

55th EOQ Congress
World Quality Congress
Budapest, Hungary - June 20-23, 2011

"Navigating Global Quality in a New Era"



June 22, 2011 (Wednesday) 55th EOQ Congress

KEMPINSKI HOTEL CORVINUS
REGINA BALLROOM

Erzsébet tér 7-8, Budapest V.

25.1. CLOSING PLENARY SESSION

Wednesday 13:30 – 17:00

Session Chair: *Pál Molnár, President of the Hungarian National Committee for EOQ and Professor at the University Szeged, Congress Chairman, Hungary*

14.30 The Golden Triangle of Management: Competitiveness, Profitability and Sustainability – How can International Standards Help?

Alan Bryden, Immediate Past Secretary General of International Organization for Standardization, France

Bryden, Alan (France)

Alan Bryden is currently a member, with the title of Ingénieur Général, of the High Council for Industry, Energy and Technologies (www.cgiet.org), an advisory body to the French government on policy issues in these areas, based in Paris. He also advises various UN and European organizations and agencies on sustainable development and quality policies.

From 2003 to 2008, he was the Secretary General of ISO(www.iso.org), the International Organization for Standardization, now comprising 162 member countries. During his tenure, ISO significantly consolidated its position and scope as the world leader for the production of consensus based, multi-stakeholders international standards. He brought to this position his extensive experience acquired previously, i.a. as Director General of AFNOR (www.afnor.org), the French national standardization body, as Director General of LNE (www.lne.fr), the French national metrology and testing laboratory and as Head of the Department for industry and agriculture in the French agency for energy conservation, now ADEME (www.ademe.fr). Amongst the numerous international positions held, M. Bryden was the first Vice President of the GATT Committee on Technical Barriers to Trade (now WTO www.wto.org), Vice President (policy) of CEN (www.cen.eu), the European Standardization Committee, and the founder President of EUROLAB, the European federation of measurement and testing laboratories: www.eurolab.org).

He is a graduate from the Ecole Polytechnique (www.polytechnique.edu) and the Paris School of Mines, now Mines ParisTech (www.ensmp.fr), and holds a degree in nuclear physics from the Université d'Orsay. He is a Chevalier of the Légion d'Honneur and of the Ordre National du Mérite. He holds both French and British nationalities, is bilingual in French and English and is fluent in Spanish.

55th EOQ Congress

**The golden triangle of management:
competitiveness, profitability and sustainability.
How can international standards help?**

*By Alan Bryden, ingénieur général des mines,
immediate past ISO Secretary General*

Budapest (Hungary) 22 June 2011

“Globalization” and “sustainable development” characterize the context of the 21st century for companies and organizations at large

The general economic and societal context in which organizations operate has drastically evolved in the past decade. The trend is for even greater challenges ahead. “Globalization” and “sustainable development” have become the key words to describe this context. Globalization applies not only to trade, associated with the consolidation of global supply chains, but to many other issues which ignore borders, such as the eradication of poverty or the need for solidarity and consistency when addressing collective threats such as pollution, pandemics, security, natural or industrial disasters. Sustainable development is the result of reconciling economic growth, environmental integrity and social equity. It has become an obligation, but also an opportunity, as much for economies as a whole as for economic actors themselves, as the planet is faced with the inter-related challenges of climate change, energy, water and nutrition, and its population is growing towards more than 9 billion human beings at the end of this century, and aging in many countries. The exponential deployment and development of information and communication technologies has “flattened” the world and revolutionized the way of making business and the means for citizens and consumers to compare situations and voice their concerns and expectations.

The golden triangle of management: reconciling competitiveness, profitability and sustainability

Designing an efficient management system and practice in this global context therefore involves integrating many aspects: knowledge and economic intelligence, innovation, quality, environment, safety and security, occupational health and safety, and, more generally, social responsibility. Overall and lasting success depends on the ability to reconcile competitiveness, profitability and sustainability. A company may be very competitive because its costs are low due to negligence of

environmental constraints or reliance on a technical breakthrough protected by patents, or because its prices are not reflecting its actual costs. But it will not be sustainable because of the social pressure to reduce pollution or of competitors catching up or circumventing innovation. It can be profitable because wages are kept low or prices too high, but there again social pressure, increasingly in emerging economies, and competition will close the gaps.

Consensus based international standards: a treasure chest of proven and globally accepted solutions

Consensus based standards constitute a treasure chest of proven and widely accepted solutions not only for the technicalities of design, production, logistics or customer-supplier relations, but also to address organizational and management issues. The worldwide success of the ISO 9000 series and their regular updates and offspring, such as the ISO 14000 series or sector elaborations, has illustrated this evolution since their first edition in 1987.

Because of globalization, the need for and the production of international standards has grown considerably, with IEC, ISO and ITU being the apex organizations. Their respective national membership cover each close to 99% of the world economy and their collections of standards in force add up to some 30000 standards, with an annual production of new or revised standards amounting to approx. 1500. Starting with the European Economic Space and the “new approach” to harmonize technical regulations on products, the concept of making reference to regional or international consensus based standards to explicit the means of abiding to essential requirements of safety or other impacts on society prescribed by legislation has prospered. The Agreement on Technical Barriers to Trade of the World Trade Organization clearly gives pre-eminence to the use of open and transparent international standards, of the type produced by IEC, ISO and ITU, in order to avoid creating unnecessary obstacles to trade. This agreement also encourages international acceptance of test results and certificates provided they are issued by organizations operating in accordance to the corresponding international standards, essentially the (ISO/IEC) CASCO “toolbox” for conformity assessment standards. The benefits of implementing standards can be identified along the entire company value chain and external interfaces. A methodology developed by ISO and Roland Berger in 2009 and deployed since at the level of countries and sectors, provides a common tool to identify and assess the benefits of standards, thus giving additional arguments to convince CEOs and executives to invest in their development and use. These benefits may be illustrated for the main facets of the “golden triangle” of management referred to above: knowledge and innovation, market access, environmental impacts and energy efficiency, business continuity and risk management and, last but not least, social impacts and responsibility.

Standards: tools for knowledge and innovation

With over 5000 work items in progress in IEC, ISO and ITU alone, covering all arrays of technology and management, monitoring standardization work is a major source of economic intelligence. Taking part in the related work is a chance to identify and anticipate technical and business trends, mingle with key competitors and customers and, possibly, to influence their content and consequently gain a competitive

advantage. Interoperability standards, whether for mere dimensions or more sophisticated aspects such as data processing or exchange of product data (cf. ISO STEP standards), facilitate the transfer of technology, the deployment of innovation as well as customer-supplier relations down the whole production and distribution chain. Using standards at the design stage will reduce subsequent engineering and production costs, and enable to assess and address, ahead of actual marketing, potential environmental or social impacts. The subject of managing innovation, including the handling of intellectual property is becoming itself a subject for standardization of best practices, with CEN having embarked on a number of developments in this area, following the emergence of related national standards.

Standards: tools for accessing world markets

The planetary success of the ISO 9000 series was clearly a result of the globalization of trade. Over 1 million organizations in some 173 countries are currently certified to this standard. Exporting, outsourcing and offshoring worldwide indeed imply a common language, as well as consistency and benchmarking, to support contractual requirements or commercial claims as to the nature and extent of “quality management” implemented by companies reaching out for world markets. Global trade, including that enabled by the wider market exposure provided by trading over the internet, where orders and reputations can be made or cancelled at “a click”, is supported by the consolidation of global supply chains. The latter themselves require international standards, not only to facilitate multimodal and international transportation (cf. dimensions of containers) but also for monitoring security or enabling identification and traceability (cf. electronic seals or RFID applications). The development and content of standards used internationally have become key strategic issues.

The traditional “transatlantic” (USA-EU) domination in this area is being questioned by the newly emerging economies, which have considerably expanded their share of global trade. Based on their growing weight in the world economy, they can not be satisfied with remaining “standards takers”. They want to be actively part of the “standards makers”. The recent growth in involvement and responsibilities of China and Brazil in ISO, IEC and ITU confirms this trend. More generally, quality and standards are now seen as tools for economic and social transformation in developing countries. Considerable resources are being invested to assist them in building trade capacity through the implementation of international standards. Similar efforts are made to deploy green technologies and efficient energy and environmental management practices worldwide, i.a. again through national and regional quality and standards infrastructures and assistance.

Standards: tools for environmental impacts and energy efficiency

The related challenges of climate change, energy, water and nutrition have triggered new needs and conveyed urgency to the production of international standards. Indeed, the ISO 14000 series has been extended to cover not only environmental management proper, but all aspects of measuring, monitoring and communicating environmental impacts: life cycle analysis, environmental communication and labelling, and, more recently, various aspects of assessing and verifying “green house gas” emissions and carbon foot-prints. Standards are being developed and

applied to support energy efficiency and renewable sources of energy. The ISO 50001 on energy management should be published this year and has the prospect of massive implementation. ISO and IEC are actively developing standards to support the use of renewable energies (such as solar, wind or tide energy, or the sustainable production of biofuels), to promote the “smart grids” for the distribution of electricity, to optimize the energy consumption of data centres, to assist in the deployment of electro-mobility and intelligent transport systems, or to provide tools for designing and operating intelligent and sustainable buildings. New developments in ISO address efficiency of water distribution and use, while existing activities related to waste management, air, soil or water quality, experience a renewed and growing interest.

Standards: tools for business continuity and risk management

Traditionally, standards address safety issues related to products or industrial activities, such as for consumer products and appliances, safety at work or medical devices and technologies. In recent years, the need to harmonize international security management practices have led to ISO standards in areas as diverse as information security (ISO 27000), food safety (ISO 22000) or security in the supply chain (ISO 28000). More generally, companies are confronted with risk assessment and ensuring business continuity in case of adverse events. ISO 31000 and the newly created TC262 offer the crucible for sharing and promoting good risk assessment practices. ISO TC223 on “societal security” is elaborating on emergency preparedness and business continuity management.

Standards: tools for social impacts and responsibility

Consumer safety has become a more complex issue with the emergence of new technologies having potential impacts on public health and safety (e.g. IT, nano- and bio-technologies) and with the “hyper-choice” to which consumers are confronted, as products and services originate from the whole planet. The “global consumer” is not just interested in fitness for use and price. Energy consumption, life long cost of service, environmental impacts, final disposal or ethics of production are now being taken into consideration to determine consumer choices and activism. Standards provide metrics and conformity assessment processes to assess and communicate these dimensions, while companies have to demonstrate that their products and production lines abide to such criteria. In other areas, accessibility of buildings and appliances for disabled and elderly persons, health informatics or ergonomics are increasingly active areas for international standardization. The area of “home networks” is a new challenge for standardizers in order to make the best use of information technology to monitor all functions in a home or building, and optimize its safety, energy consumption, environmental impact and external communication and connections. The publication last November of ISO 26000, the international standards giving guidance on social responsibility, has given a holistic framework to the way organizations address their impact on and relations with society. Its overwhelming adoption (93% of the country votes), due to its very inclusive and rather long development process, gives a long awaited and globally accepted reference for defining social responsibility, identifying the key features of how and to which extent it can apply to an organization and for relating it to sustainable development.

Management standards: monitoring the ISO radar screen

The development of management systems standards in ISO, since the first publication of the ISO 9000 series, has, followed, through successive revisions and additions, the world trends described above and mushroomed into sector or thematic elaborations. The recently published ISO 9004:2009 provides an associated guidance on a quality management approach to the sustained progress of an organization. Some important developments are underway. They aim at ensuring higher consistency, increasing coverage, adjusting contents to the evolution of best practices and making sure that conformity assessment requirements and practices reward those who indeed meet the requirements and give confidence to market players in their actual implementation.

The main developments underway are:

- the initiation of the development of a “high level structure” to federate the ISO collection of management system standards;
- the ongoing enquiry on the implementation of the 2008 version of ISO 9001, to assist in its further improvement;
- the development of new thematic management system standards: energy management (ISO 50001 and beyond), project management (ISO TC 258), preparedness and continuity management (ISO 22301), financial management (e.g. asset management, patent and brand valuation), with standards for financial services being possibly a new frontier for ISO, related to dealing with aftermath of the recent world financial crisis;
- the revamping of the main certification requirements standards: revision of ISO 17021 (systems) in 2011 and, announced for 2010, the publication of ISO 17065 (products and services), as well as the revision of ISO 17020 (inspection) and ISO 17024 (competence of personnel);
- the elaboration around ISO 26000 on which many existing international practices are aligning (e.g. GRI- Global Reporting Initiative, UN Global Compact, SA 8000) and for which myriads of more refined implementation and assessment tools are currently being developed, outside of ISO.

Conclusion: international standards are tools to facilitate market responsiveness, sustainable efficiency and global competitiveness.

Bibliography and links

- general information on ISO, IEC and ITU : <http://www.iec.ch/> , <http://www.iso.org/iso/home.html> , <http://www.itu.int/en/Pages/default.aspx>
- « Les normes sont indispensables au développement durable » by Alan Bryden La Jaune et la Rouge novembre 2009 <http://www.lajauneetlarouge.com/>

- Responsabilité sociétale entretien avec Alan Bryden Cahier n°3 Fondation pour Genève 2009
<http://www.fondationpourgeneve.ch/fr/publications/observatory.php>
- Report of the EXPRESS Group « Standards for an innovative and competitive Europe : a vision for 2020 » released February 2010
<http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/policy-review/express/>
- EU Council conclusions on standardization and innovation 2008
http://ec.europa.eu/enterprise/policies/european-standards/files/standards_policy/standardisation_innovation/doc/councilconclusions_20080925_en.pdf
- Communication from the EU Commission to the Council, European Parliament and the European Economic and Social Council: "Towards an increased contribution from standardization to innovation in Europe 2008
http://ec.europa.eu/enterprise/policies/european-standards/files/standards_policy/standardisation_innovation/doc/councilconclusions_20080925_en.pdf
- Repository of studies on the economic and social benefits of standards, and in particular, the 2010 ISO/ Roland Berger study on a "Methodology to assess the economic benefits of consensus based standards" at
http://www.standardsinfo.net/info/livellink/fetch/2000/148478/6301438/benefits/benefits_s1.html#EBS
- ISO publication: International standards and "private standards" 2010
http://www.iso.org/iso/publications_and_e-products/standards_development_publications.htm#PUB100240
- ISO-IEC publication: "Using and referencing international standards in regulations" 2008
http://www.iso.org/iso/publications_and_e-products/standards_development_publications.htm#PUB100240
- WTO's World Trade Report 2005: international standards and trade
http://www.wto.org/english/news_e/pres05_e/pr411_e.htm
- World Standards Services Network: a directory of national, regional and international standardizing bodies
<http://www.wssn.net/WSSN/index.html>
- ISO 26000 on social responsibility: access the ISO SR website through:
<http://www.iso.org/iso/pressrelease.htm?refid=Ref1294>