

# *Global Standardization in the 21st Century*



Donald E. Purcell

The Center for Global Standards Analysis

August 15, 2000



# Creative Commons License

The information provided in this presentation may be copied and used by any interested member of the public for the purpose of education provided: (1) there is attribution to “Donald E. Purcell, Chairman, The Center for Global Standards Analysis (2008),” and (2) the information is not published or used by others for the purpose of generating income.



# Bruising Global Competition

- “The United States has been fortunate to have a pluralistic, industry-led standards setting process that has served us well in the past. Whether it will continue to do so in the future in the face of bruising international economic competition is uncertain.” [U.S. Congress, Office of Technology Assessment, Global Standards: Building Blocks for the Future, March 1992]



# Global Economy Characteristics

- Intensity of global competition.
- Rapid emergence of new digital economy.
- Emergence of regional trading blocks.
- Growing importance of multinational corporations and transnational non-government institutions [e.g. TABD].
- Growing importance of international standards.



# ***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]



# ***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 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 Congressional Report March 1992]





# The Center for Global Standards Analysis

- In 1999, The Center for Global Standards Analysis, a nonprofit corporation, was formed to evaluate, inform, and educate the public on standards issues, the benefits of standards, and the potential impact of standardization on global commerce.
- Last fall, the Center became affiliated with the Catholic University of America and offered a new course on “Strategic Standardization” for graduate students.



# “Strategic Standardization”

- Raise awareness and unravel mystery.
- The course is intended for engineering, law, public policy, and international trade students.
- The course seeks to create multidisciplinary perspective for students.
- Evaluates issues, procedures, risks, strategies, United States and global standards, and relationships between private sector and public sector standards.
- Provides a forum for discussion of critical issues with private and public sector experts.

# Expert Speakers

- 
- AGMA
  - ANSI
  - ARI
  - ASME
  - ASTM
  - EIA
  - CMA
  - GAMA
  - InfoTech Strategies
  - NACLA
  - NSPE
  - NSPI
  - UL
  - NIST
  - CPSC
  - CUA
  - EPA
  - House Science Com
  - FDA
  - FTC
  - DOE
  - DOD
  - DOJ
  - DOT
  - OMB
  - Reed, Smith, Shaw..



# ***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 private sector 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](http://www.nist.gov)” for details and OMB Circular A-119 (1998)].



# Strategic Standardization Issues

- United States Standards Policy
- United States and International Standards Organizations [Process and Procedures]
- Certification and Conformity Assessment Programs
- Safety
- Environment
- Trade
- Antitrust
- Ethics
- Digital Economy



# *Policy Issues*

- Should the United States Standards Policy be amended?
- What is an international standard?
- Competition now exists on a global level. How can standards address this issue?
- The U.S. is facing very strong global competition from centralized standards systems. Can the U.S. maintain a diversified standards system in the face of increasingly centralized international standards systems?
- What effect will the consortia approach have on existing standardization programs?
- What are the liability risk factors involved in standards development?



# *Need for Greater Awareness*

- “There is a clear need in the United States for greater attention to standards. In an information-based global economy, where standards are not only employed strategically as marketing tools but also serve to interconnect economic activities, inadequate support for the standards setting process will have (serious) detrimental effects.” [OTA Congressional Report at 9]
- Global Standardization is not an economic race that the United States can afford to lose.