

Global Standardization in the 21st Century



Donald E. Purcell, President
The Center for Global Standards
Analysis

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Standards Control The Market

- “If you control an industry’s standards, you control that industry lock, stock, and ledger” [“Out of the Crisis,” W. Edwards Deming, Published by the Center for Advanced Engineering Study, MIT (1986)]



Windows DNA: Microsoft's Blueprint

- “Integration...requires a blueprint. In nature, DNA provides such a blueprint, instructing each cell on how to function to stay in concert with all others. In business, successful organizations have their own blueprints for technology...In an age of interconnectivity, businesses need an architecture that extends outward to partners and customers...The successful companies select a few standards and enforce them strictly.” [**Business@The Speed of Thought,** Bill Gates (1999) at 420, 431]



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 responsibly. How standards come about is a mystery to most people should they even ponder the question.”
[Global Standards: Building Blocks for the Future, OTA Congressional Report 1993]



Public Policy Issues related to the Development of Standards

- Economic Impact [trade, jobs, small business]
- Health
- Safety
- Environment & Sustainability
- Consumerism [quality of life & right to know]
- Ethics
- Competition and Antitrust



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 consensus standards, and the government will play a supporting role. This policy is incorporated in the National Technology Transfer and Advancement Act (1996) [See www.nist.gov for details], and OMB Circular A-119 (1998), the policy used to coordinate the consensus standards activities of federal departments/agencies.
- In addition to the U.S. National Standards Policy, DoD maintains one of the largest standards systems in the world to meet its special needs .



U.S. Standards Policy Issues

- Can U.S. SDOs develop a new consensus on the National Standards Policy for the United States?
- Competitive issues exist among U.S. SDOs and between U.S. SDOs and ISO/IEC.
- Standards represent income and intellectual property for SDOs. Some U.S. trade competitors give their standards away.
- The U.S. is facing very strong global competition from centralized standards systems.



U.S. Standards System

- The most diversified system in the world.
- There are more than 600 Standards Development Organizations [SDOs] in the United States. [NIST]
- It is estimated that SDOs have developed more than 47,000 private sector standards. [NIST]
- It is estimated that the Federal Government has developed an additional 46,000 standards. [NIST]
- The total of United States standards is estimated to be at least 93,000. [NIST]



The Global Challenge For the United States

- Preserve strengths of U.S. system
 - Private Sector leadership and support
 - Diversity and flexibility [sector specific]
 - Openness, balance and transparency
 - Meeting specific performance needs is the basis for the U.S. system.
- Ensure fairness at international level
 - Access, balance and transparency
 - Standards based on technical merit
 - Strong participation by U.S. experts



Global Trade Impact Related to Standards

- More than 80 percent of global product trade - equivalent to at least \$4 trillion - is affected by standards and technical regulations. [National Institute of Standards and Technology]
- At least \$200 billion in transatlantic trade is affected by standards. [NIST]
- The United States has a \$20B-\$40B trade deficit related to technical barriers. [NIST] Each billion dollars represents a potential lost of 20,000 jobs. [ANSI]
- At least 25% of United States GNP growth comes from exports. [Department of Commerce]



A New Blueprint

- For the United States to succeed in the global marketplace, it will be necessary for the government, national standards development organizations, associations and corporations to develop a new strategic standardization blueprint that balances the specific needs of the global marketplace with the public policy issues reflected by United States laws, regulations and private sector standards.