

Global Technology Standards – a bridge to the future



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The World is Flat, After All

“The world is flat,” and therein lies a tale of technology and geoeconomics that is fundamentally reshaping our lives – much, much more quickly than many people realize. It all happened while we were sleeping, or rather while we were focused on 9/11, the dot-com bust and Enron – which even prompted some to wonder whether globalization was over. Actually, just the opposite is true, which is why it’s time to wake up and prepare ourselves for this flat world, because others already are, and there is no time to waste. [Thomas L. Friedman, *It’s a Flat World, After All*, New York Times Magazine (April 3, 2005)]

UK National Standards Strategy

- “Standards influence everything we do. Standards, in one form or another, have always underpinned trade and business. Standards, including codes of practice and guides as well as formal standards, support compatibility and drive down costs through use of common parts, specifications and methods. They can also help open markets, create new industries and realize the potential of new technologies. Standards are so much a part of our daily routine that we use them without even being aware of doing so, and with giving thought to how they are created or the benefits they provide.” (UK National Standardization Framework, April 2003)

U.S. National Standards Policy

- For over 100 years, the National Standards Policy of the United States has been the private sector will lead in the development of standards, and the government will play a supporting role.
- *See* National Technology Transfer and Advancement Act (“NTTAA”), Section 12, (1996); *see also* OMB Circular A-119 (February 1998) (Note A-119 does not express a preference for consensus or non-consensus standardization development procedures).
- *See* National Institute of Standards and Technology website (www.nist.gov) for additional background.

Diversity - Key to U.S. Standards System

- There are 450 private sector standards groups in the U.S. that rely on consensus standards. There are 150 private sector consortia standards groups that do not rely on consensus standards. [U.S. Department of Commerce Report, *Standards & Competitiveness* (May 2004)]

U.S. Standardization Business Models

- Membership
- Copyrighted standards
- Testing & certification
- Consulting firm
- Market development
- Standards Education
- Knowledge Management
- Competitive intelligence

World Trade Organization

- The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business. [<http://www.wto.org/>]
- Note: WTO does not have a precise definition of an international standard.

Technical Barriers to Trade

- Technical regulations and product standards vary from country to country. Having many different regulations and standards makes life difficult for producers and exporters. If regulations are set arbitrarily, they could be used as an excuse for protectionism. The Agreement on Technical Barriers to Trade tries to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles. [The Agreement on Technical Barriers to Trade can be found at: www.wto.org/english/docs_e/legal_e/17-tbt_e.htm]

WTO Principles for Defining International Standards

- Transparency
- Openness
- Impartiality & consensus
- Effectiveness & relevance
- Coherence
- Development Dimension
- [See WTO Second Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade (November 2000)]

Value of Standards

- Standards are a critical factor in global economic development.
- International standards and technical regulations directly affect more than 80 % of world product trade. (U.S. Department of Commerce Report, *Standards and Competitiveness*, May 2004)

Standards Control Markets

- “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 (1982) at 302]

German Standardization Strategy

- “Standardization is also extremely relevant for the individual participants in the economic process, since whoever makes the standards controls the market.” (Opening Statement, Wolfgang Clement, Federal Minister of Economy and Labour, 2004)

Creation of Global Standards



Global Standards Governance

- National Standards Committees (consensus)
- National Consortia Groups (non-consensus)
- Regional standards groups
- Global Standards Committees (consensus)
- Global Consortia Groups (non-consensus)
- United Nations (e.g., ITU, Internet Working Group)
- World Trade Organization

Strategic Value of Standards Education

- Since 2004, South Korea has made standards education a top priority at 40 universities involving more than 900 engineering students in 2004 and 2000 engineering students in 2005.
- Standards education is not a top national priority in the academic sector of any nation in the world except for South Korea.
- Nations that establish standards education as a top national priority in their academic sector will enjoy critical global competitive advantage(s) for decades to come.

Standards are a Bridge to the Future

User Needs:

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



Technology:

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

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

Contact Information

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