

Subject: GE Energy Input to 1/10/05 US DOC Standards Stakeholder Meeting “Enhancing the Transatlantic Economic Relationship: Listening Session Focusing on Transatlantic Standards Issues”

GE Energy is one the world’s leading suppliers of technology, product and services to the energy industry. We have many locations around the world to support our global business. The area of standards and regulations is critical to our business success and we are very happy to have this opportunity to provide input from our teams on both sides of the Atlantic.

What are the major challenges you, your company, organization or industry face regarding standards issues in the transatlantic relationship?

- ISO 9001 Restrictions to Only EU Certified Companies. Specifically, PED Working Group Requires Materials Not Only From ISO Certified Company, but From Company That Is ISO Certified by EU Registrar, a Trade Restriction for US and Other Foreign Steel.
- Lack of Harmonization of different global requirements prevents us from harnessing the maximum benefits of a truly standardized product, effecting our competitiveness in the global marketplace
- Determining Impact of New/Revised Requirement Product Cost and Production Cycle is very difficult
 - for complex industrial machines, especially in the short proposal cycle. Our products are comprised of thousands of components supplied by a multitude of sub-suppliers
- Difficulty and Cost of Procuring, Translating, Maintaining Rev Control and Distribution of Standards, e.g. ENELEC Allows Standards Shared on Company Internet, CEN Does Not
- Getting Global Vendors up-to-Speed on EU, National, and Local Requirements
- Rapid Pace of Change in Requirements (Laws) and the Standards
- Variance in Notified Body / Local Authority / Customer Interpretation of Requirements
- Additional National/Local Requirements in addition to and sometimes conflicting with CE Requirements, e.g.
 - One Italy Project Required NFPA 12 Stamp on Fire Protection System by a Registered European Engineer.
 - Some Member States Require CE Declarations Be Translated With Original Signatures, Original Documentation Supplied
 - Insurance Company Created Standards Imposed by Insurance Companies which are Not Developed In Conjunction with Stakeholders
- Lack of market surveillance at customs and at the installation site deprives the manufacturer of feedback to strengthen internal compliance processes, especially with self-certification practices
- Lack of readily available intelligence on what is currently being done to increase market Surveillance, where a rapid increase could disrupt trade
- Difficult to Tell If EU National/Local Requirements Compulsory or Voluntary, e.g.
 - Difficult to discern what Germany National/Local Standards Mandatory
 - EU Customers Inappropriately Citing Some Standards As Regulation (e.g. IEC 61508)
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- Determining Where to Apply Resources Focused on Standards Development as supporting all standards activities affecting GEE products is not cost competitive
- Cannot Rely on Customers to Tell Us complete and accurate list of National/Local Legal Requirements and No Assurance That We Know Them All, Especially If Market Surveillance Lacking
- The CEN-CENELEC standards organization created in 1988 as a European political union with legal obligation of all European member states to use common standard documents has had

and continues to be a very strong influence on the global standards usage of ISO, IEC and ITU international standards.

- China's participation in WTO (World Trade Organization) recent approval was also dependent on obligations concerning standards-related measures embodied in the Agreement on Technical Barriers to Trade (TBT). Requirements of transparency in the development of standards and minimizing the potential to becoming obstacles to trade is leading China to favor use of international approved international standards.
- European countries common approach with an often common voting on submitted documents make for a very strong influence on international (voting by countries for ISO, IEC, ITU, etc) document approvals versus multi-nationals (voting by individuals for ASME, IEEE and other US organizations). It is not surprising to perceive a common agreed strategy for European and Asian countries promoting international standards globally aligned on those documents they are legally obliged to follow.
- CANENA (Council for the Harmonization of Electrotechnical Standards in North America) remains a voluntary organization for US, Canada and Mexico standards organizations. When the US on world markets frequently limits itself to US standards (referred as Regional by some), can gradually develop in a US versus the ROTW (Rest of the world) position. Thus those able to influence the European Standards side of the Atlantic could have a possible controlling position.

What strategies have proven successful in addressing these challenges?

- Centralizing Requirements On Internal Company Internet As Much As Copyrights Permit
- Working With Local Area Business Partners, Internal Departments to Maintain Latest Requirements
- Raising Management, Engineering, and Sub-vendor Knowledge Level, product planning, early incorporation of standards into requirements, and rigor in execution and documentation.
- Working with US standards organizations to reflect International Standards, driving harmonization from where the US can best influence it.
- Becoming pro-active before being faced with reacting too late from a weak negotiating position or no position at all. Those wanting to influence Standards must be present. Assure a greater presence of those protecting US Standards interests in the international standards arena. Assure a prominent role in international recognized ISO, IEC and ITU organizations.
- Establishing a Working Relationship With 3rd Party Requirement Experts and Accredited Conformity Assessment Organizations

What other approaches would you suggest for government or industry?

- Government Sourced Funding for Manufacturers to increase standards committee involvement. . The more people and the more nations that actively participate in non-governmental consensus-based standards development, the less likely that the resulting standards can be used as a trade barrier. With limited resources and pressing priorities in their regular jobs, standards technical contributors often must contribute out of office time to be able to participate in standards development. Cost of labor, travel to be present on committee discussions, and membership fees should be considered.
- Influence International Standards Organizations (e.g. ISO) to be flexible to accepting US internationally accepted standards (e.g. NFPA 70, ANSI B31.3) in addition to European. Allowing multiple methods gives manufacturers the flexibility necessary for competitive edge.
- Influence EU Legislators to also allow internationally recognized US standards as a presumption of conformity (or method to demonstrated conformity) to meet CE Directives in addition to the prescribed European Norms.

- Proactive review of any new legislation and resolution of issues because of differences with existing legislation from impacted countries - before the new legislation is adopted. Specifically, an effective 'grandfathering' methodology that works between countries.
- Developing industry consortia to get affected company input into proposed legislation. US government act as representative at EU legislation meetings that impact US manufacturing interests to the extent possible.
- Influence Insurance Agencies and Standards Organizations to align their standards development activities to minimize variation and reduce trade barriers.
- Greater partnership between US and internationally recognized standards groups promoting joint participation in reviewing documents and possible double-logo greatly facilitate international approval and mutual recognition of documents. Since May 2004 a close collaboration between IEC and IEEE has resulted in six International Standards published in areas such as industrial process measurement and control. Recent collaboration has been noted between IEC and ISA (Instrumentation, Systems, and Automation Society). Increasing partnership such as these will help mitigate or prevent the possible cleavage between both sides of the ocean.

Specific to US DOC/NIST web sites:

- Proactive Notification via email/newsletter of emergent/revised legislation and standards, high level expected market impact, market surveillance activities/date, and current events of US DOC Standards Initiative activities (possibly expand NIST's Export Alert!)
- Have NIST also Translate emergent/revised requirements sent in Export Alert!
- Add Electricity Grid Code Requirements to information pool on US DOC web site & NIST's Export Alert!
- Build online "industry blogs" for open discussion on requirements, possibly shared knowledge cent - not just on what the requirements are, but the whole requirements process, including best practices and lessons learned

How can the U.S. and EU cooperate more effectively on standards issues?

- By resolving relatively minor differences in standards that result in major market barriers. Specifically,
 - Requirement for flame proof equipment vs explosion proof - huge difference in price of cost of testing, evaluation, certification
 - Results in relatively minor or no increase in product safety
 - Although IEC Ex committee is addressing these national deviations in requirements, simple solution could be to agree that basic safety is met by any comparable standard, and allow them in cross markets.
- Establish more official Liaison procedures informing each other of common areas of interest. Initiate more partnerships similar to previously mentioned IEEE, ISA and others.
- Encourage greater joint-participation in the development of future standards or joint review of existing documents.
- Could include having increased US participation in multi-national European locations with a full knowledge and promotion of US requirements, protecting transatlantic interests, influencing and facilitating the international approval process. In 2001, IEC headquarters in Geneva established branch offices in a Boston suburb and Singapore in part as a response to a perception of a European bias in the IEC.

Impact of transatlantic standards issues in the global marketplace and international organizations

- Negative impact on Price Competitiveness & Increase in Product Development Cycle
- Difficulty in Validating Compliance for Complex Machinery, Especially Supply Chain

- Inherent Risk in Not Knowing All Requirements That Pertain to Product and Variance in Interpretation of Requirements by Authorities
- Must decide in what markets want to be present in the long term, those that are business imperative to penetrate and where efforts should be invested. It's getting to be a smaller planet where exclusion by reason of technical standards from certain markets must be reviewed.

Perspectives on the linkage between standards, the standards development process, and innovation

- Standards are valuable for many reasons. They create uniformity in design so pieces fit together. They define safety measures so risk of personal injury and property damage is reduced. They improve quality management process. And they permit expanding global horizons responding to greater number of requests from Clients situated across the globe. Clients are more sophisticated than in the past and want to be assured of getting the best world-class technology at a fair market price.
- Innovation leads standards development and the resulting standards, since most industrial standards are "prohibited behavior" not "required behavior", or define the interface between similar products. Recall the days of fax machines before there was a standard, and try to imagine hooking your computer to a phone line before standards for data transmission. The existence of standards is literally the (well-hidden) backbone of the internet. The existence of standards facilitates competition to the immediate benefit to the consumer, and opens markets to the manufacturer. Proprietary product interface behavior ultimately leads to a product with little or no market.
- At least in some areas the U.S. standards tend to be more conservative leading to less state-of-the-art and more expensive designs (e.g. in generators) compared to corresponding European or ISO or IEC standards. The standards of course impact the technologies, designs and their inherent competitiveness depending on to which market they have originally been designed. This indirect impact of standards may be much larger than the direct extra-work and extra-cost impact in any single trade opportunity.
- Standards are very deeply tied to fundamental aspects of technologies and to engineering processes and philosophies. They are not mere papers that could be easily re-written in many cases. Common standards are likely to require much more common technologies than today. Although standardization and common standards are basically a good thing, too extensive standardization is not desirable either, as it may slow down innovation and technical development. Competition is always welcome and better technologies and solutions ought to win. New technologies are often vastly better and more cost effective than the older no matter how well standardized solutions. As an extreme view it could be claimed that a standard solution is already obsolete, when born, because it takes so long time to agree upon it. A right balance between innovation and standardization (or common best practices) is very important and sensitive.