



## 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



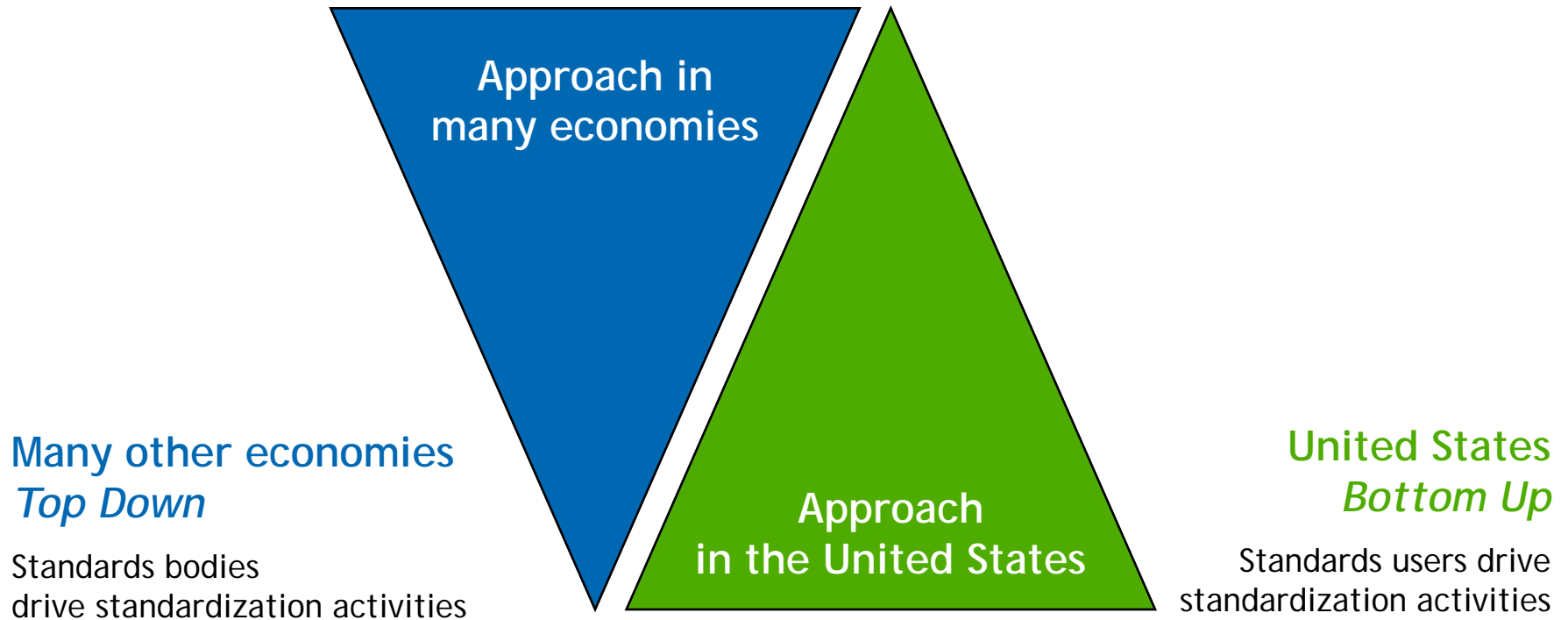


The ANSI Federation represents more than **125,000 companies and organizations** and **3.5 million professionals** worldwide

### 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





# 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

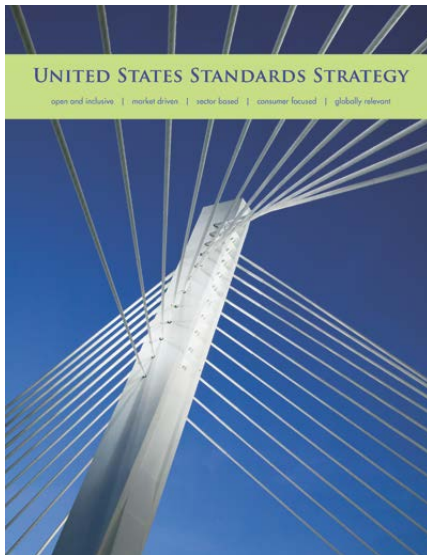
## the public-private partnership

- 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](http://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

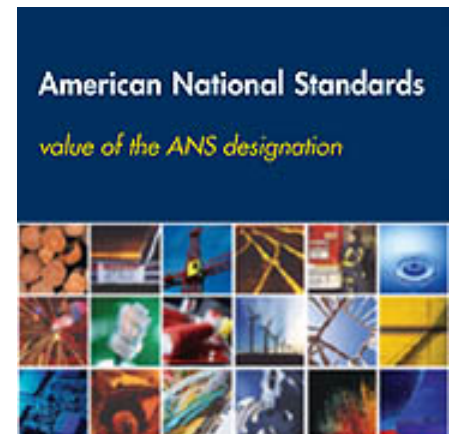


National Participation (one country one vote)	Direct Participation	Consortia
<ul style="list-style-type: none"><li>■ Treaty Organizations</li><li>■ Non-Treaty Organizations</li></ul>	<ul style="list-style-type: none"><li>■ Nationally Accepted</li><li>■ Internationally Accepted</li></ul>	
<u>Examples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

# 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](http://www.ansi.org/ansvalue)



# U.S. Standardization System

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

ASTM  
International



American  
Society of  
Mechanical  
Engineers



International  
Code Council



American  
Dental  
Association



National  
Electrical  
Manufacturers  
Association



National Fire  
Protection  
Association



**SAE** International

Society of Automotive Engineers



Institute of  
Electrical and  
Electronics Engineers



**Underwriters  
Laboratories Inc.®**

Underwriters Laboratories Inc.

American  
Society  
of Civil  
Engineers



American  
Petroleum  
Institute



**And more than 200  
additional organizations**



# Getting Involved in U.S.-Based SDOs


[www.StandardsPortal.org](http://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 SCCP




INTERNATIONAL TOOLBOX




SPEAKERS' PACKAGE




ANSI INTERNATIONAL POLICY PAPERS




ANSI INTERNATIONAL ACTIVITIES




INTERNATIONAL CALENDAR



VIETNAM STANDARDS TRAINING PROGRAM



DELEGATION VISITS



INTERNATIONAL GUEST RESEARCHERS


**ANSI**  
American National Standards Institute

# 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**  
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www.eLearners.com/MechEng

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	✓	✓	✓	✓	✓	✓