



Global Standards Information

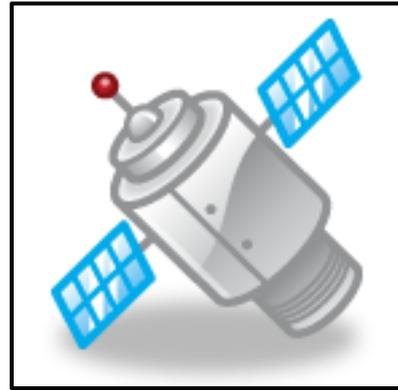


# USG & Standards “The Big Picture”

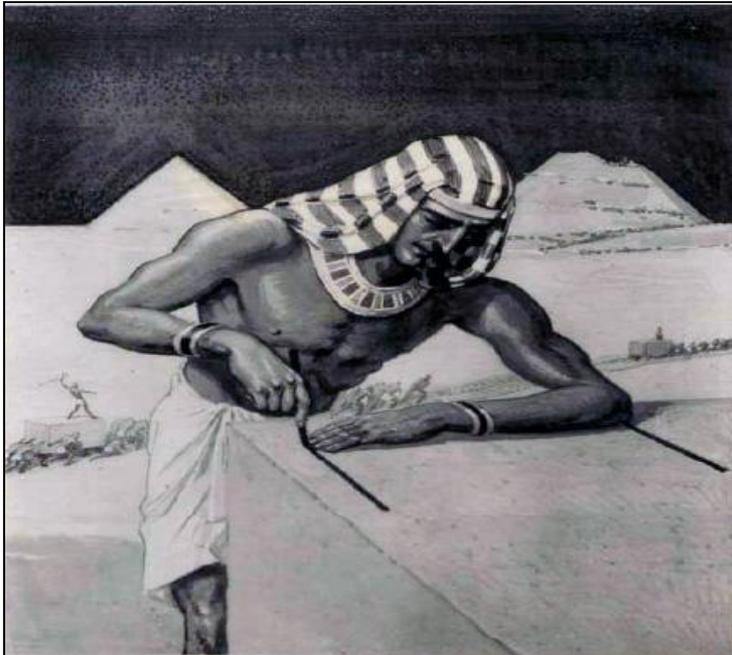
NIST Workshop on the Fundamentals of  
Standards and Conformity Assessment for the  
U.S. General Services Administration,  
Office of Federal High-Performance Green Buildings  
February 2, 2012

# Today's Discussion

- Standards: A Brief Historical Perspective
- U.S. Standards System
- NTTAA and OMB Circular A-119
- ICSP
- Resources
  - NCSCI, WTO Inquiry Point and Notify US
  - Workshops on Standards and Conformity Assessment



# Standards in History – Building the Pyramids



- Cubit -  
First known measurement.  
About 20 inches.  
Length of forearm from point of  
elbow to end of the middle finger.



# Early Drivers for Standards



Baltimore  
Fire  
of 1904

# The U.S. Standards System Today

The U.S. standards system is voluntary, decentralized, sector driven and is, sometimes, competitive.

The system relies on cooperation and communication among:

- Private sector standards organizations
- Industry
- Government

# One Approach Among Many in the World

## The U.S. Standardization Model:

- resembles the nation's economic structure: sector-based and driven by market needs
- reflects U.S. culture and traditions
- reflects government/private sector dynamics
- relies strongly on diversity and decentralization

# Key Terms & Concepts

## STANDARDS

**Market-driven** technical specifications for a product, service, person, process or system, with which compliance is voluntary

## TECHNICAL REGULATIONS

**Technical** specifications, which may include (or reference) particular standards, with which compliance is mandatory

## CONFORMITY ASSESSMENT

**Processes** used to verify the compliance of a product, service, person, process or system to either a standard or a regulation (e.g., testing, certification, inspection)

# Key Concepts in Standards Development

## Openness

All stakeholders may participate; no single interest may dominate

## Transparency

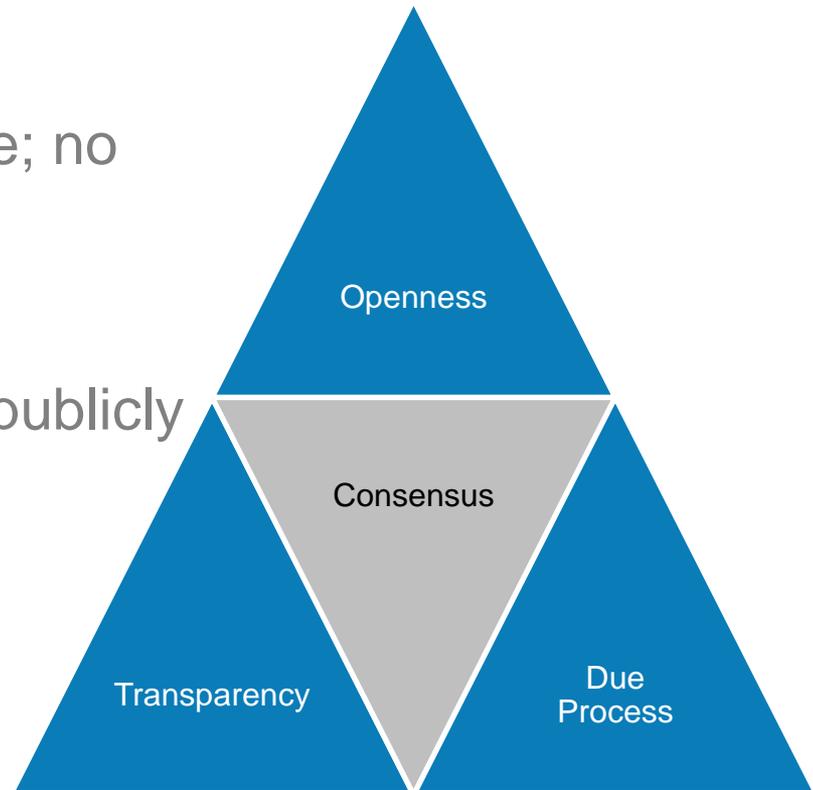
Records/ processes open and publicly available

## Due Process

Appeals mechanism

## Consensus

Decisions more than majority but not unanimity



# Key Players in the U.S. Standards System

- **Standards Developing Organizations (SDOs)**
- **Committee members who provide technical input, including **Government** agency personnel**
- **American National Standards Institute (ANSI)**
- **National Institute of Standards and Technology (NIST)**

# Key Player – SDOs

- **Professional Societies** whose members seek to advance professions, and also develop standards
- **Trade Associations** promote their industry's products, and develop standards
- **Testing and certification organizations** produce their standards and may also use those of other organizations
- **Organizations that only develop standards**



# Key Players – Consortia

- **Consortia** are groups of companies that come together to create a standard to address a (typically single) commercial need
- **Characteristics:**
  - Quick standards setting
  - Arose in the late 1980s to meet changing technological needs
  - Most often are joint ventures that “pay to play”
  - Recently, many consortia in the food industry and in the environmental/sustainability sectors
  - “Proprietary” standards
  - Enormous variation among consortia in terms of openness, transparency and consensus

# Key Players – International Players

- International Organization for Standardization (ISO)
- International Electrotechnical Commission (IEC)
- International Telecommunication Union (ITU-T)
- Other private SDO
- Treaty organizations (government based)
- Regional bodies

# US Government Role in the Standards System

- Standards User
- Standards Development Participant

**But, does NOT oversee or control the process!**

# Government Role as Standards User

- In Regulation
  - 8,383 citations of standards incorporated by reference
  - More than 6,900 are non-government standards
  - 672 incorporations by reference by EPA of ASTM standards
- In specifying what USG will buy (procurement contracts)
  - 1000's of standards are used in purchasing goods

# Government Role as Participant in Standards Development

USG personnel participate in the standards development process:

- Contribute technical expertise/resources
- Ensure government needs are being met



# Example of SDOs with GSA Staff Participation

- Ambulance Manufacturers Division
- American Society of Mechanical Engineers
- ASTM International
- Builders Hardware Manufacturers Association
- Institute of Packaging Professionals
- International Safe Transit Association
- Material Handling Equipment Industry Association

**Note: In 2011, GSA reported 18 agency representatives participated in 51 voluntary consensus standards activities.**

# NIST's Standards Services: A Few of the Things We Do

- National Technology Transfer and Advancement Act (NTTAA) and OMB Circular A-119
- Interagency Committee on Standards Policy (ICSP)
- Work with and support other agencies to develop conformity assessment programs
- WTO Inquiry Point
- Training on Standards and Conformity Assessment for Government Agency Personnel
- Standards in Trade workshops

# Goals of Legislation and Administration Policies

- Eliminate cost (of developing standards)
- Decrease the cost of goods and burden of complying with agency regulations.
- Promote efficiency and economic competition through harmonization of standards
- Further the reliance on the private sector to supply Government needs
- Enhance collaboration with the private sector on standards that serve national needs.

# Use Voluntary Consensus Standards to Carry Out Policy

Section 12 (d) (1) of the National Technology Transfer and Advancement Act (NTTAA) states:

(1) IN GENERAL- Except as provided in paragraph (3) of this subsection, **all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies**, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.

# Consult and Participate with Standards Developing Organizations

Section 12(d)(2) National Technology Transfer and Advancement Act (NTTAA) states:

(2) CONSULTATION; PARTICIPATION- In carrying out paragraph (1) of this subsection, **Federal agencies and departments shall consult with voluntary, private sector, consensus standards bodies and shall**, when such participation is in the public interest and is compatible with agency and departmental missions, authorities, priorities, and budget resources, **participate** with such bodies in the development of technical standards.

# There are Exceptions ... BUT You Must Report Them

Section 12(d)(3) National Technology Transfer and Advancement Act (NTTAA) states:

(3) EXCEPTION- If compliance with paragraph (1) of this subsection is inconsistent with applicable law or otherwise impractical, a Federal agency or department may elect to use technical standards that are not developed or adopted by voluntary consensus standards bodies if the head of each such agency or department transmits to the Office of Management and Budget an explanation of the reasons for using such standards.

# OMB Circular A-119 – Policy Guidelines on Implementation of the NTTAA

- Establishes policies on Federal use and development of voluntary consensus standards and on conformity assessment activities
- Revised in 1998 to be consistent with, and reinforce, the NTTAA

# Federal Agency Responsibilities Under the NTTAA & Circular

- Ensure agency compliance with NTTAA and the Circular
- Appoint a Standards Executive to serve on the Interagency Committee on Standards Policy (ICSP)
- Submit data to NIST for annual report to OMB

# Interagency Committee on Standards Policy

- Established in 1968, the ICSP's authority is set out in OMB Circular A-119. The role of the ICSP was strengthened by the passage of the NTTAA in 1995.
- The ICSP seeks to promote effective and consistent standards policies plus foster cooperation between government, industry, and other private organizations involved in standards activities.
- Membership consists of Federal Standards Executives and their designated representatives from 32 agencies

# NIST's Role in the Interagency Committee on Standards Policy

- NIST is the chair of the ICSP.
- The ICSP reports to the Secretary of Commerce through the Director of NIST.
- ICSP members report annually to NIST – NIST prepares an Annual Report on Federal Agency Use of Voluntary Consensus Standards and Conformity Assessment.

# NTTAA Has Been Effective

Since reporting began in 1997:

- 2,470 private sector standards have replaced Government-unique standards
- 82 Government-unique standards were developed, 37 of which have been discontinued over the same time -
- Only 45 government standards reported in lieu of private sector standards under the NTTAA.

# Subcommittee on Standards

- Established March 2010 and chaired by Dr. Patrick Gallagher, Director of NIST.
- Part of the OSTP National Science and Technology Council Committee on Technology,
- provides high-level leadership to support focus and active engagement on critical standards issues.
- Improves coordination to ensure responsive and timely engagement with the private sector to meet national needs.

# Subcommittee on Standards (cont.)

- Memo from EOP – “Principles for Federal Engagement in Standards Activities to Address National Priorities” released on Jan 17.
- <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-08.pdf>
- Provides guidance to agencies on standards engagement in instances where agencies are called upon to assume a leadership role in the development of standards solutions for national priorities and technology issues.
- More guidance on this document will be forthcoming.

# NIST Standards Information Center & WTO TBT Inquiry Point

Under 19 U.S. Code, the Department of Commerce is assigned responsibility for operating:

- U.S. National Federal Standards Information Center
- U.S. National “technical offices” to support the World Trade Organization’s Agreement on Technical Barriers to Trade (WTO TBT) and U.S. Free Trade Agreements

The DOC has delegated these roles to NIST.

# NIST Provides Expert Research Services and Resources

- Standards
- Technical Regulations
- Conformity Assessment Procedures

Inquiry Point responds bibliographically, not technically.

# Do You Have a Standards-Related Question?

Standards Services has access to the following resources:

- Information on Standards
  - U.S. Industry, Federal and Military
  - Foreign Country, Regional and International
- Standards Indexes, Catalogs, Directories, Handbooks, Dictionaries and Encyclopedias
- Newsletters and Periodicals
- Standards related websites
- NIST researchers

# Notification Authority

- Review and evaluate published U.S. proposed regulations (*Federal Register*)
- “Notify” U.S. proposed regulations to trade partners
- Provide full texts of U.S. proposed regulations to trade partners
- Receive and process trade partners’ comments on U.S. proposed regulations
- Receive and process U.S. comments on trade partners’ proposed regulations

# Service for U.S. Trade and Export



[www.nist.gov/notifyus](http://www.nist.gov/notifyus)



- Immediate information on proposed regulations in global markets
- Opportunity to comment on and potentially influence those proposed regulations
- Value and assistance in global trade issues



- Read or request the full text of a proposed regulation
- See deadlines for dates to comment
- Request an extension on comment deadlines
- Learn how to submit effective comments
- Submit comments to WTO Member countries
- Access a wealth of WTO TBT-related information

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Monday February 5, 2007



## Notify U.S.

### New Country Joining the WTO

Vietnam has joined the WTO and if you wish to track that country, you must update your country profiles.

### Welcome

Welcome to the **Notify U.S.** Web site. **Notify U.S.** is a free, web-based e-mail subscription service that offers U.S. entities (citizens, industries, organizations) an opportunity to review and comment on proposed foreign technical regulations that can affect their businesses and their access to international markets. This service and its associated web site is managed and operated by the [National Center for Standards and Certification Information \(NCSCI\)](#) an organization within the [National Institute of Standards and Technology \(NIST\)](#). NIST is part of the [U.S. Department of Commerce's \(DOC\) Technology Administration](#).

### Purpose

The purpose of **Notify U.S.** is to collect and fulfill subscriber requests for information on [World Trade Organization \(WTO\)](#) Agreements relating to **Technical Barriers to Trade (TBT)**. Member countries of the [World Trade Organization \(WTO\)](#) are required under the Agreement on Technical Barriers to Trade (TBT Agreement) to report to the WTO all proposed technical regulations that could affect trade with other Member countries. The WTO Secretariat distributes this information in the form of "notifications" to all Member countries.

### Subscribers

By subscribing to the **Notify U.S. Service**, U.S. entities receive, via e-mail, notifications of drafts or changes to domestic and foreign technical regulations for manufactured products. Included in the subscribers e-mail is a link to the [Notify U.S. web site](#) where they can read more information and order complete texts of the regulations for review and comment. At this time, the **Notify U.S. Service** is only available to subscribers who are U.S. citizens and individuals that are part of U.S. based organizations and industries.

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# Contacts for Standards Information

National Center for Standards and Certification Information  
(NCSCI) at NIST

Email: [ncsci@nist.gov](mailto:ncsci@nist.gov) and [notifyus@nist.gov](mailto:notifyus@nist.gov)

Telephone: 301-975-4040

[www.nist.gov/ncsci](http://www.nist.gov/ncsci)

[www.nist.gov/notifyus](http://www.nist.gov/notifyus)

Thank You

## USG & Standards – “The Big Picture”

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# Useful Links

Dept. of Commerce

[www.commerce.gov](http://www.commerce.gov)

NIST

[www.nist.gov](http://www.nist.gov)

NCSCI

[www.nist.gov/ncsci](http://www.nist.gov/ncsci)

Notify U.S.

[www.nist.gov/notifyus](http://www.nist.gov/notifyus)

Standards.Gov

[www.standards.gov](http://www.standards.gov)

Regulations.Gov

[www.regulations.gov](http://www.regulations.gov)

Export.Gov

[www.export.gov](http://www.export.gov)

Trade.Gov

[www.trade.gov](http://www.trade.gov)

# More Links

ANSI

[www.ansi.org](http://www.ansi.org)

US Military Standards

[www.dodssp.daps.mil](http://www.dodssp.daps.mil)

Standards Index

[www.nssn.org](http://www.nssn.org)

WTO

[www.wto.org](http://www.wto.org)

WTO Documents

[docsonline.wto.org](http://docsonline.wto.org)

ISO

[www.iso.ch](http://www.iso.ch)

International Classification of Standards (ICS)

[www.iso.org/iso/en/prods-services/otherpubs/pdf/ics5index-en.pdf](http://www.iso.org/iso/en/prods-services/otherpubs/pdf/ics5index-en.pdf)