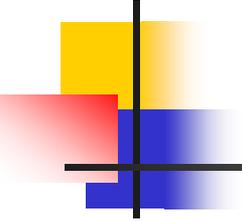


# Presentation to United States Access Board on the Strategic Value of Standards

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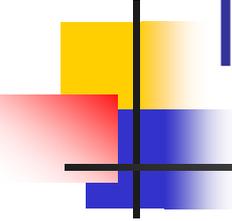
Donald E. Purcell, Chairman  
The Center for Global Standards Analysis  
November 29, 2006



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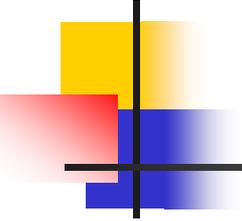
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# The Strategic Value of Standards

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- Standards influence everything we do. [UK National Standards Framework]
- Standards control markets. [German National Standards Strategy]
- “If you control an industry’s standards, you control that industry lock, stock and ledger.” [Dr. Edwards Deming]
- Standards create competitive advantage through technology and information transfer and global market intelligence. [Canadian National Strategy]
- Standards are the language of international commerce. [US National Standards Strategy]



# Globalization

- Globalization is rampant and will continue to be so... (*The World is Flat* by Thomas L. Friedman (2005))
- The World is developing a new global marketplace which directly affects all national economies...
- Every nation has to renegotiate its economic position in a new global marketplace...
- Global standards and standardization play a critical role in determining whether a nation will be successful in its renegotiations...

# Standards are a Bridge to the Future

## User Needs:

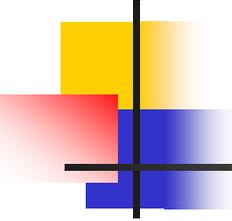
consumers,  
companies,  
industries,  
government,  
testing &  
certification .



## Technology:

ideas,  
concepts,  
values,  
perspectives,  
methods,  
products &  
services

**Standards form a bridge between technology and users.  
Whoever controls the bridge controls the future.**

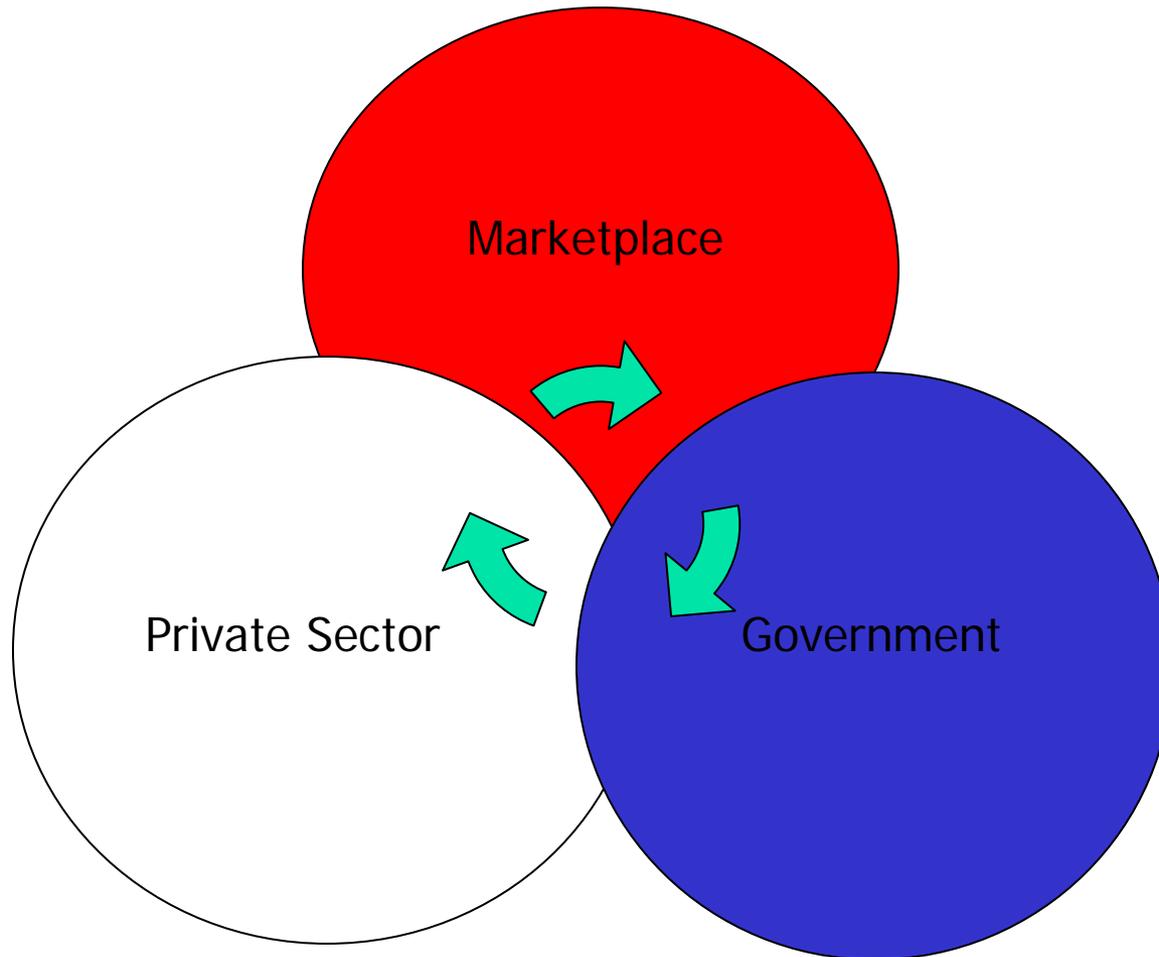


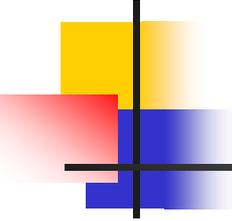
# The Mystery of Standards

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- “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*, Report to Congress, U.S. Office of Technology Assessment (1992)]
- Standards are generally unnoticed because they function at the DNA level of technology, economic, political and social issues.

# Sources of Standards

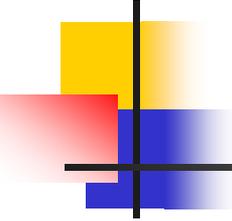




# U.S. Federal Standards Policy

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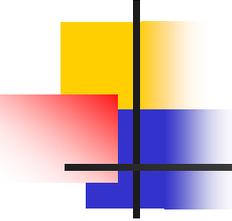
- U.S. Constitution, Article I, Section 8 – Congress shall have authority , *inter alia*, “[5] To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures;”
- The National Technology Transfer and Advancement Act (NTTAA) (1996) directs Federal agencies with respect to their use of private sector standards and conformity assessment practices. The objective is for Federal agencies to adopt private sector standards, wherever possible, in lieu of creating proprietary, non-consensus standards.
- OMB Circular A-119 (1998), Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, establishes policies on Federal use and development of voluntary consensus standards and on conformity assessment activities. OMB issued this revision of the Circular in order to make the terminology of the Circular consistent with the National Technology Transfer and Advancement Act (NTTAA).



# Integrity of Due Process for Private Sector Standards

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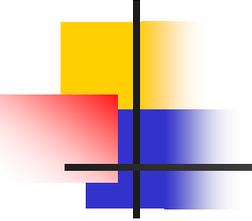
- Courts and government agencies aggressively maintain the integrity of due process for development of private sector standards.
- **Competition**
  - *In the Matter of Rambus*, FTC Decision August 2, 2006, (Docket No. 9302)
  - *Allied Tube & Conduit Corporation v. Indian Head, Inc.*, 486 U.S. 492 (1988)
  - *American Society of Mechanical Engineers v. Hydrolevel Corporation*, 456 U.S. 556 (1982)
  - *National Society of Professional Engineers v. United States*, 435 U.S. 679 (1978)
  - *Radiant Burners v. Peoples Gas Co.*, 364 U.S. 656 (1961)
- **Health, Safety, the Environment**
  - \**Meneely v. S.R. Smith, Inc.*, 5 P.3d 49 (2000)
  - \**King v. National Spa and Pool Institute*, 570 So.2d 612 (1990)
  - \**United States v. Automobile Mfrs. Assn. Inc. et al*, 307 F.Supp. 617 (DC CDCal Nov 1969)
  - \**Hempstead v. General Fire Extinguisher Co.*, 269 F.Supp. 109 (DC Del 1967)



# Global Perspectives on Strategic Value of Standards

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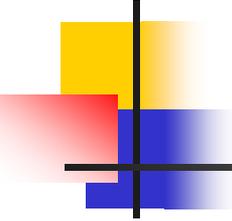
- “The technology standard has become the source of a core competitive edge for industrial development. To some extent, a technology standard is a kind of development order and rule. Whoever controls the power of standard making and has its technology as the leading standard, commands the initiative of the market. Technology standards have become an important means of global economic competition, and directly influence the competitiveness of an industry, region or country. Therefore, as for Chinese enterprises, possessing the successful standard is a *strategic choice* to seize the leadership of the future industrial development.” [Program, Conference on Information Technology, Beijing, China (May 2005); emphasis added]
- “*Standards have become the new [international] battleground.*” [Phillip J. Bond, Undersecretary of Commerce for Technology Policy, *New York Times* article, “China Poses Trade Worry as It Gains in Technology,” January 13, 2004; emphasis added]



# Current Global Standards Base

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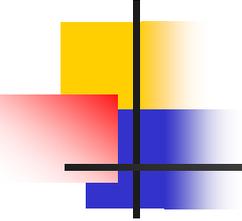
- IEEE estimates 500,000 standards exist in the world today that form the technology foundation of the global marketplace.
- IEEE estimated that it costs approximately \$1.5 billion (US) to maintain these standards.
- Imagine a world in which the global marketplace will be significantly transformed by technological advancement in the next few years, requiring the revision of many existing standards and potentially affecting trillions of dollars (US) in international trade.
- Imagine all nations may have to significantly restructure their standardization system in order to remain competitive in a new global marketplace.
- Is the United States prepared to maintain its economic position in the World (30% world income) and participate in development of standards which form the basis for a new global marketplace?



# Education of Technology Ambassadors

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- If a nation's economic future is at risk, is it worth investing in educating that country's best and brightest students to be effective future representatives (Technology Ambassadors) in global technology negotiations which will determine a nation's economic future?
- If global standards are a nation's bridge to a brighter future, then nations need to recognize that it is in their best interests to prepare their best and brightest students to be the best bridge builders possible.
- Strategic Value of Standards Education
  - South Korea: 47 universities and 7,000 engineering students.
  - Asia-Link Program: European Union program to fund 2 European and 6 Asia universities to create new standards education internet program which will be available in 2007.
  - United States: ABET, 1 university course (Catholic University School of Engineering)



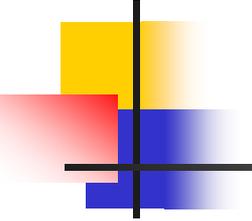
# Strategic Public Policy Choices

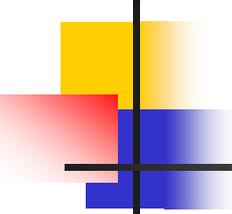
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- For a government board or regulatory agency, what are the strategic standards choices (individually or in combination) best suited to meet their Congressional responsibilities?
  - Market place standards.
  - Private sector standards.
  - Government standards.

# The Center for Global Standards Analysis

## Board of Directors

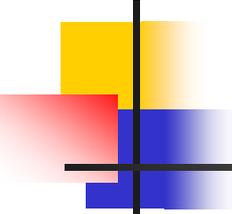
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  - Mary Saunders, Chief, Standards Division (Liaison)  
U.S. National Institute for Standards & Technology      Government



# Websites

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- *Center for Global Standards Analysis*  
[engineering.cua.edu/StandardsCenter/center\\_for\\_global\\_standards\\_analysis.htm](http://engineering.cua.edu/StandardsCenter/center_for_global_standards_analysis.htm)
- *Catholic University Lectures*  
[engineering.cua.edu/StandardsCenter/Lecture%20List.htm](http://engineering.cua.edu/StandardsCenter/Lecture%20List.htm)
- [Standards.gov](http://Standards.gov)
- [Note: the Center will introduce a new website in the first quarter of 2007.]



# Contact Information

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