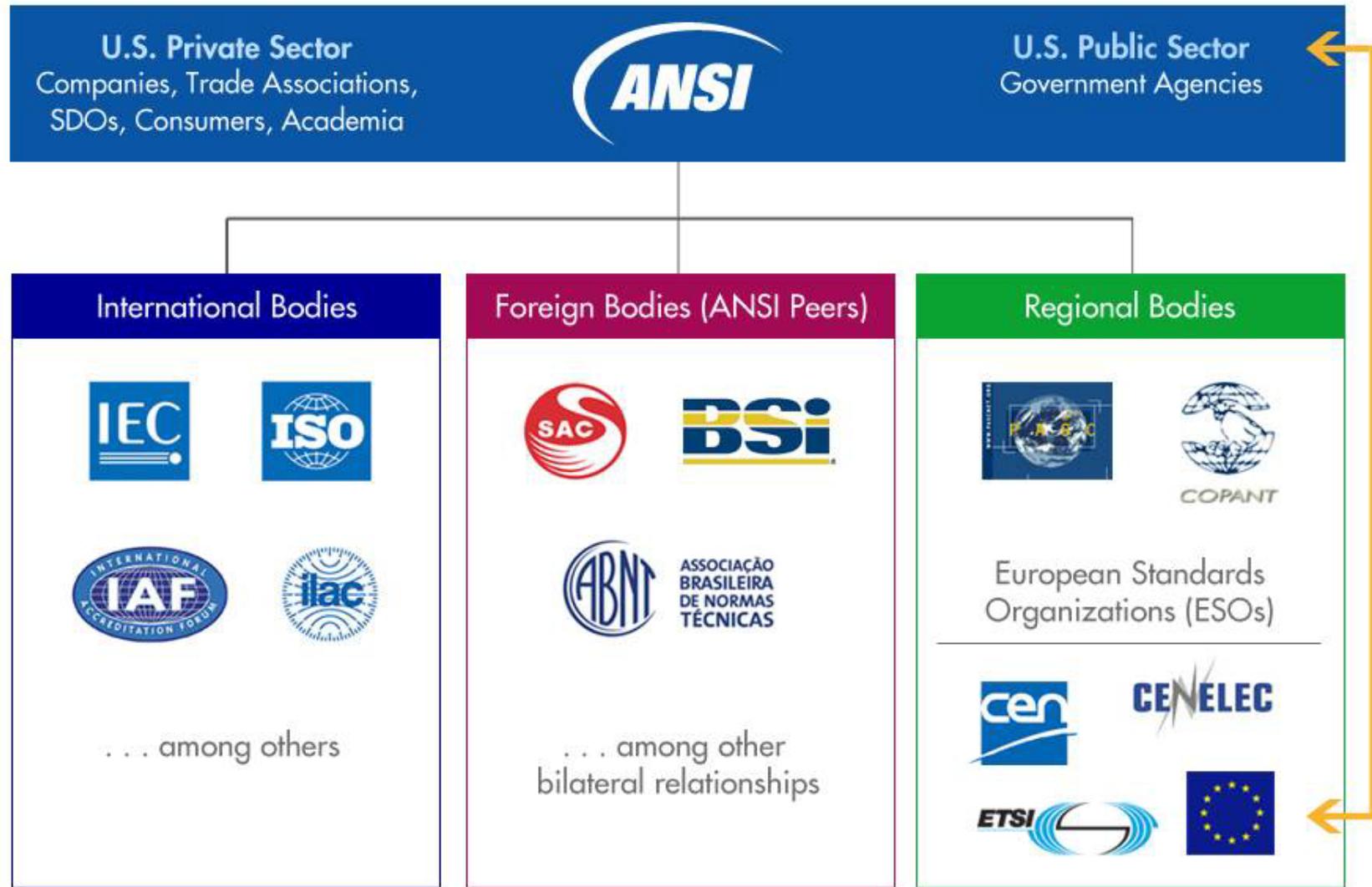
- Represents U.S. globally
- Ensures integrity of the standards and conformity assessment system
- Offers neutral forum
- Accredits standards developers and conformity assessment organizations
- Coordinates partnership between U.S. public and private sectors



- U.S. member of ISO
- U.S. member of the IEC, via ANSI's U.S. National Committee
- a U.S. member of IAF and ILAC
- member of regional forums in the Pacific Rim and the Americas
- liaison with groups in Europe, Africa and the Middle East
- bilateral agreements with other national standards bodies



Snapshot: ANSI International, Regional, and Bilateral Activities



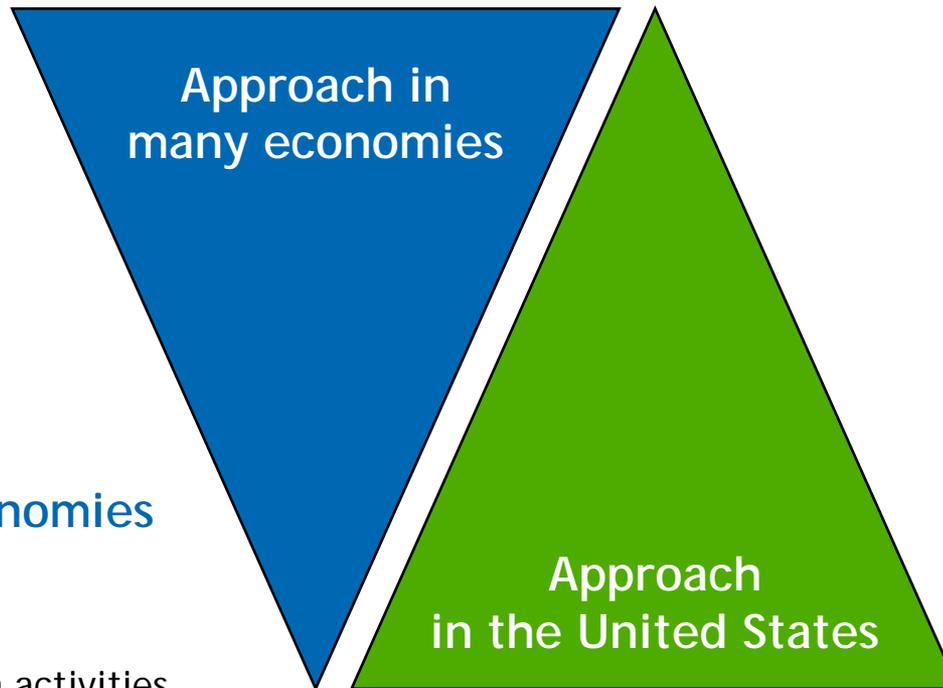


The ANSI Federation represents more than **125,000 companies and organizations** and **3.5 million professionals** worldwide

Members of the ANSI Federation include . . .

- Academia
- Individuals
- Government
- Manufacturing
- Trade Associations
- Professional Societies
- Service Organizations
- Standards Developers
- Consumer and Labor Interests
- and many more

U.S. Standards and Conformity Assessment System comparison with many other economies



Many other economies
Top Down

Standards bodies
drive standardization activities

United States
Bottom Up

Standards users drive
standardization activities

U.S. Standards and Conformity Assessment System

comparison with many other economies

- Emphasizes private-sector standards solutions
- Relies on private-sector **compliance verification** for both regulatory and non-regulatory functions
- Provides a strong voice and greater authority to standards users and individual stakeholders

U.S. Standards and Conformity Assessment System

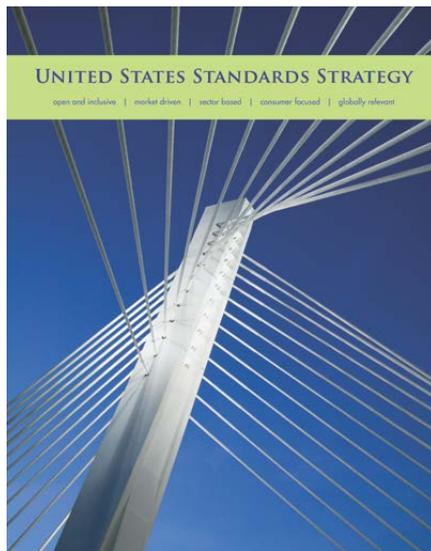
the public-private partnership

- No single government agency has control over standards
 - Each agency determines which standards meet its needs
- **National Technology Transfer and Advancement Act (NTTAA) – Public Law 104-113**
 - Encourages each government agency to seek existing private-sector standards that are appropriate for its purpose and mission

U.S. Standards and Conformity Assessment System

reliable - flexible - responsive

- Market driven
- Flexible and sector-based
- Industry-led and government-supported



This system is designed to . . .

- Support a broad range of stakeholder engagement
- Address emerging priorities and new technologies
- Allow stakeholders to find the solutions that best fit their respective needs

As defined in the *United States Standards Strategy*
www.us-standards-strategy.org

U.S. Standards System

a market driven approach



- In the U.S. alone, there are more than 100,000 standards
- These documents are being developed by:
 - standards developing organizations (SDOs)
 - over 500 consortia
 - thousands of committees
- Over 9,500 approved American National Standards

U.S. Standards System

guiding principles



- Standards should meet societal and market needs and should not be developed to act as barriers to trade

- The U.S. endorses the globally accepted standardization principles of the World Trade Organization Technical Barriers to Trade Agreement
 - Transparency
 - Openness
 - Impartiality
 - Effectiveness and relevance
 - Consensus
 - Performance-based
 - Coherence
 - Due process
 - Technical Assistance
 - Flexible
 - Timely
 - Balanced



WORLD TRADE
ORGANIZATION

U.S. Standards System

different tools for globally relevant standards

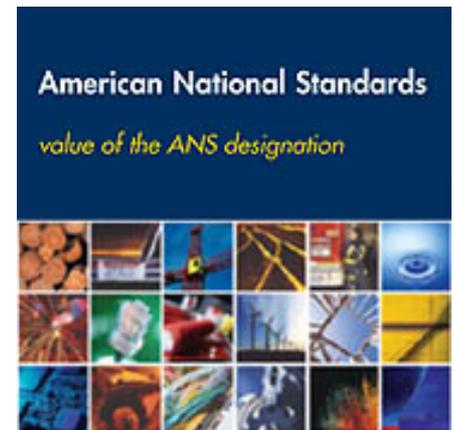


National Participation (one country one vote)	Direct Participation	Consortia
<ul style="list-style-type: none"> ▪ Treaty Organizations ▪ Non-Treaty Organizations 	<ul style="list-style-type: none"> ▪ Nationally Accepted ▪ Internationally Accepted 	
<p><u>Examples</u> ISO, IEC, ITU, CODEX, etc.</p>	<p><u>Examples</u> ASTM International, ASME, SAE, etc.</p>	<p><u>Examples</u> IGRS, W3C, etc.</p>

American National Standards (ANS)



- Currently there are approximately 225 ANSI-accredited standards developers
 - Not all standards developed by these organizations are submitted for consideration as ANS
- There are approximately 10,000 American National Standards
- Learn more: www.ansi.org/ansvalue



U.S. Standardization System

examples of ANSI-accredited SDOs and U.S. TAGs

ASTM
International



ASTM
INTERNATIONAL
Standards Worldwide

American
Society of
Mechanical
Engineers



ASME
SETTING THE STANDARD

International
Code Council



ICC
INTERNATIONAL
CODE COUNCIL®

American
Dental
Association



ADA®

National
Electrical
Manufacturers
Association



NEMA
Setting Standards for Excellence
www.nema.org

National Fire
Protection
Association



NFPA®

SAE International™

Society of Automotive Engineers

IEEE STANDARDS
ASSOCIATION

Institute of
Electrical and
Electronics Engineers



 **Underwriters
Laboratories Inc.®**

Underwriters Laboratories Inc.

American
Society
of Civil
Engineers



ASCE®
American Society of Civil Engineers

American
Petroleum
Institute



energy API

And more than 200
additional organizations

Getting Involved in U.S.-Based SDOs

www.StandardsPortal.org a resource for global trade

ANSI
American National Standards Institute

The International Language of commerce is standards.

www.StandardsPortal.org provides answers to the critical standards, conformance, market access, and trade-related questions that companies require to succeed in the U.S. and internationally.

Follow the links below to access information on your markets of interest.



EXPORT MARKETS

 **UNITED STATES OF AMERICA**
English 中文简体

- Find Standards
- Find Standards Developing Organizations
- Find Conformity Assessment Bodies

 **PEOPLE'S REPUBLIC OF CHINA**
English 中文简体

- Find GB Standards
- Purchase GB Standards
- SAC Pages

 **REPUBLIC OF INDIA**
English

- Find Indian Standards
- ISI Mark

INTERNATIONAL TRADE RESOURCES

 **CHINA ROUNDTABLE**

 **U.S.-INDIA SSCP**

 **INTERNATIONAL TOOLBOX**

 **SPEAKERS' PACKAGE**

 **ANSI INTERNATIONAL POLICY PAPERS**

 **ANSI INTERNATIONAL ACTIVITIES**

 **INTERNATIONAL CALENDAR**

 **VIETNAM STANDARDS TRAINING PROGRAM**

 **DELEGATION VISITS**

 **INTERNATIONAL GUEST RESEARCHERS**

Getting Involved in U.S.-Based SDOs (2)

www.StandardsPortal.org a resource for global trade

ANSI American National Standards Institute

Standards Portal Home
标准信息平台首页

U.S. Information

Standards Developing Organizations (SDOs)

Trade Associations

Conformity Assessment Bodies (CABs)

U.S. Standards Strategy

U.S. Conformity Assessment Principles

Search for Standards (NSSN)

Ads by Google

Online Mech. Engineering
Find & Compare Online Engineering Degrees.
Request Free Info.
www.eLearners.com/MechEn

BACKGROUND KEY INFORMATION RESOURCES

Resources: Standards Developing Organizations (SDOs)

This Directory provides information on a wide variety of Standards Developing Organizations (SDOs) that play a role in the U.S. system, including contact information, the scope of standards development work, and their international activities by geographic region. Information in this SDO Directory can be searched by:

- SDO Name
- ICS Code (What's this?)
- Industry Sector

Learn more about the directory

View by SDO Name View by ICS View by Industry Sector

Acronym	Organization name	Keywords
AATCC	The American Association of Textile Chemists and Colorists	Textiles, textile coloration, design, dyeing, finishing, merchandising, test methods, training, quality control
AF&PA	The American Forest & Paper Association	Wood, structural design, construction, residential, commercial, engineered wood products, structural panels, framing, green building
AHRI	Air-Conditioning, Heating, and Refrigeration Institute	Air-conditioning, refrigeration, heating, ventilation, controls, boilers, furnaces
AIHA	American Industrial Hygiene Association	Occupational health and safety, management systems, respiratory protection, ventilation systems, worker safety, industrial hygiene.

U.S. Standards System

examples of roles and responsibilities

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