

*Global Technology Standards –
a bridge to the future*



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April 2005

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“Change is the process by which the future invades our lives, and it is important to look at it closely, not merely from the grand perspectives of history, but also from the vantage point of the living, breathing individuals who experience it.” (Alvin Toffler, *Future Shock*, 1970)

“Technology, which once progressed at the periphery of culture, not engulfs our minds as well as our lives.” (Kevin Kelly, *New Rules for the New Economy*, 1998)

Bridge –
a pathway spanning a stream, canyon,
obstacle or anything that spans a gap



User Needs:

consumers,
companies,
industries,
government,
& society in
general .



Technology:

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

Standards form a bridge between technology and users. Standards are the links, connections and systems which govern the application of technology necessary to meet specific needs in society.

Global standards are like DNA

- Global standards are similar to DNA. Just as DNA affects every form of life on the planet, global standards affect every product and service in international commerce.
- There are thousands of individuals from many sectors of society involved in the development of standards worldwide. It is estimated more than 500,000 consensus standards exist in the world today, costing approximately \$1.5 billion [U.S.] per year to maintain and support global trade among the nations of the world. [See <http://www.thinkstandards.net/benefits.html>]

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 without giving thought to how they are created or the benefits they provide.”
[*United Kingdom National Standardization Strategic Framework, page 2 (2003);*
<http://www.nssf.info/FinalDocument.pdf>]

Standards Govern 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]

The Value of Global Standards

- In 1999, the Organization for Economic Co-operation and Development estimated that at least 80 % of world [product] trade was directly affected by standards. The value of this trade was estimated to exceed \$4 trillion (U.S. Dollars).
- [OECD Report for Regulatory Reform and International Standardization at 9-10 (Jan. 1999)]

Strategic Standards Issues

- Needs of specific groups in society
- Cost, performance and reliability
- Health, safety, and the environment
- Sustainability
- Energy
- Intellectual Property
- Global trade
- Internet and Electronic Commerce
- Ethics
- Competition and antitrust

Global Standards Governance

The Market



Global Standards



Private Sector



Government

Major Issues in Global Standards

- Does process really matter, i.e., the methods, policies and procedures used to develop standards?
- What steps are necessary to increase awareness among leaders in business, government and academic sectors of the critical significance of global standards?
- How can the knowledge and experience of those who develop global standards be transferred effectively to colleagues and future generations?
- Does standards education have a strategic value?

Process Is of Critical Importance

- Process is of critical importance – but which process: consensus or non-consensus?
- The U.S. Federal Government has reserved the right to use any standard developed by either a consensus or non-consensus method if it suits the needs of a government department or agency. [*See* National Technology Transfer and Advancement Act (1996); OMB Circular A-119 (February 1998)]
- Can the marketplace do any less?
- Being flexible on process is essential!

Leadership Awareness

- For decades, those who develop global standards have struggled with a significant lack of awareness among business, government and academic leaders concerning the critical significance of global standards.
- Strong international competition based upon global standards, resulting in significant economic pain and suffering, will become the basic tool used to increase awareness among leaders in the business, government and academic sectors. (See U.S. Department of Commerce Report, *Standards and Competitiveness*, May 2004)

Knowledge Management

- *Because global standards control markets,*
it is of critical importance the knowledge
and experience of those who actually
develop global standards be managed in a
manner to facilitate the transfer of this
information to peers, colleagues and the
next generation of standards practitioners
responsible for developing global standards.

Strategic Value of Standards Education

- If I give someone something to eat, I help that person for a specific day. If I teach someone how to get food, I have changed a person's life forever.
- In virtually the entire world, there is no university in which standards education is a top priority.
- In the past 18-24 months, 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.
- Nations which make standards education a top national priority will enjoy important global competitive advantage(s) for decades to come.



What global standards bridge(s)
is your organization currently
building, and what are the
organizations' plans for the
future?

Contact Information



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