CONSENSUS

Standards
for the
global village

"Enbridge relies on CSA standards every hour, every day."

ART MEYER, VP TECHNOLOGY, ENBRIDGE PIPELINES

« Enbridge s'appuie sur les normes CSA à chaque heure du jour, tous les jours. »

ART MEYER, VICE-PRÉSIDENT, TECHNOLOGIE, ENBRIDGE PIPELINES

"Standards have helped make Enbridge a leader in liquids and natural gas pipelines and the remote operation of our systems," Art Meyer states. "Every day we rely on CSA standards that assist us to operate efficiently, effectively and safely. However, it's not just today that Enbridge depends on CSA standards; our industry must look out on the horizon to anticipate new standards requirements. By being involved with CSA we will be better prepared to meet changing times, technologies and public needs."

Be in the company of experts and help shape Canada's future today.

« Les normes ont contribué à faire d'Enbridge un chef de file du secteur des canalisations de gaz naturel et de produits liquides, en plus de faciliter l'exploitation à distance de notre réseau », explique Art Meyer. « Chaque jour, nous nous fions aux normes CSA, lesquelles nous aident à mener nos activités de façon efficace et sécuritaire. Enbridge aura d'ailleurs besoin des normes CSA encore longtemps. En effet, notre secteur d'activités doit se tourner vers l'avenir de manière à prévoir l'arrivée de nouvelles exigences. Grâce à notre collaboration avec la CSA, nous serons davantage en mesure de nous adapter aux changements qui affectent notre époque, nos technologies et les besoins de la population. »

Joignez-vous aux spécialistes et contribuez à façonner l'avenir du Canada dès maintenant.

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In this issue...

World Standards Day

Global Standards for the Global Information Society

October 14th is the day set aside by major international standards bodies to recognize and celebrate the importance of standardization. In 2003, the theme selected for World Standards Day is "Global Standards for a Global Information Society".

As a tribute to World Standards Day, this special issue of *CONSENSUS* features stories and articles that examine the phenomenon of "globalization" and highlight the critical role played by the standards community in addressing current world dynamics.

The Global Information Society:

Worlds Apart of a World Together

From her home in Caracas, Belen chats with Jane who lives in a northern British Columbian town. Although they've never been on the same continent let alone in the same room, they know each other well. They met on-line through a school-community outreach program and share a passion for baseball.

Natasha and Jean-Marc, web-conference weekly on the progress of their company's development project to bring clean water to the people of a remote South African village. One sits in the comfort of the company's cool offices while the other crouches in cramped quarters patiently trying to link-up.

Bits and bytes travel across miles in mere seconds to connect us to each other but sometimes those connections only emphasize the gulf that divides us.

In the past twenty years alone, the rate of technological progress in industrialized nations has been staggering. The proliferation of information and communication technologies (ICTs) has had an impact on virtually all aspects of human activity. And while citizens the world over have become gradually more dependent on the modern conveniences of ICTs, the benefits of that progress are by no means equally distributed.

"In today's world, there are (still) enormous disparities in people's rights, capacities and opportunities to access, create, communicate, use and benefit from information and knowledge; there are equally enormous disparities in people's access to and capacity to use electronic ICTs that allow us to perform these activities on a scale and with a speed that has never been possible before." [1]

Among those working to establish a more equitable Information Society are the United Nations (UN), the International Telecommunications Union (ITU), the International Organization for Standardization (ISO), and the International Electrotechnical Commission (IEC). As contributors to a World Summit on the Information Society (WSIS) these organizations intend to bridge the gap between those who have and have not, through global discussion.

The WSIS will engage international collaborators from across the globe, representatives from governments, the private sector, civil society and the entire network of UN agencies. Regional conferences will be followed by two international gatherings, one in December 2003, the other in November 2005. Participants will endeavour to articulate a shared vision for the global Information Society and to develop a coordinated action strategy.

The Canadian government has already undertaken a series of consultations that will guide the development of Canada's final position at this World Summit. Recognizing the importance of our fundamental human connectedness, the Canadian vision is focused on putting people first.

According to the Canadian Ambassador to the United Nations in Geneva, Christopher Westdal, the role of the WSIS is "to set the groundwork for increased cooperation and mobilization in the years ahead, to help establish the international agenda and, to find mechanisms that apply ICTs to support international and national development. Canada's vision is one where partnerships and community-led development can enable technology to support individuals, communities and nations. We believe that the WSIS can - and should - generate benefits for those that need it the most."

To ensure that less industrialized nations are not being excluded from access to technology, ISO, ITU and IEC have individually and collectively made commitments to

ensuring that the relevance and importance of developing countries is given full consideration.

In addition to their respective programs aimed at raising awareness and promoting the benefits of Information Technology to all nations, a shared objective for the international standards community is to promote the use of International Standards as a means of bringing the world together. Harmonized international standards provide a framework that accelerates the convergence of ICTs, reduces the proliferation of multiple approaches and helps minimize the incompatibilities between systems.

As part of the WSIS preparatory conferences held in Bucharest, Romania and in Tokyo, Japan, both the Asia-Pacific and the Pan-European regions acknowledged the important role of standards. In Bucharest, the Declaration included a reference to the need for international policy dialogue to promote the application of compatible standards as a means of bridging capacity gaps. In Tokyo, the Declaration mentioned that the development of the Information Society must be based on platforms of internationally interoperable technical standards accessible for all and noted the importance of this issue for all countries.

When you consider the potential for ICTs to affect social, cultural and economic change, it becomes easy to understand why "inclusiveness"—empowering all nations to participate and contribute—is essential to the goals of the WSIS. And likewise, why the international standards community has made it the focus for World Standards Day in 2003.

It won't be easy. The realm of digital technologies is inherently riddled with dichotomies. It is an arena that both challenges and compounds. And although cost and accessibility are the most often cited obstacles to development and progress, the issues facing the WSIS extend beyond cables and wires to many other questions of a socio-political nature. ∎

[1] *Canadian Contribution to WSIS PrepCom-2, Geneva, 17-28 February 2003 For more information on Canada's involvement in the WSIS visit: http://www.wsis-smsi.gc.ca.To learn more about WSIS visit: http://www.itu.int/wsis.*

Standards for the global village

a GLOBAL RECIPE to beat Business Integration Blues

Service Oriented Architecture

The frequent drumbeat of business and government leaders is a call for better cost efficiencies and organizational effectiveness without diminishing customer service. After years of this mantra, organizations are still grappling with the difficulties of identifying and implementing improvements while managing IT costs. Integrating business processes remains an area with untapped potential. Take, for example, the labour intensive and complex process of managing forms.

The way in which organizations manage forms has changed dramatically over the past decade. Initially, organizations would distribute paper forms manually to clients either in person or through the mail service. About five years ago, this changed when electronic forms were introduced and organizations began to offer clients the ability to download forms from their web sites. The change was great for clients but very labour intensive for organizations that had to constantly update each form individually. Today, *service-oriented architecture* (SOA) offers a way to simplify this business process by facilitating updates to thousands of forms simultaneously.

Imagine the pain of a government agency that is required to manage the metadata (i.e., data about data) and the business processes associated with multiple electronic forms. An eForm is used to capture data from citizens around the country. The agency needs to manage, for example, what the form looks like, what questions it contains, and in what language it appears. Metadata helps to determine all of these elements by providing information about how selected data is organized. An electronic form application uses the metadata to dynamically create a customized form on request.

The agency publishes the metadata to build the eForm in a *registry* system. Each time an eForm application starts up, the application reads information from the registry to determine how to configure the eForm it presents to the citizen. If the form metadata has changed since the previous presentation, the eForm application reconfigures the form. The registry provides all of the details necessary to accomplish this successfully, including the formatting and language needs of the citizen. The form may be presented differently to a citizen based on the preferred language and province specified by the citizen.
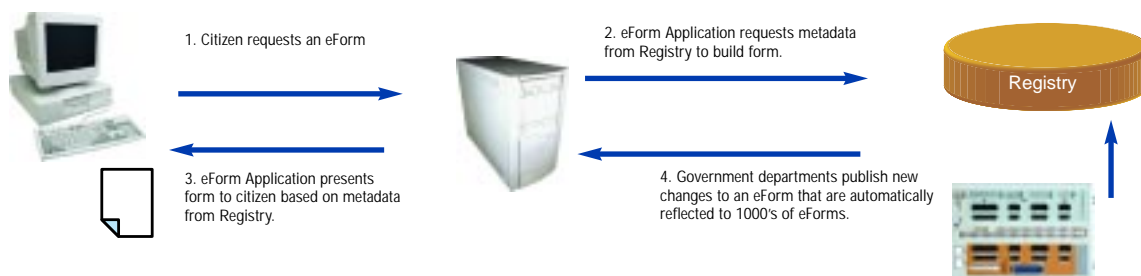
In the example above, service-oriented architecture enables the agency to manage multiple electronic forms by simply publishing the new form structure metadata in the registry. The form metadata changes over time, however instead of having to manually change each and every instance of an eForm application, the eForm tool automatically configures itself to reflect the needed changes in every instance of the form. According to Duane Nickull of Yellow Dragon Software, "The return on investment for implementing an automatically configurable set of service-oriented components is dramatic compared to the cost of manual labor needed to perform integration management using traditional methods. SOA-based eForms tools will become the choice of organizations looking to shrink software and IT costs."

What is Service Oriented Architecture?

A service-oriented architecture is a way of connecting services or applications across a network. Each service can have many incarnations. It can be a business process such as requesting an eForm, or it can be a technical application. This collection of services communicates with each other through simple data passing or through two or more services coordinating an activity. In the example above, different services communicate seamlessly to allow users to access the version of the eForm that meets their language and geographical needs. Other services allow eForm content managers to make content or structural changes to an eForm that is applied simultaneously to all selected eForms. The collection of services is connected most commonly using the technology of *Web Services* [1] which uses eXtensible Markup Language (XML) [2] to create a robust connection. Languages like XML also provide the functionality for disparate information systems with different interfaces to communicate with each other.

For developers, service-oriented architecture allows them to treat technical applications as network services that can be chained together to perform complex business processes more quickly. Developers have the option to include the functionality as part of the application that needs it, or they can develop it as a separate component. The collection of services forms a service layer that is separate from

1. Citizen requests an eForm

2. eForm Application requests metadata from Registry to build form.

3. eForm Application presents form to citizen based on metadata from Registry.

4. Government departments publish new changes to an eForm that are automatically reflected to 1000's of eForms.

Registry

the logic layer that contains details of the application such as language, operating system, or database. The ability to keep services and logic separate offers tremendous benefits to governments and private companies for return on investment, maintenance efficiency, and cost effectiveness.

Benefits of Service Oriented Architecture

Maximize Return on Investment

The creation of a robust service layer has the benefit of a better return on investment on software development. Services map to specific business tasks. For example, a manufacturer of light bulbs is planning to create an inventory service that has all of the tools necessary to manage the inventory for the company. Using service-oriented architecture, the company can put the logic for the inventory service into a separate layer that will allow implementation, updates, fixes, and tests to happen much more quickly. More importantly, the supporting logic will be relevant beyond the lifetime of the service because it is separate and can be modified. The return on the company's initial investment is significant, because the life of the logic is extended and maintenance and replacement costs are decreased.

Unlock the Value of Your Organization's Information

Business Integration or Interoperability are terms that may trigger pain or nightmares for some. This is the task of tying many information systems together to support a business process. A company's financial process might depend on ten different information systems that feed each other information, such as, billing software, client database, invoicing system, and financial reporting software. In theory, the ability to link many information systems allows organizations to mine valuable information that otherwise would remain undiscovered or would be too costly to perform manually. Yet in practice, organizations have spent billions of dollars trying to integrate their systems with limited success. A lack of standards for programming languages, operating systems, application interfaces, and networking protocols are some of the fundamental challenges of business integration.

Recently, some leading analysts have suggested that "service-oriented architectures" could help to solve the business integration issue. Traditionally, it would take armies of systems integrators to go in and modify code manually to allow information systems to share information. This task is simplified dramatically with service-oriented architecture. The user simply communicates with an interface while the details of the service such as language, operating system, related database, remain in the logic layer. If all applications can appear on the network as a set of services, it is possible to plug all these services into a single information bus. The process of integration or interoperability is now turned into the

software equivalent of building a computer. The developer plugs different services into the bus, they share information, and integration takes place. Although this example is simplified, it helps to illustrate the elegance and efficiency of service-oriented architecture.

## Service-Oriented Architecture and Global Standards

Service-Oriented Architecture has received significant global attention. In fact, all new global standards for information technology systems use service-oriented architecture. An example of these new global standards is Electronic Business XML or eBXML, a subset of service-oriented architecture designed for long-standing business collaboration on a global basis. eBXML is

Various services are plugged into the logic layer or information bus.

the result of joint collaboration between United Nations Centre for Trade Facilitation and Electronic Business (CEFACT), Organization for the Advancement of Structured Information Standards (OASIS), and 2,000 independent participants around the world.

"Canada has some very ambitious projects that take advantage of service-oriented architecture," says Duane Nickull of Yellow Dragon Software. "One such initiative will utilize a Service Oriented Registry to build, maintain, and share an integrated justice data dictionary that will join together Canada's key justice systems. This means that justice systems across the country will benefit from a single data dictionary that combines intelligence from different regions of the country in a format that is easy to maintain."

The benefits of service-oriented architecture resonate: loud and clear. New business processes can be introduced, upgraded, or standardized more quickly than ever before. Implementation and testing becomes much faster and maintenance is minimized, allowing governments and businesses to become more agile and more responsive to client needs, cost effectiveness, and competitive pressures. And, it is the availability of global standards that take advantage of service-oriented architecture that will ensure that these benefits are realized on a broad and far-reaching scale. ∎
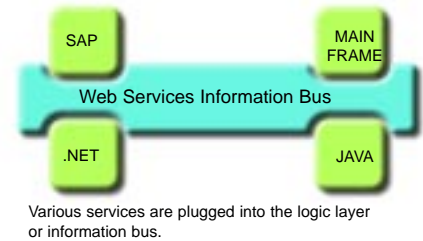
1 Web Services activity is closely centered on the W/C consortiums' Web Services Architecture Group. See http://www.w3.org/2002/ws/arch/
2 XML – see http://www.w3.org/TR/1998/REC-xml-19980210

Tulips, Targets
AND TECHNOLOGY TRENDS

Interview with Mr. Alan Bryden,
Secretary-General of ISO

*I*n May 2003, delegates from around the globe congregated in Canada's capital to experience the hospitality of the Standards Council of Canada (SCC) as it hosted the International Organization for Standardization (ISO)'s second annual networking conference. The assembly focused on "networking in a new information and communication environment" and with Canada's tulip festival as a backdrop, offered participants the opportunity to learn from each others' experiences, develop new working relationships, and apply this information worldwide through their respective agencies. Among the highlights of the event was the chance to hear from ISO Secretary-General Alan Bryden. Mr. Bryden spoke with enthusiasm about the Internet, information technology tools and other trends affecting the standardization community. Following his visit to Ottawa, we asked Mr. Bryden to comment on his Canadian experience and tell us more about his vision of ISO's future.

CONSENSUS Magazine (CM): *What can you tell our readers about the objectives and outcomes of this 2nd networking event and your own personal experience in Canada's capital?*

Alan Bryden (AB): The ISO system is a decentralized one and the concept of the networking conference was introduced in order to provide opportunities for first-hand exchanges among those managers from our national members who are in charge of promoting and communicating the standards the system produces. The theme of the second event highlighted the opportunities offered by information technology, such as Web sites for communicating our offering, Web stores for selling our standards, and innovative information services on electronic platforms.

These new opportunities enable us to communicate with a wider public than ever before and to associate our stakeholders more closely, from defining their requirements, to giving them access to information on the progress of work items, and to delivering the results.

The conference was all the more efficient in being organized by SCC, which demonstrates its grasp of IT opportunities, for example, on its Web site where it includes an informed choice of material generated by ISO Central Secretariat – thus avoiding having to reinvent the wheel – along with original material developed to suit its own context and to further its strategies.

CM: *In your career, you have been exposed to standards development from several different vantage points —from the US, to France and now from a position of leadership at an international organization. How have the roads you've traveled in your career affected your view of standardization and influenced the approach you will take in your role as Secretary-General of ISO?*

AB: In the course of this career of some 20 years, I have witnessed three standardization phenomena that have increased in importance and influence my approach:
- firstly, as a result of globalization, the evolution in focus from national to regional and international levels;
- secondly, the expansion in scope from product and manufacturing standards to standards for management systems, business and the quality of services, and
- thirdly, the growing importance of IT in both the production and dissemination of standards.

In addition, the need to organize and encourage the international recognition of test results and certificates, and, more broadly, the assessment of conformity of products, services, management systems and personal competence, has resulted in the development of mutual recognition agreements based on peer assessment and in the expansion of accreditation.

CM: *Along with the International Telecommunications Union (ITU) and the International Electrotechnical Commission (IEC), ISO is among the apex organizations for international standardization. It has an established reputation as an organization with a highly developed social conscience and as an important contributor at the global level. What would you say is the organization's biggest hurdle in maintaining and protecting the image and integrity of ISO?*

AB: The success of ISO 9000 and ISO 14000 and the diversification of ISO's scope mean that we are more and more associated with concepts like performance and quality. These are key elements for competing on world markets and there is therefore a growing temptation to use ISO's name – much more so than, say, 20 years ago – to support the image of products or services and to demonstrate their quality to customers. For ISO, this is "the ransom of success" and it calls for increased vigilance to ensure that our name is not misused, particularly, for example, in Internet domain names and in claims related to conformity assessment according to ISO standards. We have had a number of successes in protecting our name on the Internet and we are cooperating with the representatives of the accreditation bodies to encourage good practice in conformity assessment.

CM: *The rapid pace of technological change has had a dramatic impact on global markets. Organizations from virtually all business sectors have had to adjust in order to keep pace and remain competitive. What type of role have the Internet and new technologies played within ISO? And how have technology trends affected ISO's practices, particularly in terms of resources and other constraints?*

AB: The integration of information technology is transforming ISO at all levels of the organization, whether in its communications with members and stakeholders, or in the operation of its standards-development processes. In particular, we can point to the growing use of electronic tools by our standards-developing technical committees and subcommittees, of which 50 per cent now work fully electronically and a large number take advantage of the ISO/TC server. E-balloting and the electronic delivery of standards will both be fully operational by the end of the year. In fact, the electronic delivery of standards via Web stores has become the N° 1 sales channel.

CM: *Producing and implementing standards and tests that address market needs while fostering inclusiveness—giving equal voice to all nations, presents some unique challenges for international standards bodies. What concrete steps is ISO taking to extend its services to developing countries and ensure their participation at the international table?*

AB: ISO is a rather unique organization with regard to its high degree of representivity. One hundred and twelve of our 147 members are from developing nations or economies in transition. We have a number of specific actions for increasing their participation in our work. These include helping to establish a viable infrastructure for standardization and related matters by preparing special publications (development manuals), capacity building through training seminars, workshops and fellowships, and sponsorship of their attendance at ISO technical committee meetings.

In particular, we are assisting them to develop their information technology infrastructure in order to conquer distance and the cost of physical participation in standards development by electronic means. For example, we are providing resources from ISO Central Secretariat to assist in designing Web sites for developing country members and access our "e-Services". We have published a manual for developing countries on the use of IT in standards development and are now working on a programme of eLearning modules addressing the various aspects of standardization.

Another avenue is the development of twinning arrangements whereby developing countries partner with a member body in a developed country to gain experience and share the task of providing TC secretariats, acting as Chair, or simply participating.

CM: *Some say that the objectives of both encouraging participation by developing countries and using Information Technology (IT) tools to improve the provision of goods and services are contradictory, especially considering that many developing countries still do not have access to, or the resources to acquire new technologies. How does ISO plan to bridge the digital divide and ensure the global village of the future is one of progress, not dependence?*

AB: We have taken a number of practical steps to help develop the basic technological platforms for access to our "e-services", which we continue to develop. For example, personnel from ISO Central Secretariat have performed such missions to Egypt, Jordan, Morocco, Tunisia, Ethiopia and Eritrea, and to Ecuador and Bolivia.

To a certain extent, for the financing of such assistance, ISO is able to help directly through the use of funds in trust contributed by its members specifically to assist developing country members. Canada has been particularly generous in its assistance. We also constantly seek to identify new sources of assistance through partner organizations like UNIDO, UNCTAD and the WTO, or national development agencies such as SIDA in Sweden, NORAD in Norway. and SECO in Switzerland.

CM: *Governments around the globe are striving to find smarter, more efficient ways to address the challenges of their respective regulatory systems. To what extent can ISO provide support for regulatory reform? Where does for example "the harmonization of technical regulations" fit within the larger agenda of strategic priorities for ISO?*

AB: On the one hand, there is the increasing globalization of trade, and other issues such health, safety or protecting the environment, and with it the growing realization that International Standards can contribute to avoiding technical barriers to trade whilst supporting and disseminating technical progress. On the other, with the trend towards deregulation of services formerly provided by governments, International Standards are attractive alternatives to providing the technical basis for public services because governments can be confident that they have been developed after broad consultation on stakeholder requirements. Reference to standards is the model that has been followed by the European Union to create the Single Market and, more precisely, reference to International Standards is stipulated in the WTO/TBT Agreement and supported by the United Nations Economic Commission for Europe as a key tool for global trade.

ISO and its standardization system are great assets for government trade negotiators and deregulation because they are based on stakeholder input from all regions of the world – which gives our standards wide acceptability. In addition, we encourage the national adoption of our standards, so it is easier for governments to accept them as providing the technical requirements for products and services for referencing in national regulations, because any issues relating to language and implementation by the economic players concerned are addressed during the national adoption.

CM: *The Standards Council of Canada places a high value on ensuring that Canadian standardization priorities are voiced at the international level. How would you describe Canada's efforts? How can Canada best contribute to ISO's vision of the future?*

AB: Canada is a founder member of ISO and has been playing a leading role in our organization at strategic, managerial and technical levels for 56 years. It has been particularly effective in its contributions towards management system standards – providing the secretariats for the committees responsible for ISO 9000 and ISO 14000 – and also for its efforts and support on behalf of developing countries. The best future contribution Canada can make is to continue promoting effectively the

road to International Standards in its own part of the world, for the benefit of its own stakeholders and also of the world community.

CM: *Do you have any additional comments that you'd like to share with our CONSENSUS readers?*

AB: Your pertinent questions illustrate the quality approach that makes CONSENSUS such a good magazine. And by the time this interview is printed, we will have another example of Canada's contribution to leadership in international standardization. As my new Deputy Secretary General at ISO, I have chosen someone who will be no stranger to your readers, especially those who have worked with him at SCC and CSA: Kevin McKinley! ■

ISO

ISO Horizon 2010
**Standards for a sustainable world**
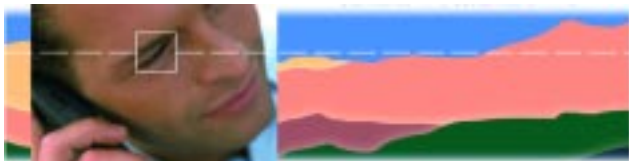
**Consultations to update
ISO's strategy for 2005 - 2010**

ISO Horizon 2010:
Standards for a sustainable world

The work of the International Organization for Standardization (ISO) touches the lives of many stakeholders, be it general consumers or business professionals. It has a membership of 147 national bodies from countries in all regions of the globe.

In order to adjust to global market trends and other new developments, ISO is currently updating its strategy through an extensive consultation process. For more information about ISO Horizon 2010 visit www.iso.org.
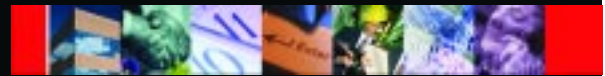
CORPORATE SOCIAL RESPONSIBILTY   STANDARDS WITH A CONSCIENCE

Corporate Social Responsibility or CSR. It's a term that has seen its fair share of headlines with the scandals that have rocked the business world over the past five years, but it's a concept that has been around for more than a quarter century.

"It started out with an environmental focus but over the years CSR has evolved to reflect the economic and social aspects of doing business as well," said Dr. Kernaghan Webb, Chief Research & Senior Legal Policy Advisor, Canadian Office of Consumer Affairs, Industry Canada, and a member of the International Standards Organization's (ISO) Strategy Advisory Group looking into CSR standards. "Today, the spotlight is shining on corporate governance and companies' fiscal responsibility toward their shareholders, but this is only a small portion of what CSR encompasses."

Quite simply, CSR can be defined as the way a company achieves a balance of economic, environmental and social objectives while still managing the bottom line. CSR shelters worker health and safety, human rights, labour relations, community development, poverty reduction, environmental protection, sustainable development, consumer protection, anti-bribery, corporate governance and philanthropy under one big umbrella.

"With more companies implementing CSR programs, the time is ripe to look at whether or not an international standard would be useful," said Webb. "To function in a global market, businesses need a credible set of criteria for acceptable business practices no matter where they operate." Other international groups have produced documents and guidelines that address the concepts of sustainability and CSR, including the Global Reporting Initiative, the OECD's Multinational Enterprise Guidelines, the International Labour Organization's conventions, Social Accountability (SA) 8000, and the United Nation's Human Rights Declaration and Global Compact.

Adding its voice to the discussion, the ISO formed a strategic advisory group to study the feasibility of developing and implementing a voluntary CSR management standard. Chaired by Daniel Gagnier, Senior Vice President, Corporate and External Affairs of Alcan Inc., Canada, the group, formed in January 2003

and made up of 22 members from around the world, is working on a technical report and recommendations on the need for a unified international standard. The report will be completed by the end of this year. If the ISO accepts the group's recommendations, a CSR standard could be introduced by 2007.

Webb says that an ISO CSR standard would be relatively easy to develop because it would refer to guidelines already in place and would build on its own widely accepted ISO 9000 and ISO 14000 quality and environmental management standards. "ISO has already constructed the basement and the first floor of the CSR structure. It just needs to address the social aspect - the second floor if you will - to finish it off."

Gagnier agrees it's time that one unified CSR standard be developed and that members of the ISO Strategic Advisory Group are working hard to come up with an acceptable definition of what CSR is. "With CSR, everybody has been groping around in the dark for the same information and it was time we put our heads together to get a clearer view of what the concept actually means to people," he said. "The beauty of this advisory group is that we've got people from all over representing different interests and who all have their own view of what CSR should be. However, we agree there's a definite need for it. Our ongoing discussions of how, when and why you implement CSR is part of a sharing process that ultimately leads to everybody pulling each other up by their bootstraps in order to do things better."

Accountability is the crux of CSR. Savvier investors, concerned communities and other interest groups are demanding that corporations put in place a more transparent and dynamic management system, one that addresses the needs and concerns of the communities they work in, as well as any potential impact their operations might have. A growing number of consumers are also becoming advocates of social responsibility, purchasing products and services from companies perceived to be good corporate citizens.

For Sondra Bruni, Chair of the Standard Council of Canada's Consumer and Public Interest Committee (CPIC), and of the Canadian advisory committee for ISO COPOLCO, good corporate governance will lead to more effective and profitable operations for companies as well as better returns for their investors and customers on

all levels, especially given recent events. "The loss of public confidence and trust in the integrity of corporations should be a wake-up call to the need for more effective, accountable and transparent governance," she said. "The public is demanding more careful due diligence on the part of both corporate boards of directors and the government agencies in charge of overseeing them."

The immediate reason a corporation would want to embrace CSR is that it's a way of proactively identifying and managing their political, environmental, social and legal risks, according to Kernaghan Webb. "CSR is necessary because both the private sector and the broader society are recognizing that businesses need a social license as well as a legal license to operate," he said. "It's no longer acceptable for an oil company, for instance, to knock on the government's door and ask what they have to do in order to exploit an oil field. Now they have to find a way of talking to all of the stakeholders in the vicinity of that field and get their consent. When they do that, they have some degree of assurance they won't have

any problems because the stakeholders are now part of the process."

Webb is certain corporations will embrace an ISO CSR management standard for the simple reason that the ISO is a globally recognized brand. "There's a lot of information out there but it's either at a high level of generality or it's not authoritative. An ISO CSR standard that is transparent and interoperable would provide a strong framework - a structured process - that a company could follow and implement, no matter its size or location."

Though the benefits of CSR may be hard to measure in pure business terms, Daniel Gagnier says companies that court negative publicity because of environmental and human rights violations, or fiscal irresponsibility, will not only tarnish their reputation, but will watch their stock price plummet. "Corporations that weave CSR into their business model will find it's a great motivator for common good. Employees are proud to work for the company because it's giving something positive back to the community. And that's ultimately good for business." ∎

Alcan Tops For CSR

Corporate Social Responsibility (CSR) isn't just a P.R. buzzword at Alcan Inc., it's an ethos that is imbued throughout the company's business plan.

"Sustainability is a priority and it made sense to incorporate economic and social objectives into our business framework as well," said Daniel Gagnier, Senior Vice President, Corporate and External Affairs, Alcan Inc., Canada. "When you really think about it, it all boils down to the fact that CSR is the right thing to do. It benefits the company, and most importantly it benefits your employees, the environment and the communities you work in."

Alcan's commitment to CSR has won the company kudos from many different sources, including a nod this year from Corporate Knights as the top corporate citizen out of 50 Canadian companies. Corporate Knights is an organization that promotes business ethics, concentrating specifically on socially responsible investing and corporate social responsibility. Alcan also consistently ranks high on the Dow Jones Sustainability Indexes.

Although Gagnier appreciates the accolades, he says Alcan doesn't implement CSR for positive publicity. "We don't practice CSR for the purpose of winning awards or gaining goodwill, we do it because it's a holistic business approach that is a win-win situation for everybody." Gagnier believes so strongly in the concept that he is the volunteer chair of ISO's Strategic Advisory Group looking into the feasibility of a CSR standard.

Alcan sponsors numerous projects that aid communities around the globe. They range from an arts program for Vancouver kids to watershed management consulting in third world countries. In Brazil, the company has built eight clinics for Project Smile, a free dental program that has treated more than 3,500 children in the community of Ouro Preto. In Bangladesh and other underdeveloped countries, Alcan works with aid organizations to remove arsenic from water. An educational program, Micro-Business Network, helps schools around the world teach students the importance of sustainability and how to run a business through the recycling of aluminum cans and shopping bags. More than 32,000 students have participated since the program's inception 12 years ago and the profits fund school and community activities.

Alcan's commitment to CSR isn't just for outside projects. The company also fosters this spirit in its workplace and in its relationships with suppliers. Its Worldwide Code of Employee and Business Conduct sets out a path toward responsible workplace and business practices that the company expects its employees and its contractors to follow.

"Our long term plan for CSR is simply to get better at it," said Gagnier. "Someone once said to me that the road to sustainability is still under construction. It's certainly a journey of improvement, constant learning and the use of economic success for the benefit of both shareholders and stakeholders." ∎
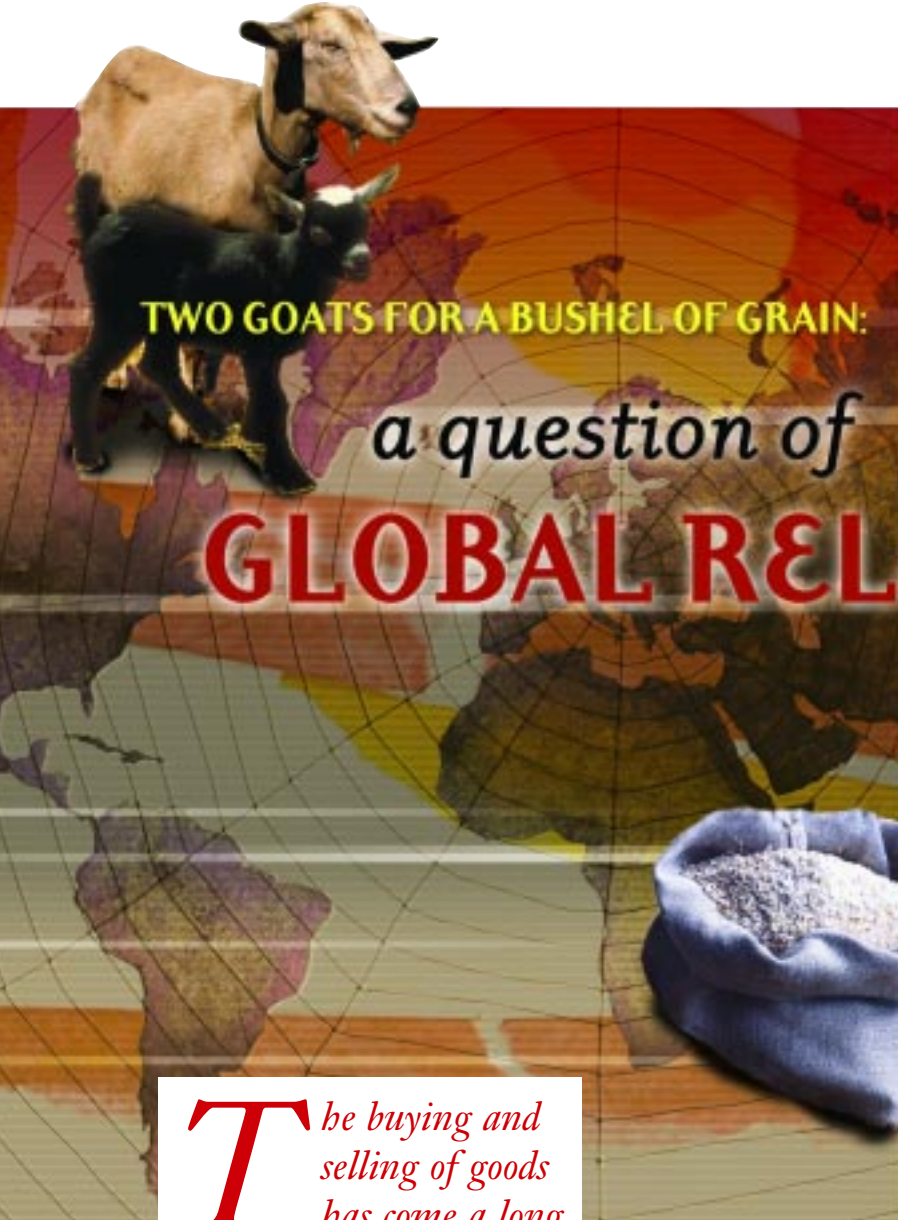
TWO GOATS FOR A BUSHEL OF GRAIN:
a question of
GLOBAL RELEVANCE

The buying and selling of goods has come a long way from the days when two goats could be traded for a bushel of grain. Or has it?

For centuries, raw materials have been extracted from the depths of the earth and refined. The elements combined and multiple products manufactured. Each of these products, in turn, distributed through established channels linking many suppliers. The products bought by consumers from numerous retailers or combined to form part of other products.

At each point in this intricate chain of supply and demand there is both a specific set of standards and a corresponding set of tests.

In fact, the very basis of the links between manufacturers, distributors, retailers and consumers is the ability to demonstrate that a product or service measures up—that it has specific attributes and qualities and meets certain criteria.

So perhaps things haven't changed that much at all. The parties involved must agree upon the value of each product or service. The goat herder and the grain farmer must reach consensus on the value of their respective "goods" before they can trade. Although between nations, there are many other variables to consider, it is much the same principle. Acceptance of the standards and tests used in one place is a means to their being sold in another.

So what does all this have to do with the modern business of selling TVs, medical equipment and countless other products in markets around the globe?

Modern Marketplace

In today's marketplace, with the disappearance of traditional trade barriers (like tariffs), goods and services flow more readily across national and continental borders bringing international standards and the assessment of their conformity to the forefront of trade discussions. Manufacturers and service providers who can show that their product or service has been assessed and found to meet a standard that is recognized and applied around the world have a definite advantage over their competition. These tests or assessments of conformity are also an important indicator for governments, regulators, consumers and health and safety officials. Not only do the assessments build confidence and open doors to markets around the world, they also verify that the applicable safety, health, performance and other requirements have been met.

The World Trade Organization's (WTO) Agreement on Technical Barriers to Trade (TBT) has reinforced this message by making standardization and conformity assessment a vital part of the global trade agenda. All

signatory governments—more than 140 to date—are encouraged to participate in international standardization and, to use international standards as the basis for national/domestic activities.

The Challenge

The current challenge is ensuring that standards designed for use by any one country or region, are truly relevant around the world, and developing a genuinely global system for assessing conformance to those standards.

How is this challenge being met? Across the international standardization community, work is underway to refine the principles and practices used to ensure that standards and conformity assessment are globally relevant.

Charles Cipolla, President, Rockwell Automation Canada Inc., and past Chair, Electro-Federation of Canada Inc., recognizes the goal of international standardization in terms of opening doors to markets around the world. He says Rockwell Automation Canada Inc., a subsidiary of Milwaukee-based Rockwell Automation, which makes products such as industrial controls and programmable logic controllers, is working to have some of its newer products certified to International Electrotechnical Commission (IEC) standards.

Harmonization

Developing international standards that address the needs of most countries is an important piece of the global relevance puzzle. The goal of international standardization is removing barriers to trade by encouraging the harmonization of national standards through the adoption of global standards. In order to prevent standards from becoming technical barriers to trade they must be free of national or regional bias.

The IEC has taken an important step towards realizing this goal through its new initiative to ensure that well-specified differences in essential national and regional requirements are included in its standards. The policy, detailed in the document entitled Implementation of Essential Differences in Requirements in IEC Standards, is designed to facilitate the development of truly global IEC standards that reflect the needs of all the world's major markets, as well as the WTO requirement for "equal treatment" of all countries and regions.

Tony Flood, President, Canadian National Committee of the IEC, and Chairman, IEC Global Relevance Task Force (GRTF), says this change is significant: "Put into practice in the marketplace, this policy is expected to contribute to an increase in the implementation of IEC

standards, a decrease in modifications at the national level and the increased potential for global product designs."

The policy was created after the GRTF found that only 50 per cent of 40 IEC standards surveyed were adopted without significant deviations. Countries which had a different technical infrastructure or climate than those addressed in an IEC standard often refused to adopt it as their national standard or implemented a modified version.

Mr. Flood points out that writing differences into the main body of a standard means they can be seen and understood by all parties, including manufacturers, who are often able to incorporate differing requirements for various markets into the one product at the design stage.

The issue of global relevance is likewise on the table for the International Organization for Standardization (ISO). ISO has stated its intent to clarify the principles followed in the ISO system and, has raised the issue of global relevance in its ISO Horizon 2010 consultative document, as it surveys its members and other stakeholders to gather their ideas for its 2005-2010 strategic plan.

The ISO Technical Management Board (TMB) has decided that before an ISO project is started, all interested parties should commit to achieving a single solution, or, at a minimum, a single set of performance criteria, with the option to define different deemed-to-comply solutions.

Regional and international schemes and agreements

Another key component of global relevance is the ability for countries to recognize each other's inspections, testing, certification or accreditation. The framework for this emerging global accreditation regime is provided by regional and international conformity assessment schemes and related formal agreements. These schemes and agreements help lower or eliminate duplicate costs and reduce delays in the delivery of products to market.

Key milestones in establishing a global framework include, the:

- use and acceptance of international documents such as ISO/IEC Guide 68 Arrangements for the acceptance of conformity assessment results;
- sharing of national best practices related to conformity assessment;
- participation in international and regional systems of accreditation—the process of verifying an organization's competence to perform a particular conformity assessment function;
- signing of Mutual Recognition Agreements (MRAs) and Multilateral Arrangements (MLAs) with organizations like the International Laboratory Accreditation

Cooperation (ILAC) and the International Accreditation Forum (IAF); and the
- expansion of the IAF and Pacific Accreditation Cooperation (PAC) MLAs to include environmental management systems and product certification.

Major standards developers are also contributing to another aspect of making standards truly international by signing recognition agreements. The dual-logo agreement between the IEC and the Institute of Electrical and Electronics Engineers (IEEE), for example, is designed to minimize duplication and reduce unnecessary expenditures. Under the agreement, the IEC evaluates new IEEE electronics, telecommunications, power generation and other electrotechnical standards for international status. Selected standards are published as IEC/IEEE Dual Logo International Standards and are made available for adoption by IEC member countries.

Hans Konow, CEO, Canadian Electricity Association (CEA), is encouraged by the IEC/IEEE dual-logo agreement and new IEC policy. "I think a great deal of progress has been made to break down historic barriers." He says CEA supports the "world standards first" philosophy, but stresses that standardization needs to take the fundamental differences between the North American and European electrical systems into account.

Developing nations

Among the most important aspects of the standards business is "inclusiveness" or the practice of involving representatives from all affected stakeholder groups (industry, consumers, testing labs and regulators). If conformity assessment and standards are to be relevant around the globe, all nations must be involved. At the international level, one group of players—developing nations—is receiving particular attention through efforts such as:
- the ISO Council Task Force on Developing Countries' (DCTF) Programme of Action to increase these countries' participation in international standardization; and
- expansion of the IEC Certification Body (CB) Scheme to non-IEC members. This is expected to benefit manufacturers in developing countries, where there are few IEC members. The CB Scheme promotes acceptance of test certificates based on specific IEC standards without the need for more testing and evaluation.

For the goat herder and the grain farmer, the village market has become a much different place—at once larger and smaller. And while the principle of a single accreditation, accepted worldwide is still down the road, the need for globally relevant conformity assessment and international standards is here to stay. Standards and tests are the tools that make it possible to market TVs, medical equipment and many other products and services, half a world away. Globally relevant standards and tests are the tools that will open new doors throughout the global village. ■

The Development of 735-kV Transmission and Standardization at Hydro-Québec

Hydro-Québec was formed on April 14, 1944, marking the beginning of the interconnection of Québec's various power systems and a long process of technical standardization. In the 1960s and 1970s, Québec nationalized electricity and started massive projects to develop Québec's hydroelectric potential.

Bringing energy from the North Shore to Québec City and Montreal was a major challenge that triggered a wave of research into solutions for minimizing the energy loss that comes with transmission over long distances. In 1955, no country anywhere in the world carried electricity at voltages higher than 400 kV (400,000 volts). The engineer Jean-Jacques Archambault and a handful of colleagues such as Don McGillis and Gilles Baril, studied how to design and promote the use of 735-kV transmission.

The first 735-kV line ever built, about 450 km long, was commissioned in 1965 and linked the Manicouagan and Rivière aux Outardes power stations to the load centres of Québec. This technology revolutionized the industry and made it possible to exploit the hydroelectric resources of Québec's northwest and northeast.

From its founding in the late 1960s, the Institut de recherche d'Hydro-Québec (IREQ) has been an active participant in developing the new technology for electrical power systems that traverse large distances. IREQ also helped standardize Hydro-Québec's generating, transmission and distribution equipment, a process made necessary by the 735-kV technology.

IREQ played a key role in the expansion of a modern and efficient power system, and researchers found innovative solutions to the problems posed by operating a 735-kV system. Hydro-Québec can now carry electricity at 735 kV over distances of more than 1000 km on a top-notch system that is reliable, safe and provides operating flexibility.

The experience acquired throughout this process has been distilled into standardized technical specifications. In the late 1970s, Hydro-Québec implemented a technical standards program and established standards in cooperation with the suppliers of generating equipment components (such as transformers and circuit breakers).

Training tools were required to standardize practices and methods in order to:

- Ensure the reliability of equipment
- Promote the interchangeability of equipment
- Encourage the grouping of purchases and reduction of inventory
- Increase savings in labour and equipment
- Reduce delays

The expertise and progress that developed along with 735 kV technology, the development of alternative solutions as well as the standards established by Hydro-Québec have enabled Hydro-Québec TransÉnergie and its engineering and project partners to play a major role on the international scene. Wherever the construction of high-voltage power lines permits the transmission of electricty over long distances, Hydro-Québec TransÉnergie and its partners are there!

Efforts are currently underway at Hydro-Québec to harmonize its technical standards with national and international standards, while ensuring that the requirements for its operating system—related particularly to a northern climate, long transmission distances and modes of compensation—are taken into account. Most of Hydro-Québec's technical standards are based on IEC standards in use throughout the world.

Most of the energy generated by Hydro-Québec is carried on high-voltage lines. With 735-kV technology, the environmental impact has been reduced: a single 735-kV line on the Hydro-Québec TransÉnergie system replaces four single-circuit 315-kV lines.

Hydro-Québec was the first to develop the commercial 735-kV line, and the accessories that operate at that voltage. Today, Hydro-Québec is still pioneering in high-voltage transmission technology. Québec's innovations have set standards that can guide any country that must carry electricity over long distances. High-tension lines have become a key technology for major systems.

Hydro-Québec's vision of the future embraces its ongoing participation in organizations such as the IEC and, in maintaining its leadership role in the electricity transmission industry. ■

The Adventures of an International Peer Evaluator

HAVE CHECKLIST, MUST TRAVEL!!

by Joan Brough-Kerrebyn

"What kind of work do you do that has you traveling half way around the world?" A routine question asked by travelers sitting next to each other on long *haul* flights. An easy question to ask, but it's a bit more difficult to answer when you are a *peer evaluator*.

Peer evaluation is a job you will never hear about in the career section of the popular press. While it is an obscure and specialized function, it is also one with a far-reaching impact on international efforts to promote global trade. Peer evaluators from the Standards Council of Canada (SCC) much like their colleagues in other accreditation bodies around the world utilize a process that enables the worldwide recognition of registration and certification certificates. The work is very exacting with knowledge and experience requirements that make the fifty or so people who do it a close-knit group. We know each other fairly well but we rarely see each other in familiar surroundings. Instead we meet up in foreign locations to form teams that visit and evaluate another economies' accreditation body (AB).

In reality, being part of a peer evaluation team is long hard work, performed in a strange environment under time and performance stresses, while still recovering from jetlag. What is accomplished, however, is very important to the AB being visited. The team's findings will influence the future design and delivery of the AB's services. The resulting evaluation report will provide the evidence that global associations of ABs, such as the IAF and ILAC can have confidence in the services of the AB. Without this formal acknowledgement, the AB clients—the registration/ certification bodies or laboratories the AB has accredited—cannot obtain the global acceptance they seek to have the certificates they issue accepted by buyers in non-domestic markets. SCC has been a leader in contributing staff to carry out these evaluations as part of their commitment to support international multilateral recognition arrangements (MRAs). It's these arrangements that provide the foundation for recognition of certificates by the members of these international associations. (Try explaining all this to a stranger seated next to you on a plane.)

A typical evaluation visit begins with a Sunday evening meeting following the arrival of the two to five team members from their separate corners of the world. Before this meeting there has already been a week or so of work expended, on reviewing documents against requirements, as well as communicating with the applicant AB to clarify information and finalize the logistics of the visit. The Sunday meeting, chaired by the team leader, is intended to bring all the team members up to speed on their roles and, to explore initial impressions of the organization being evaluated. Formal introductions are initiated at an opening meeting held Monday. On average,

a week is spent at the AB. Two days are used to evaluate the office operations and procedures. The rest of the week is used to actually witness the AB assessing a client in order to observe the performance of their assessors and the implementation of their assessment procedures. In between these activities, the evaluation team meets frequently, usually in the evening back at the hotel, to compare notes and to ensure that all the requirements are covered. By mid-week the team leader starts putting together a written report incorporating input from the team into a single document that outlines what findings the AB should address, as well as its key strengths and weaknesses. The visit ends with a closing team meeting to discuss the report and ensure that the issues are well understood and agreed upon.

The evaluation team's work, however, does not end upon their departure from the AB. The AB is required to respond and address the evaluation findings in order to improve their program operations and be in conformance with the requirements. The team then reviews the AB's response to ensure that the issues have been adequately addressed and in a few cases a member of the evaluation team may be required to revisit the AB to confirm implementation and effectiveness. Add to this the administrative and approval process for the MRA, and you are looking at 6 to 10 months before the recognition becomes reality.

These procedures are relatively straightforward but in practice no two evaluations are identical. The whole experience is an exciting exercise in diplomatic adaptation and quick thinking.

While the evaluation process involves established international requirements, no two ABs implement them in an identical manner. The key is to evaluate the "equivalence" of the results and to avoid comparing what the AB does directly with what happens in your own office. Every AB operates in a different market and culture and this affects how they implement the requirements. For example, in some cultures the practice of formal voting is not something embraced with comfort by committee members as they prefer to seek informal consensus. A requirement for documented voting procedures is problematic to them and even if written is rarely used or avoided. What is also often noticeable is the ratio of resources employed, where labour is relatively less expensive more human resources are used, while an AB in high labour cost regions will depend more on systems aided by technology. Both approaches have their advantages and pitfalls. Experienced team members understand that they must always be open-minded to the implementation of the requirements, focusing on the end

results not the means of achieving them. In return for their efforts, evaluation team members broaden their perspective on how to accomplish certain AB functions and usually return home with a few good ideas.

It's the exposure to each other's systems and the opportunity to evaluate against the agreed-upon requirements that cements the process of mutual recognition. By developing a sense of familiarity and sharing ideas, each AB gains comfort with each other and expands the knowledge they need to maintain their programs. What the evaluation team members also often gain from their hard work is a very positive, if not brief, experience with a different culture that develops mutual respect and understanding at the personal level.

I am very often impressed with the efforts expended to facilitate the evaluation teams' welcome and our ability to function. In addition to the actual evaluation, the related logistic arrangements involve significant efforts on the part of the AB's staff. Although the AB staff may be nervous, they are also eager to have your opinions on how they operate. If the evaluation team does their job correctly the AB is more relaxed by the week's end and thankful to be directed to those areas where there may be opportunities for improvement. While the team members have the advantage of viewing the operations as outsiders, everyone gets their turn on the other side of the table — being evaluated by their peers. There exists a sense of community amongst ABs, with a mutual goal of ensuring that the global accreditation system maintains its' integrity and is well respected. As we develop common understanding and expectations through the peer evaluation process, issues such as politics and state affairs rarely factor in, if only all diplomatic exercises could function as well! ■

Joan Brough-Kerrebyn

NEWFOUNDLAND SIGHTSEEING COMPANY
Takes ISO 14001 ON TOUR

*G*ros Morne National Park—
designated a UNESCO World
Heritage Site in 1987 for its
exceptional universal value—protects
thousands of square kilometers of
extraordinary landscape on
Newfoundland's west coast.

The Long Range Mountains, the northernmost extent of the Appalachians, contain numerous glacially-carved fjords. One of the most spectacular, Western Brook Pond, is also the Park's largest lake. With a surface of 20 square kilometers, (1,22 square miles), the lake is bordered by sheer granite, gneiss cliffs and cascading waterfalls that tower from above, often turning to mist before they reach the pond. Free of sediment, organic matter and human pollution, it is one of the purest bodies of water in the world and among the most visited attractions in Newfoundland and Labrador. Drawing a good 25,000 visitors annually, provincial campaigns promote its image widely as a tourism icon.

Along with tourism however, the popularity of Western Brook Pond has brought with it the risk of environmental degradation. Concerned about the pressure on the ecosystem, Parks Canada revised its Request for Proposal process, making registration to ISO 14001 a mandatory requirement for companies seeking to operate concessions within the Park.

In response, Norock Associates Ltd., who operates the Western Brook Pond Boat Tour, became the first boat tour company in North America to be registered to the international standard. Owner Reg Williams, embraced the notion of certification, convinced that it would mean a lot not only for Parks Canada, but for his company as well. Certification was granted upon successful

registration of the boat tour's Environmental Management System (EMS) by BSI Management Systems. Commenting on the registration, Ron Mathis, Senior VP, Marketing and Sales for BSI says the registration clearly demonstrates Norock's commitment to protecting the natural heritage resources upon which all tourism businesses depend.

Ken Kennedy, Manager of Client Services for Parks Canada in Western Newfoundland and Labrador, adds: "Only the most progressive operators have evolved beyond simple regulatory compliance and implemented an EMS". "Through the third-party registration, Mr. Williams is demonstrating Norock Associate's commitment to environmental stewardship and is pledging its desire for continual environmental performance."

By far, the chief environmental aspect of any boat tour operation is the prevention of diesel fuel spills. Although Norock had leak detection procedures in place prior to adopting ISO 14001, the implementation of the standard established very vigilant daily documentation recording procedures aboard the ships, at the underground storage tank and, during fuel deliveries over the trail to dockside. The company believes the standard is delivering the performance goals Norock has set, including no fuel spills and recycling 50 per cent of the solid waste generated at the site.

Certification didn't come cheaply for Williams, who wasn't familiar enough with the certification process to make the necessary budget allowances and went beyond the minimum requirements.

When Williams had to replace an existing tour boat on Western Brook Pond, the new one – weighing 17 tons was specially designed so that it could be built in sections. To avoid carrying the pieces over an ice road in the winter, which would have left a scar on the landscape, the pieces were then flown by helicopter over the three kilometers of

coastal lowland situated between the entrance to the trail at the highway and the dock. "The proactive action," tells Kennedy, "helped to avoid damaging a sensitive environment that could have taken decades or hundreds of years to repair."

Despite the costs, today, Williams proudly details the many benefits of his newly documented safety program: formal training for his employees, on-site garbage disposal facilities, separate sorting of recyclables and tabulations of fuel use, storage and water samples.

Williams has also collaborated with Parks Canada to define and work within carrying capacity limits. As a sustainable tourism principle, defining limits to future growth helps to ensure that all aspects of the operation can continue to accommodate a set number of visitors. To ignore the need to manage growth is to invite an undesirable increase in the size of an operation's ecological footprint.

For his efforts Williams won the 2003 Sustainable Tourism Award, which is offered jointly by Hospitality Newfoundland and Labrador, and Parks Canada. The award recognizes the operator who most demonstrates a commitment to protecting the natural heritage resources. According to Parks Canada, the nominating agency, "the significant effort Williams has made to manage the environmental impacts of his operation make him a leader in the province's sustainable tourist industry." The award further acknowledges that Williams' forward-looking vision is also helping to ensure the sustainability of the region's communities, who continue to enjoy economic benefit as a result of the national park's role as an anchor attraction.

Making wise choices today is an essential part of ensuring the future success of the tourism industry. That includes managing to high environmental standards. Williams and his company are leading by way of example and are setting a standard for others to follow in the Newfoundland and Labrador's tourism industry. ■

STANDARDS FUNDING ESSENTIAL TO Canadian Quality of Life

Canadians will forfeit the ability to effectively influence and decide the standards that support our trade and infrastructure if funding to standards development continues to decline, according to a recent report released by the Task Force on Innovative Funding Solutions for the Development of Standards (TFUNS).

TFUNS, established in 2001 by the Standards Council of Canada's (SCC) Advisory Committee on Standards, was asked to look into the causes and effects of continued underfunding of standards development efforts in Canada. The TFUNS committee, a small working group made up of representatives from standards development organizations (SDOs), the SCC, industry and government, interviewed a cross section of participants involved in Canadian standards development, including a number of consumer organizations, and encapsulated their opinions in a report submitted in June 2003 to the SCC's governing council. The document also states that underfunding will cause Canada to lose its unique voice in the standards world, forcing Canadians to rely on standards developed without Canadian input. "This would have a negative impact on our quality of life", says John Walter, Senior Director, Standards Development, for the Canadian Standards Association (CSA) and the TFUNS Chair.

"If we don't provide the resources to have a voice at the national and international levels, we won't have the kind of control, involvement or influence to introduce and implement the standards that fit our needs. We'd have to rely on what other countries have decided," he said. "The standards may not be suited to our way of life, our climate, our environment or our social values. We must have the funding to develop standards that address the unique way Canadians live, work and play. Standards touch us all, every day, affecting nearly every product or service we encounter."

The TFUNS report outlines seven recommendations addressing the underfunding issue, three of which were approved by the SCC for further consideration and action. The SCC asked TFUNS to re-examine and flesh out the four remaining points, taking a closer look at their ramifications. The committee will submit additional research and findings at the end of 2003.

Included in the three action items approved by the SCC is how to address compensation from those who use and benefit from standards to those that develop them. Also, the report recommends Canada Customs and Revenue support a research and development tax credit for companies involved in standards development, and that the federal government re-establish funding for the translation of National Standards of Canada (NSCs). "If we are truly a bilingual nation, shouldn't governments ensure that the standards that protect our way of life are available in both languages?" asked Walter.

A strong voice in the standards community is fundamentally important, especially in this era of international trade. As trade barriers have been lowered or removed, thanks to NAFTA and the WTO, the emphasis has shifted from the development of national standards that, in the past, did not assist in the removal of tariff-protected markets, to industry-specific and international standards that smooth the pathway to global trade. To stay competitive, government and industry must rely on standards to gain access to new markets as well as to prevent restrictive trade of goods coming into the country. With a steady decline over the past 15 years of standards funding for everything from translation to supporting committee members' attendance at standards conferences and meetings both at home and abroad, Canada's voice is in danger of becoming a mere whisper.

Another consideration to be addressed is how to get governments, organizations and industry to provide compensation for using standards that help bolster their bottom line or help them meet their objectives. Should they have to pay for the development of a standard as well as for its distribution? How should this process work? If a government incorporates a standard into a regulation, a law or public policy, should it have to pay? Should corporations that participate in the standards development process have some level of ownership or the right to freely use the standards once they're implemented? Are regional and national standards a hindrance to Canadian companies looking to compete globally? These are important questions that must be discussed, according to the TFUNS report.

However, John Walter says the funding debate won't be resolved until Canadians understand the importance of standards, be they regional, national or international, to their everyday lives.

"I don't believe Canadian society understands, and therefore values, the standards we develop in this country. I think people assume standards are developed and somehow paid for by governments and so they take them for granted," he said. "I would certainly like to see recognition that standards protect and enhance the Canadian quality of life in a way most people don't even think about. If Canadians understood their value, there would be a greater interest in their long term funding." ∎

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