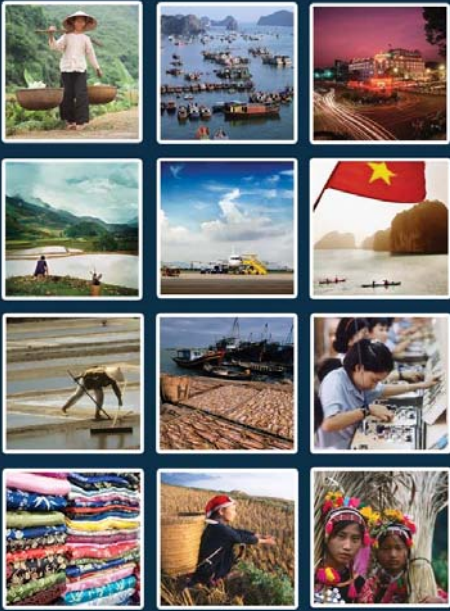


# U.S. - Vietnam Standards Training Program



Cooperation between ANSI and STAMEQ  
Sponsorship by the United States Trade and Development Agency



***Intensive Session 3:  
Regulatory Principles***

March 12, 2008



Cooperation between ANSI and STAMEQ  
Sponsorship by the United States Trade and Development Agency



## ***Lecture 2:***

# ***National Technology Transfer and Advancement Act (NTTAA)***



# Agenda for this session

- ❑ U.S. Government Participation in Voluntary Consensus Standards
- ❑ The Government's Role in Standards Development
- ❑ The Government as a Stakeholder
- ❑ Government Agency Participation in Standards Development
- ❑ Government Use of Standards
  - Benefits
  - Legal Policy and Framework
  - Key Points
  - Sources
  - Examples
- ❑ Conclusions

# U.S. Government Participation in and Use of Private Sector Standards

The U.S. Standardization system consists of a unique and dynamic cooperation between the federal government and the private-sector. This relationship is important to emphasize because of its role in:

- ❑ Promoting technical innovation in the U.S.
- ❑ Advancing U.S. positions globally
- ❑ Adapting U.S. policy to the needs of industry and consumers thus reinforcing economic competitiveness
- ❑ Encouraging the development of globally relevant standards

# The Government's Role in Standards Development

The U.S. Government is:

- ❑ A standards user
  - through the purchase of products
  - through the incorporation of standards into regulations
- ❑ A participant in standards development through the voluntary process that does not receive any special treatment/privileges for participation
- ❑ A contributor to the technical underpinning for standards
- ❑ An advocate for the U.S. national interest

**Goal: protect health, safety and the environment  
while not creating unnecessary barriers to trade**

# Government as a Stakeholder

The U.S. Government has an interest in:

- ❑ Promoting fair trade and competition
- ❑ Having confidence in competently conducted activities
- ❑ Assuring interoperability of critical infrastructure like...
  - IT systems
  - Emergency communications systems
  - E-government...applicable to purchased systems and components
- ❑ Facilitating innovation

# US Government Agency Participation in Standards Development

- More than 3,200 agency staff participate in private sector standards development activities
- Government agencies participate in relevant fora developing voluntary standards in order to:
  - Support regulatory needs
  - Enable efficient government procurement
  - Create solutions to support emerging national priorities
- In addition, NIST contributes technical efficiency by:
  - Contributing expertise in metrology (measurement) to the development of test methods; product, system, and process specifications; etc.
  - Participating in data collection efforts supporting the development of test methods
  - Providing measurement standards needed to calibrate instruments used in test methods



# Example: Government representatives participation in standards development

- ❑ NIST has active involvement in nanotechnology standards development activities
- ❑ Emphasis are developing relevant standards to enable reliable measurement and characterization
- ❑ NIST experts provide technical expertise in highly accurate and precise measurement, and provide measurement standards (reference materials) that underlie documentary standards
- ❑ NIST staff participate in ASTM E42, ASTM E56, IEC TC113, ISO TC229, ISO TC201, ISO TC202, ISO TC213, IEEE-P1650, IEEE-P1690, JEDEC, SEMI, OECD-WPMN: all focusing on standards and test method development within areas of nanotechnology

# Government Use of Standards: Benefits

- ❑ Eliminates the cost of developing standards that meet government requirements
- ❑ Decreases cost of goods procured
- ❑ Promotes efficiency and economic competition; decreases burden on regulated communities
- ❑ Furthers the policy of reliance on the private sector to supply goods and services that meet government needs

# Government Use of Standards: Legal and Policy Framework

- U.S. law\* and policy\*\* require Federal agencies to:
  - use voluntary consensus standards to the extent practicable
  - report development of agency-unique standards
  - participate in the development of voluntary consensus standards relevant to their needs
  
- Encouraging the trend toward Federal agency reliance on non-government standards is an important part of the U.S. Standards Strategy

*\*Public Law 104-113 (1996), also referred to as the National Technology Transfer and Advancement Act (NTTAA) of 1995*

*\*\*OMB Circular A-119 – Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*

# National Technology Transfer and Advancement Act (NTTAA)

## □ Section 12(d) :

- Directs federal agencies to use “technical standards developed or adopted by voluntary consensus standards bodies” as a means to carry out policy objectives or activities determined by the agencies or departments

# National Technology Transfer and Advancement Act (NTTAA)

- ❑ All Federal agencies should use consensus technical standards in lieu of agency unique standards
  - Agencies must annually report use of agency unique standards and provide explanation of use
  
- ❑ Federal agencies should participate in standards developing activities
  
- ❑ NIST is identified as the coordinator of Federal standards and conformity assessment activities with those of the private sector

# Policies of OMB Circular A-119

- ❑ Encourage federal agencies to ***benefit from the expertise of the private sector***
  
- ❑ Promote federal agency participation in private-sector standards developing bodies to ***ensure the creation of standards that meet the needs of Federal Agencies***
  
- ❑ ***Reduce reliance on government-unique standards*** where private-sector standards suffice
  - No preference among types of standards (consensus versus non-consensus)
  - Use of commercial off-the-shelf products regardless of source of underlying standard

# Government Use of Standards: Key Points

- ❑ The federal government makes maximum use of private sector standards, where appropriate
  - In procurement and policy activities
  - To support regulatory activities
  
- ❑ Agencies retain the authority to choose the standard that best meets their needs
  
- ❑ The voluntary consensus process is preferred specifically because of the benefits the process offers

# Examples of Standards Sources Used by the Federal Government

- ASTM International
- Institute for Printed Circuits
- American Society of Mechanical Engineers (ASME)
- National Fire Protection Association (NFPA)
- Society of Automotive Engineers
- Underwriters Laboratories, Inc.
- American Petroleum Institute
- International Organization for Standardization/International Electrotechnical Commission (ISO/IEC)
- International Maritime Organization (IMO)
- Compressed Gas Association



# Examples of How Agencies Use Standards

- ❑ Specific references to private sector standards incorporated into regulations
- ❑ General references to private sector standards in regulations
- ❑ Agency-developed standards
- ❑ Consensus standards recognized in support of regulations

# Reliance on Voluntary Standards for Regulation: Consumer Product Safety Commission

- ❑ Over the past 15 years, CPSC has only issued 35 “mandatory standards”, for a ratio of 9 consensus standards for every “mandatory standard”
- ❑ CPSC has found using consensus standards wherever possible to be faster and less costly
- ❑ The consensus standards development process fully considers CPSC’s expertise and technical advice at each stage of the process
- ❑ When “mandatory standards” are necessary, CPSC favors performance rather than design standards that give manufacturers flexibility

# Reliance on Voluntary Standards for Procurement: The U.S. Department of Defense

The U.S. DoD has reduced significant cost and optimized its procurement and research and development budget by:

- ❑ Adopting, whenever practical, standards developed in the private sector already available in the private-sector rather than repeating work
- ❑ Using commercial off-the shelf products wherever available and feasible, rather than creating government-unique product lines

# Reliance on Voluntary Standards for Government Programs: The Environmental Protection Agency

Since the introduction of the NTTAA in 1996 requiring federal agencies to use voluntary standards wherever possible, the EPA has benefited from:

- ❑ Greater ease in meeting regulatory obligations, with voluntary standards meeting the technical requirements of about half of the 600-900 EPA rules written each year
- ❑ Increased collaboration between government and private sector technical experts on the environment
- ❑ Opened paths of communication with industry to advance the agency's objectives

# Conclusions

- ❑ Individual federal agencies make effective use of private sector standards in many applications
- ❑ Agencies must consider whether the use of standards helps them accomplish their missions, increases efficiency, reduces the burden on regulated and other communities and whether trade is impacted
- ❑ At last count, more than 6,500 private-sector standards were incorporated by reference into federal regulations
- ❑ Greater use of standards with global acceptance facilitates both the least burdensome regulatory approach and trade

# ***Questions?***

# Additional Resources

Database of standards used for procurement:

[http://standards.gov/sibr/query/index.cfm?fuseaction=Home.total\\_procurement\\_sibr](http://standards.gov/sibr/query/index.cfm?fuseaction=Home.total_procurement_sibr)

Database of standards used in regulation:

<http://standards.gov/sibr/query/index.cfm>

Link to OMB A-113:

<http://ts.nist.gov/ts/htdocs/210/nttaa/113.htm>

Link to NTTAA:

<http://ts.nist.gov/ts/htdocs/210/nttaa/nttaa-qa.htm>