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The Mystery of Standards

- “Standards generally go unnoticed. They are mostly quiet, unseen forces, such as specifications, regulations and protocols, that ensure that things work properly, interactively, and responsibility. How standards come about is a mystery to most people should they even ponder the question.”
[Global Standards: Building Blocks for the Future, OTA, March 1992]



The National Standards Policy of the United States

- For over 100 years, the National Standards Policy of the United States has been that the Private Sector will lead in the development of standards through the consensus process, and the government will play a supporting role.
- Three major issues challenge this policy: (1) the growth of government, (2) the emergence of a highly competitive global economy, (3) regulatory and standardization costs have to be reduced while performance has to be improved.



United States Standards

- There are more than 600 standards development organizations [SDOs] in the United States.
- It is estimated that SDOs have developed more than 47,000 private sector standards.
- It is estimated that Government has developed an additional 46,000 standards.
- The total of United States standards is estimated to be at least 93,000.



Public Law 104-113

- **Federal Agencies shall rely on voluntary standards**
 - identify agency needs and applicable voluntary standards
 - report use of agency-unique standards
 - compare voluntary standards with agency standards
 - participate in development of voluntary standards
- **NIST shall coordinate with Federal, state and local agencies and with private sector on standards and conformity assessment activities**
- **OMB A-119 Circular provides guidance for agency compliance with law**



The Global Challenge for Standards

- Preserve strengths of U.S. system
 - Industry support
 - Diversity and flexibility
 - Openness, transparency and balance
 - Meet market, government needs
- Ensure fairness at international level
 - Voice for all interested and affected parties
 - Acceptance of standards based on merit
 - Strong participation by U.S. experts



Vital U.S. Concepts

- **Consensus**
- **Openness**
- **Transparency**
- **Membership - balanced**
- **Due Process - Appeals**



The U.S. Standards System

- **Effective**

- Products designed & operational rapidly
- Products interoperable & easily maintained
- Industry, stakeholder needs met

- **Health, Safety, and Environment protected**

- **Complex, sector specific, but open & transparent**



Standards Strategy

National Issues

- **Apparent competition among U.S. SDOs with each other and with ISO and IEC**
- **\$ and intellectual property for SDOs**
- **Industry and government needs for global standards and fewer points of contact**
- **Strong European competition**
- **Maintenance of U.S. technology in standards used globally**



Strategic Standardization

- **Standards often produced on ad hoc basis by individual experts**
- **Strategic standardization better way to set priorities related to mission & goals**
 - **Top management understanding & commitment**
- **Proactive approach for standards for the future**
 - **Intelligent highway, optoelectronics, etc.**



Elements of a Strategy

- **Greater Federal support for ANSI's roles**
 - **Coordination and policy roles**
 - **Accreditation of standards developers**
 - **Membership in ISO, IEC, PASC, COPANT**
- **Ensure level playing field internationally**
 - **Develop strategic alliances**
- **Encourage sector-specific input to ISO and IEC**
 - **Monitor, support U.S. pilot projects**



Meeting the Global Challenge

- **Ensure that international standards-developing process is accessible to all**
- **Avoid regional dominance; create a level playing field in ISO/IEC**
 - **Different voting structure? Dues?**
 - **Sector specific SDOs?**
 - **Performance based standards?**
- **Resolve IPR, financial issues for U.S. SDOs**



Participation is Key

- **Essential for say in content of standard**
- **Opportunity for input to policy decisions**
- **Opportunity to build strategic alliances**
- **Opportunity for standards instead of regulations, or as support for both regulation and procurement**
- **U.S. consensus position essential for strong international input**



U.S. Challenges

- **National standards strategy that encompasses current strengths and meets global challenges**
- **U.S. conformity assessment infrastructure that meets industry and regulatory needs**
- **Effective outreach to foreign colleagues in both standards and conformity assessment**



Management System Compliance

- Quality Controls - ISO 9000
- Environmental Controls - ISO 14000
- Management system compliance does not replace any product conformity, quality or suitability requirements, nor does it replace compliance with existing health, safety or environmental requirements.



Trade Estimates Related to Standards

- More than 80 percent of global product trade - equivalent to at least \$4 trillion - is affected by standards and regulations. [OCED]
- At least \$200 billion in transatlantic trade is affected by standards. [TABD]
- Trade in parts and components now accounts for at least 30% of global trade. [World Bank Study]



Major Legal Issues

- Antitrust
- Environment
- Health
- Intellectual Property
- Safety and Product Liability
- Trade



Sampling of Voting Members on ISO Technical Committees

- ISO TC 17 Steel - Europe 17/ Other 14
- ISO TC 28 Petroleum - Europe 15/ Other 13
- ISO TC 35 Paints - Europe 12/Other 9
- ISO TC 83 Sports Equipment - Europe 7/ Other 0
- ISO TC 92 Fire Safety - Europe 17/ Other 10
- ISO TC 94 Protective Clothing - Europe 18/ Other 7



Significant Issues From ASTM's Perspective

WTO/TBT Agreement - Provide better interpretation of meaning of “international standards body”

- Include due process provisions in support of openness and transparency**
- promote participation from all interested parties worldwide**
- provide for a balance of market driven and regulatory interests to ensure no single segment dominates**
- be capable of maintaining technical relevancy of standards including incorporation of technological advances**



Better Education of Senior Management on Importance of Standards



A Legal Overview

- Manipulation Of Standard-setting Can Have Harsh Economic Impact
- Voluntary Associations Are Not Exempt From Liability
- Strict Adherence to Due Process Procedures and Ethical Guidelines Can Provide Defenses





Proper Due Process Can Protect Innocent Associations

- Associations must enact and enforce fair processes and guidelines
- Only full and open public access to the standard-setting process can guard against abuses





Global Challenges

- The dynamic growth of the global marketplace has stretched standards development resources, public and private, to the breaking point and beyond.
- Can a decentralized standards system successfully compete with a global system that is increasingly centralized?
- Will the National Standards Policy of the United States be sufficient to address the challenges of the new century?
- What is the best method for development of a global standard?
- Is the global standards development process open, fair, transparent and available to all interested parties?