

NIST

Global Standards Information



Standards and Trade

Ajit Jillavenkatesa

Program Office/Standards Services Division



DilbertCartoonist@gmail.com
Dilbert.com



© 2009 Scott Adams, Inc./Dist. by UFS, Inc.



***“Sanliu de qiye zuo chanpin; erliu de qiye zuo jishu;
yiliu de qiye zuo biao zhun”***

Third-class companies make products;
second-class companies develop technology;
first-class companies set standards

A saying in vogue in China,
originally attributed to Sony Corp.

Today's Discussion

- The relation between standards and trade
- Why is this important and why should we care
- Framework
- Case studies

Some recent and current high profile trade issues involving technical standards

- Harmonization of biofuel standards
- Restriction on hazardous substances (ROHS)
- Nanotechnology – definitions, material specifications and labeling
- China conformity assessment requirements for information security products
- WAPI
- Energy Efficiency standards

Foundational nature of standards

- Enable interoperability
- Are the basis for technical regulations
- Are used to meet requirements for health, safety and environment
- Can support contractual obligations
- Standards impact both trade in goods and services

Upto 80% of trade may be affected by standards –

1999 OECD report on Regulatory Reform and International Standardization

How does this impact us?

- Extensive NIST participation in standards development as technical experts
- We are a unique resource to the private sector and our government partners
- Broad ramifications of our work, extending well beyond just the work item that we are involved in
 - Policy implications
 - Understanding the impact of our actions and activities
 - Understanding the motivation and actions of other players

Standards and Trade

- Multilateral negotiations have reduced tariff based barriers to trade
- Increasing global trade flows
 - New competition in domestic markets
 - Genuine concern about quality and safety of imports
- Standards and conformity assessment requirements are one form of Non Tariff Measures (NTMs) that can be used in a protectionist manner – aka Technical Barriers to Trade (TBT).
- Measures such as testing, labeling, certification, inspection, etc.:
 - Can increase the cost of doing business
 - Can be discriminatory
 - Can be used to protect domestic industry

The World Trade Organization and the Agreement on Technical Barriers to Trade

- The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) led to establishment of the World Trade Organization (WTO) in 1994.
- Approximately 60 agreements covered under the WTO
- Most pertinent standards related agreements include:
 - Agreement on Technical Barriers to Trade
 - Agreement on Sanitary and Phytosanitary Measures
- Agreements are legally binding

WORLD TRADE
ORGANIZATION



WTO TBT Agreement and Standards

- International treaty status
- Members can regulate at levels they deem appropriate
- Standards and conformity assessment measures do not create unnecessary obstacles to trade
- Development of international standards
- Use of international standards as the basis for technical regulations
- Good practices for preparation, adoption and application of standards
- Use and recognition of conformity assessment procedures

U.S. implementation of the TBT Agreement

- Trade Agreements Act of 1979, as amended
- Title 19, Chapter 13, Section II of the United States Code “
Technical Barriers to Trade (Standards) “
 - Engage in activities related to standards-related measures
 - Not creating unnecessary obstacles to foreign commerce of the United States
 - Federal agency use of international standards
 - Use of performance criteria, rather than on design criteria

Questions that arise

- **International standards**
 - Particularly significant issue, as international standards are not defined
 - Impacts both standards development, and adoption and use of standards in technical regulations
 - Must be used as the basis, unless “ineffective or inappropriate”
 - “Rebuttable presumption” - if based on international standards, it is not an unnecessary obstacle to international trade

What do we need to be aware of?

- Cannot predict all the policy implications of standards related work, while participating in standards and conformity assessment activities.
- But certain things to be aware of:
 - Is the standards or conformity assessment activity in response to, or in anticipation of proposed regulatory action?
 - Where is the activity taking place and are there other similar activities in other fora?
 - Who are the participants contributing to the effort?

What do we need to be aware of?

- Things to be aware of (contd):
 - The genesis of new work item proposals
 - Are there patented technologies that are being brought to the standardization activity?
 - Are there trade policy concerns or discussions during the standards development activities, e.g. discussions about a country or region specific approach to regulation, etc.

Case Study: Nanotechnology

- Cross-disciplinary nature of this technology creates some unique challenges:
 - Multiple definitions
 - To regulate or not?
 - Measurement science and methodologies are still being developed
 - Toxicology and exposure effects are being studied
 - Technology offers potentially significant consumer benefits

Case Study: Nanotechnology

- Nanotechnology standards and related development work currently underway in ISO, IEC, ASTM International, OECD, and numerous other organizations
- Depending upon organization, involvement of government officials varies
- Differences in perspectives on whether to regulate, how to regulate, what to regulate, and who should regulate
- Current issues of significant debate:
 - Definition – also impacts legal liability
 - Labeling – what should the label say
 - Regulation – what to regulate and scope of regulation

Case Study: China CA requirements for information security products

- Chinese requirements for testing and certification of 13 categories of IT products with security functionality
- China unique conformity assessment requirements.
- Chinese standards are based upon ISO standards
- Attempts to base conformity assessment requirements on an international system
- Products worth billions of dollars implicated
- U.S. and international concerns about loss of intellectual property and markets

Case Study: China CA requirements for information security products

- Significant concern among US industry due to:
 - Extensive scope of the requirements
 - Cost
 - Legitimate objectives
- Extensive NIST staff involvement due to expertise in both standards and conformity assessment:
 - NIST work incorporated in the ISO standard in question
 - NIST role in NIAP

Resources

- Start with the Standards Services Division (to become the Office of Standards Coordination):
 - Staff expertise in standards, conformity assessment and trade policy space
 - Strong interaction with U.S. government and industry standards and trade policy experts and organizations
 - Standards Information Center – standards and conformity assessment resources, Inquiry Point and Notification Authority

Review

- Integral relation between standards and trade
- While NIST staff participation is mostly technical in scope, the impact of our work may extend well beyond the committee or working group that we participate in
- Numerous issues and positions (e.g., technology policy, trade policy, competition, intellectual property, etc.) that technical staff may not be aware of need to be considered
- Awareness and knowledge of these complex interactions can help us be even more effective in our standards participation

Thank You

NON SEQUITUR WILEY

