

# Canadian Standards Strategy

## and implementation proposals



## **Canadian Standards Strategy and [implementation proposals](#)**

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A.

## *Context — Need for a Canadian Standards Strategy*

The world of standardization is changing. Looking ahead, the next decade promises continued change — both here in Canada and around the world.



At the international level, standards are becoming a pillar of the new global trade system. As barriers to trade and investment are eliminated and information technologies continue to evolve, standardization is taking on an increasingly important role in global affairs. At the same time, new international agreements and codes are setting out guidelines for a broadening range of health, safety and environmental issues.

Equally important are the realities of the Canadian fiscal environment. Industry and all levels of government are struggling to do more with less, reducing administrative costs and eliminating regulatory burden while still protecting the public interest and meeting market needs. Standards systems can offer effective, less costly alternatives to meet these objectives.

The Canadian standards system can be proud of its accomplishments. Relative to its size in the international economy, Canada is an effective player in the standards arena. However, if we are to remain effective and ensure that international standards benefit Canadians, we need a comprehensive standards strategy that sets out clear directions for continuous improvement and involves the broadest range of standardization players.

This strategy puts forward a broad vision and over-arching strategic directions designed to guide Canada’s standardization activities in the dynamic international and domestic environment ahead.

### The Changing World of Standards and Standardization

Definitions of standards and related processes and activities are evolving to keep pace with a rapidly-changing operating environment. Reflecting this trend, the Canadian Standards Strategy uses the term **standard** to describe both a formally developed standard, which is defined by ISO and the Standards Council of Canada as “a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context”, and recent, less formal approaches designed to achieve the same ends — including *de facto*, temporary standards and those developed and used by coalitions and industry sectors.

Similarly, the Strategy includes both formal and informal **standardization processes**. This is intended to reflect the growing recognition by some sectors of industry for such non-traditional approaches as the use of self-declaration as a conformity assessment tool.

For the purposes of this Strategy, **participants** in standardization processes are defined as the organizations that contribute to the development, monitoring, revision, and conformity assessment of standards in Canada and internationally. The range and nature of these participants is changing. As environmental pressures increase and the population ages, and as privacy, health and safety issues become more important to Canadians, more sectors and organizations are playing an active role in standardization.

# B.

## *Purpose and Goals of the Canadian Standards Strategy*

The purpose of the Canadian Standards Strategy is to provide direction and leadership on how to use standardization to best advance the social and economic well-being of Canadians in a global economy. This includes, among other things, protection of health, safety and the environment, as well as the rewards of trade and economic competitiveness.

While the Strategy will have a positive impact on all Canadians, it is intended to guide the work of current and future participants in the full range of standardization processes — including development, monitoring, and conformity assessment. More specifically, the Strategy is aimed at ensuring that standardization activities are organized to:

On the **international** front...

- influence the formation and evolution of global standards **that are important to Canada**
- improve access to existing and new markets for Canadian goods and services
- build competitive advantage through technology and information transfer and global market intelligence

On the **domestic** front...

- meet the needs of an evolving regulatory and policy environment
- represent fully the broadening range of standardization stakeholders
- communicate effectively the role and benefits of standardization and conformity assessment practices

To be effective on both these fronts, it is essential that Canadian standardization activities be based on a strong yet flexible foundation. The Canadian standards system must work to ensure that its capacity and resources are aligned with demonstrated priorities and anticipated needs in standardization. Moreover, efforts must focus on forging partnerships, strategic alliances and sectoral approaches that will maximize the effectiveness of standardization efforts. Finally, a single body is required to co-ordinate the diverse activities and varied organizations that make up the Canadian standards system.



# C.

## *Key Elements of the Strategy*

The following eight elements, which collectively form the national standards strategy, support and elaborate on the purpose and goals noted above and provide direction on actions required to achieve them. While the elements are organized under three key areas of activity, there is an intentional and necessary overlap among them.

On the **international** front...

1. **Participate in the development of international standards, and use standards adopted or adapted from internationally accepted standards to the greatest extent possible.**

In today's global environment, international standards have become an important means of achieving social and economic prosperity, for individuals, firms and nations. Well defined, widely applied standards enhance trade and increase opportunities for Canadian industry in markets abroad. At the same time, internationally agreed and harmonized standards for social and public policy issues, such as the protection of privacy, preservation of the environment, and the promotion of health and safety, serve to shape the world and society in which we live.



The use of international standards helps avoid trade barriers. Therefore, in addition to employing international standards here in Canada, we need to promote their use by our trading partners. Moreover, the benefits of participating in international standards activities in which new trends and technologies can be acquired and transferred both to and from Canadian industry should not be underestimated.

While international standards are the preferred choice, in some cases they will not be appropriate or possible to achieve. Wherever national and regional (North American) standards are developed, efforts should be taken to ensure that they are suitable for adoption or adaptation as international standards over the longer term.

## 2. Prioritize standardization efforts and resources within three key areas:

- those in which Canadians have a major interest in health, safety, the environment or other social issues
- trade sectors in which there are existing or potential benefits to Canadians
- harmonization of standards where appropriate, and especially within North American markets

Participation in international standardization activities can be expensive and time-consuming. Canadians must therefore direct their efforts and resources to those areas of greatest benefit, both existing and potential. All global standards forums will continue to be important for many sectors of our economy. At the same time, NAFTA-related venues are clearly a high priority for Canadian standardization initiatives. Canada's largest trading partner, the United States, is a significant player in international standards. As a country, Canada relies heavily on American standards in many areas such as health, safety and transportation, by accepting these as equivalent to our own or by directly referencing them in our legislation/regulation. Within this context, however, it is essential that Canada pursue harmonization initiatives on a sector-by-sector basis, ensuring that these standardization practices take into account Canadian priorities, interests and objectives.







In setting priorities for standardization activities, ongoing analyses of trade flows for Canadian products and services, as well as markets, competitors and market opportunities, are essential. Similarly, Canadians must target efforts at international issues in which we have major social, environmental, health or safety concerns.

### **3. Monitor and evaluate innovations in conformity assessment practices, and actively pursue new international arrangements of anticipated benefit to Canada.**

Traditionally, assessing and verifying conformity to both product and process standards has been carried out by independent, third-party bodies in the national context. Increasingly, less formal means of assessment are being used both domestically and internationally — for example, self-declaration and supplier qualification — particularly when health, safety and environmental concerns are not significant issues.

With the increasing volume of trade across jurisdictions, the potential exists for unnecessary (and costly) duplication of conformity assessment practices. Bilateral and multilateral agreements such as Mutual Recognition Agreements (MRAs) between and among accreditors can help to address these issues in some markets by reducing redundant testing and certification procedures, thereby lowering costs, reducing delays and expanding trade opportunities. These innovative global accreditation mechanisms should be considered, assessed and used wherever appropriate — i.e., in accordance with priorities established for international standards activities, and where the public interest and opportunity for redress are not jeopardized.



On the **domestic** front...

**4. Actively communicate the role of standards, and the benefits and challenges associated with standardization processes and products, among public- and private-sector decision makers at all levels of Canadian society.**

Building awareness and understanding of standardization and the important contribution it makes to Canadians' social and economic well-being is critical to the long-term success and funding of Canada's standardization efforts. An informed public, with a solid understanding of the benefits and appropriate use of standardization processes, will help to ensure that decision makers in both government and industry give full consideration to standardization as an important tool for shaping policies that meet the needs of the Canadian public and industry.

Similarly, it is essential that Canadian industry have a full and balanced understanding of the role of standards and the benefits and challenges of standardization processes and products. This will help to ensure the businesses and organizations that provide volunteers to the standards system are confident they are making a solid investment — both for their organization and for Canada.



**5. Position standardization processes as a necessary complement to regulatory processes, and encourage the use of standards in the development of Canadian public policy.**

There is enormous potential for standardization processes to help reduce the costs of regulation, facilitate internal and external trade and technology transfer, and enhance Canada's overall competitiveness. These goals can be accomplished without compromising consumer confidence and safety.

Federal, provincial/territorial and municipal governments currently make use of voluntary standardization practices in regulations. Examples include incorporating standards into regulations, using standards as alternatives or supplements to regulations (e.g., national voluntary codes), and devolving to — or otherwise relying on — private-sector conformity assessment processes to promote and monitor compliance with regulations.



However, standardization is often not considered as fully or frequently as other regulatory or market-based tools. Greater effort must be directed at promoting standardization in the development of Canadian public policy, and ensuring that policy makers consider standardization processes and products as indispensable tools for use either on their own, or in concert with other approaches. Standards approaches have proven to be an effective and cost-efficient means of addressing potentially conflicting private and public interests.



## **6. Develop mechanisms to guide standardization activities in current and emerging social and economic issues.**

Technological advances and the globalization of economies have given rise to a range of new issues and challenges. Recently, standardization processes and products have been applied increasingly to such issues as the environment, health, safety and privacy. Other issues — from genetically modified foods, to the electronic marketplace, to the myriad challenges posed by an ageing population — are clearly on the horizon as a focus for standardization organizations and processes.

If the Canadian standards system is to address these issues successfully, participants must be equipped with comprehensive approaches to guide their actions in key policy areas. Effective processes, such as those being developed in the area of environmental standards, will help bring public and private interests together to develop national initiatives that support and complement international standardization. Mechanisms must reflect the strengths, weaknesses, opportunities, challenges and legal implications, for consumers and relevant



Canadian industries. Such an assessment should serve as the basis for establishing adequate and appropriate infrastructure (i.e., standards development, registration, certification, government support and sector engagement). Finally, these approaches must identify the role and value of Canadian standardization activities in meeting Canada's social policy goals and commitments in key issue areas.

Strengthening the **foundation**...

## 7. Improve system responsiveness and enhance participation in all standardization activities.

As with any system, continuous review and improvement of the infrastructure that supports standardization activities is vital. For example, there is much evidence to show that standards volunteers and their organizations need to have the right information at the right time if they are to participate effectively in standardization activities.

Moreover, the effectiveness of voluntary consensus standards (both domestic and international) depends on having broad-based, balanced and expert input into their development and adoption. The roles of current participants, including industry, governments and consumers, must be re-examined and the importance of their participation reaffirmed. For example, participation by federal and provincial/territorial governments in standardization activities may increase as they come to rely on voluntary consensus standardization practices as a complement to traditional regulation, and as new and innovative international trade agreements that affect their mandates and interests are negotiated. The base of sectors and issues represented at the standardization table will also be expanded as policy frameworks are developed for emerging issues.

At the same time, systems for collecting, synthesizing and feeding back the information and knowledge so vital to effective participation must be developed and maintained. Initiatives such as these, together with continuous review and evaluation of the effectiveness of standardization processes, will contribute to a robust





and proactive system, designed to be effective in an ever-changing social, economic and political operating environment. As well, new approaches to providing resource support for Canadian standardization activities will serve to strengthen the system overall.

**8. Forge partnerships and strategic alliances among current and potential participants in standardization activities.**

Ensuring the most effective organization of standards volunteers and information, and the best possible use of resources, means broadening and strengthening the base of participants. Informal and formal collaborative approaches, both long-term and ad hoc, often serve to leverage scarce resources and have a greater impact than do individual efforts. Similarly, initiatives aimed at developing and operating sector-based initiatives should focus first on maximizing the use of existing infrastructure, then on developing new infrastructure (such as advisory committees, inter-government committees, non-government sector-based organizations and industry-based groups).



# D.

## *Next Steps*

Development of this Strategy marks the beginning of a new era for standardization work in Canada. For the first time, all participants in standardization activities will have a common vision to guide their activities. Far from offering specific, prescribed action which is “cast in stone”, the Strategy offers a living tool to ensure that Canadians — including consumers, industry, government and all sectors — reap the maximum benefits from our standardization efforts.

Moreover, the Strategy is not a stand-alone document. It is accompanied by an initial set of implementation proposals that were developed under the direction of the Standards Council of Canada to carry the Strategy through to action. Where the Strategy outlines the broad goals, objectives and directions of future standardization activities, the implementation proposals set out the specifics of how the Strategy might be achieved.

The Strategy must also be understood and adopted by the wide range of participants in the Canadian standardization arena. Widespread adoption will ideally lead to continuous review and revision of the Strategy, making it a flexible, evolving tool to guide standardization efforts for the social and economic well-being of Canadians well into the coming century.



## Implementation Proposals



# A.

## *Preface*



This document presents an initial set of Canadian Standards Strategy (CSS) implementation proposals, created to support the realization of the Strategy.

The implementation proposals are 23 suggested concrete actions to begin the process of converting strategy to reality. These actions include:

- mechanisms to develop and maintain standardization priorities;
- means of improving the effectiveness of existing groups, committees and organizations;
- supports for innovative standardization directions;
- measures to build Canada's standardization infrastructure; and
- measures to expand the scope and reach of the National Standards System.



The implementation proposals have been built through extensive consultation with existing and potential partners in the National Standards System over two years. Most of the implementation activities call for action to be taken by more than one organization. In fact, all will require the participation of virtually all partners in the National Standards System if they are to be effectively implemented and adopted.

As the leader of the National Standards System, the Standards Council of Canada (SCC) will develop detailed action, resource and performance measurement plans to solidify its commitment to the Strategy. It will consult with its partners and stakeholders to prioritize actions, and will report annually on progress against these proposals. The SCC will encourage all of its partners to make similar commitments.

It is also important to note that action items in this document are a starting point the implementation of the Canadian Standards Strategy is an ongoing process which will require new initiatives to meet emerging challenges and opportunities. Once again, action by all partners in the standards system will be critical to the long-term success of the Strategy.

# B.

## Action Items



### 1. Create and maintain a framework for developing national positions

The continuing growth in the importance of trade for Canadian prosperity suggests that standardization will become an increasingly important determinant of our international competitiveness. This is true not only of traditional sectors such as resources and manufacturing, but also in services, information technology and communications. Standardization is also a growing part of international agreements on health, security, the environment and other critical issues. Moreover, there is a proliferation of standards, conformity assessment and trade forums undertaking diverse standards-related initiatives that affect Canadian interests. Developing a framework to reflect Canada's overall trade and social policy interests — including those of the provincial and territorial governments and consumers — as well as plans for specific activities, is essential for the efficient and effective pursuit of Canada's standardization interests in a variety of international forums.

#### Action Required

**What:** Develop and maintain a framework of priorities, objectives and strategies for Canadian participation in international (including multilateral, regional and bilateral) standardization forums, and develop national positions from this framework in preparation for international participation, agreements and events. Undertake strategic planning with respect to the hosting of major regional and international standardization events and meetings.

**By whom:** SCC, in consultation with its advisory committees, SDOs, federal departments including Industry Canada, DFAIT, Health Canada and Environment Canada, provincial-territorial governments and other stakeholders including NGOs and consumer representatives.

**When:** Beginning in 2000.

**Notes:** The framework would be flexible in order to respond to emerging issues and activities in international standardization. It would provide guidance for the development of a plan (by affected Canadian interests under the auspices of DFAIT for trade issues or SCC for voluntary standards and conformity assessment). Such a plan, including objectives and strategies, would be developed at the outset of Canadian involvement in any activity.

As an example, DFAIT has begun to work with the SCC through PTAC as one avenue to bring provincial and territorial viewpoints to the development of a national position, as well as with the Interdepartmental Standards Committee to reflect fully the range of federal interests. DFAIT will also work with NGOs and other public interest groups to further this initiative.

## **2. Establish a broader mandate for technical committees under CNC/ISO and CNC/IEC**

ISO and IEC have been the traditional focus for international standards activity, and SCC provides a permanent, formal infrastructure of specialized technical committees for the formulation of input to and positions for Canadian participation in these forums. However, support for Canadian participation in other standards forums (e.g. ITU, regional standards forums) is uneven. Some of these forums also carry out important standards-setting activities that can substantially affect our interests, but without our participation. While these organizations may be very influential at ISO and IEC, Canada has not established mechanisms to monitor their activity. Equally important, the global acceptance of many U.S. standards and the magnitude of Canada's exports to the U.S. require that Canada establish and maintain mechanisms for Canadian participation in, monitoring and influencing of international standards development centred in the U.S. Expanding the mandate of existing Canadian technical committees would contribute to a more complete infrastructure to advance Canada's standards interests in a more effective and coordinated manner.

## Action Required

**What:** Expand the mandate of SCC's specialized technical committees reporting to CNC/ISO and CNC/IEC from one of restricted participation in ISO or IEC to one that includes standards-related activity in their respective fields of expertise in selected non-Canadian standards forums, including emerging forums. The expanded mandate would also enable technical committee participation in innovative standards activities.

**By whom:** SCC would provide enhanced secretariat services necessary for these committees to fulfil their expanded role.

**When:** Beginning in 2000.

### 3. Take leadership in developing international standards for electronic commerce

Canada is a leader in developing strategies and standards for electronic commerce. In 1998, the Canadian Electronic Commerce Strategy was developed through a joint public-private sector initiative. Canada is also a major initiator and consensus builder in the OECD's *Global Action Plan for Electronic Commerce*. It is anticipated that domestic Canadian standards will serve as the basis for international standards. In order to maintain Canada's leadership role in the field of electronic commerce, and to have Canadian standards adopted internationally, it is necessary to establish a multi-stakeholder group to work on key electronic commerce issues of broad application.

## Action Required

**What:** Establish one or more multi-stakeholder teams to identify and develop standardization approaches for priority electronic commerce issues, and work to mobilize concerned industries and federal, provincial and territorial departments to establish funding to support the team(s) for a two-year trial period. Outcomes of the trial phase would include measurements of the potential impact of such committees, proposals for continuation or expansion, proposals for alternative funding approaches, etc.

**By whom:** SCC, through TSACC, and Industry Canada, in consultation with relevant federal, provincial and territorial agencies, industry associations and consumer associations.

**When:** September 2000 to April 2002 (trial period).

## 4. Engage developing countries in international standardization

Despite Canada's unified standards system, Canadian government standards assistance to developing countries has been fragmented, relatively poorly coordinated and unrecognized by many developing countries. Most members of the G-7 have strategies to advance their international trade interests by the deliberate use of standards in penetrating foreign markets, especially in the emerging economies. A coordinated approach to providing standards assistance to developing countries would provide a major contribution to the standards needs of these countries, and could lead to trading benefits for Canada.

### Action Required

**What:** SCC's CAC/DEVCO will review its role in supporting developing countries to participate in the development of standardization infrastructures, with a focus on two areas. First, ensuring that the committee provides assistance to developing countries in establishing their technical and administrative infrastructure (thereby improving their capacity to meet their international trade obligations), and second, leveraging trade benefits for Canada (thereby increasing Canada's influence in international standardization organizations by encouraging long-term alliances with developing countries). CAC/DEVCO will also coordinate its contributions to PASC and COPANT.

**By whom:** CAC/DEVCO, in cooperation with SDOs, federal government departments and agencies such as CIDA.

**When:** Beginning in 2000.

## 5. Develop, implement and maintain processes for setting priorities for standardization activities in the areas of health, safety, the environment and other social issues

International standards are powerful tools, providing a mechanism for meeting the environmental, health and safety goals of both producers and consumers of goods and services. Canada has an important voice in the ISO forums with, for example, TC 207, TC 176 and COPOLCO. Attention to the myriad of issues has been diffuse. Given limited resources, it is necessary to focus attention on a limited set of widely-accepted priorities in order to achieve objectives. At the same time, national and provincial/territorial interests must be safeguarded throughout the process.

## Action Required

**What:** Develop, implement and maintain a process to ensure high net benefit in standardization activity in the areas of health, safety, the environment and other social issues which is also responsive to key economic interests and which reflects national and provincial/territorial priorities. Products will include assessments of resource requirements, key stakeholder relationships, research requirements and action plans and priorities.

**By whom:** SCC's CPIC in consultation with other advisory committees, federal departments including Health Canada and Environment Canada, provincial and territorial ministries, prominent NGOs, Pollution Probe, the Consumers Association of Canada and other public interest groups.

**When:** Beginning in 2000.

## 6. Develop and maintain the capacity for standards-related policy development, analysis and dissemination

Currently, the capacity of SCC and the broader NSS to carry out research and analysis and to develop policy and information systems is not sufficiently supported. Decisions that establish priorities for the effective use of public resources must be based on sound and current knowledge of both domestic and international standardization environments. This capacity must be developed for the benefit of all stakeholders, including the Canadian public.

## Action Required

**What:** Develop, support and coordinate a full capacity for setting priorities that make the best use of resources, including building capacity in the areas of research, analysis, policy development and information system use.

**By whom:** SCC, in collaboration with a range of other partners, including academic institutions and funding agencies, provinces and territories, DFAIT, Industry Canada and the Industry Portfolio Office. This effort will also draw extensively on sectoral and NGO input.

**When:** Beginning in 2000.

## 7. Ensure that standards development processes support social policy objectives

SCC's mandate and, by definition, a goal of the National Standards System, is to “support sustainable development, benefit the health, safety and welfare of workers and the public [and] assist and protect consumers . . .”. These objectives must be an inherent part of the established standards development process, which falls for the most part within the domain of the standards development organizations. Ensuring that these objectives are supported is vital to establishing priorities for standardization efforts and resources.

### Action Required

**What:** Review standards development processes to ensure that they “support sustainable development, benefit the health, safety and welfare of workers and the public [and] assist and protect consumers . . .”, and reflect this goal in criteria for establishing priorities in standardization activity.

**By whom:** ACS and CPIC, on behalf of SCC.

**When:** 2000.

## 8. Move toward a global accreditation regime

In the past, Canada has limited its conformity assessment activity to domestic or US-based organizations. Canada has also become involved in regional accreditation arrangements, which represent the best way to achieve acceptance of conformity assessment on a global basis.

For several years, SCC has participated in new initiatives for multilateral acceptance of conformity assessments. SCC participation in the work of the International Accreditation Forum (IAF), the International Laboratory Accreditation Cooperation (ILAC), the European cooperation for Accreditation (EA), the Pacific Accreditation Cooperation (PAC), the Asia Pacific Laboratory Accreditation Cooperation (APLAC) and the North American Calibration Cooperation (NACC), has resulted in some of SCC's accreditation programs becoming recognized by our global partners. There remain a number of programs where global recognition has not been achieved.

## Required Action

**What:** SCC will continue to participate in the international and regional accreditation bodies listed above, as well as selected emerging groups, and actively promote the extension of existing MLAs to include the programs not yet covered. SCC will join the Interamerican Accreditation Cooperation (IAAC) in 2000. In addition, the SCC will rationalize its participation in regional bodies.

**By whom:** Staff, with support from ACCA and ACT.

**When:** Beginning in April 2000.

## 9. Identify and make available to stakeholders the objectives and strategies underlying trade-related Mutual Recognition Agreements (MRAs)

MRAs are a relatively new type of trade policy instrument. Given the large number of Canadian stakeholders directly implicated in an MRA, there is a particular need to ensure “due process” for the formulation of Canadian positions if Canada’s interests are to be well served. Development of a “business case” for MRAs would help to ensure that clear, full information is available to stakeholders, and will provide a useful and rigorous framework for decision-making.

## Required Action

**What:** Identify Canada’s interests, priorities, objectives, strategies and business cases in general for MRA activity, and for specific MRAs prior to the commencement of negotiations. Disseminate this information to all stakeholders.

**By whom:** DFAIT, with input from Industry Canada, SCC (PTAC and ACT), and other affected Canadian stakeholders. SCC’s involvement would be issues related to voluntary standards and implementation, as negotiated and agreed.

**When:** Beginning immediately.

**Notes:** The SCC has developed, and will maintain and make available to members of the National Standards System, a comprehensive listing of all MRAs signed or being negotiated on behalf of federal, provincial and territorial governments, agencies, bodies, etc. This information will be available on the SCC Web site, and should include a DFAIT notice of intention to develop an MRA and reports on progress (proposition, negotiation, signing, confidence-building, review).



## 10. Examine the use of alternative conformity assessment practices

There has been an increase in the use of alternative means of conformity assessment such as self-declaration and supplier qualification. SCC and its advisory committees are uniquely placed to examine all aspects of this complex matter, to ensure that Canadian representatives are well positioned to make informed decisions when the issue is raised in international forums, and to disseminate information to companies and other NSS stakeholders.

### Required Action

**What:** Undertake continuous monitoring of the emergence and use of less formal conformity assessment practices, evaluation of the impacts of these, and broad dissemination of information. Research to include conditions for success of various approaches, impacts on various stakeholders, costs and benefits, etc.

**By whom:** ACCA, with assistance from ACT, PTAC and CPIC.

**When:** Beginning in September 2000.

## 11. Strengthen Canada's metrological infrastructure

Recognizing that metrology is a basic infrastructure upon which most normative standards depend, the National Research Council's Institute for National Measurement Standards (NRC/INMS) will participate in measurement comparisons with its counterparts in Canada's trading partners throughout the world. This will be done under the auspices of the MRA signed in October 1999 by the directors of the national metrology institutes of thirty-eight member states of the Metre Convention. This MRA deals with the mutual recognition of national measurement standards and of calibration and measurement certificates issued by national metrology institutes. It is expected to open the way for wider agreements related to trade, commerce and regulatory affairs.

## Action Required

**What:** SCC will continue to support and encourage NRC/INMS (a PALCAN partner) in this activity and in all aspects of its role as Canada's national metrology institute. This role makes NRC/INMS the focal point for Canada's national measurement system and includes maintenance of a research base in measurement science, development and dissemination of national measurement standards, assessment of Canadian secondary calibration laboratories, and participation in international activities that ensure the continued recognition of Canadian measurements throughout the world.

**By whom:** SCC and NRC.

**When:** Beginning in April 2000.

## 12. Promote the use of the National Standards System (NSS)

There is a need to promote NSS services to participants in the Canadian standards system, including senior levels in both the public and private sectors and the general public, to generate greater use of and more active support for the system and enhance awareness and understanding among participants. The SCC is currently leading the development of a NSS communications plan to promote the benefits of the NSS and to highlight the release of the CSS.

### Action Required

**What:** Finalize the NSS communications plan and implement it throughout the broader constituencies of NSS participants.

**By whom:** All stakeholders in the NSS, including the advisory committees, coordinated by the SCC Communications Division.

**When:** Beginning in Fall 2000.

### 13. Connect emerging industries to standardization activity

Emerging industries, such as those in the information and communications technology, communications, biotechnology and service sectors (composed largely of SMEs) are for the most part unaware of the information and opportunities provided by standards development and conformity assessment activity, at both the national and international levels. In particular, they are not well informed about the value of a Canadian influence in international standards development as a means of reducing both consumer concerns and barriers to trade. Once they are better informed, Canadian companies in new industries will be in a position to influence, or at least monitor, standardization developments affecting the marketplace for their goods or services. Their access to the SCC's web site will allow them to do so with ease.

#### Action Required

**What:** Assemble information on relevant standards activity for selected new industries, and conduct a series of seminars on standardization issues for individuals from these industries.

**By whom:** SCC and its advisory committees, with the assistance of Industry Canada.

**When:** Beginning in Spring 2001.

### 14. Examine and evaluate management system standards

Globally, the number of firms adopting ISO 9000 or ISO 14000 continues to grow. Clear information, such as cost benefit analysis and case studies will help Canadian decision-makers determine whether ISO 9000 or ISO 14000 are appropriate for their organizations. In 1998-99, SCC sponsored a major survey of Canadian businesses regarding their attitudes toward, and experience with, the ISO 9000 and ISO 14000 series of standards. These results are yet to be analyzed and made available to stakeholders.

## Action Required

**What:** Conduct an analysis of the 1998-99 survey results and make it available to SCC, accredited quality and environmental systems registration organizations, and Canadian business (particularly SMEs) with the goal of helping businesses determine the costs and benefits to their organizations of adopting or registering to the ISO 9000 or ISO 14000 series of standards. Case studies should also be developed and posted on the SCC Web site and on Strategis.

**By whom:** SCC (to analyze and make available survey results) and registration organizations in cooperation with their clients (to develop case studies).

**When:** April 2000 for the report and Fall 2000 for the case studies.

## 15. Develop a Web portal for the NSS

There is currently no single source of access to standards services, products and information, and to participation in NSS collaborative activities, for individuals and organizations across Canada. SCC's current Web site has the potential to become an interactive, up-to-date resource for the NSS and the public.

## Action Required

**What:** Expand the SCC Web site ([www.scc.ca](http://www.scc.ca)) to serve as a portal for the National Standards System as a means of supporting collaborative, system-wide marketing and information dissemination approaches, as well as the use of common messages, themes, tools and information sharing approaches. At the same time, ensure that the SCC site is easy to navigate by a range of stakeholders. Ensure that users have full connectivity to international standards organization sites. Ensure that the site provides a modern suite of facilitation, collaboration, and communication tools. Assess needs for support for individuals and groups who are not currently connected electronically.

**By whom:** SCC.

**When:** By Spring 2001.

## 16. Provide support for the Agreement on Internal Trade (AIT)

While responsibility for the AIT and its application rests with another body, SCC and its advisory committees, particularly PTAC and ACT, and Industry Canada are well positioned to provide advice and support on standards-related issues.

### Action Required

**What:** Identify opportunities and offer to advise the Committee of Ministers for Internal Trade (CMIT) of opportunities for greater provincial and territorial government use of the NSS to remove internal trade barriers. These might include the use of the NSS to improve efficiency and effectiveness in inter-provincial trade and as a vehicle for greater transparency and cost effectiveness in government procurement. (The latter is illustrated by current government-sponsored activity for the development of a standard for computer sales and service.) In order to provide such advice, SCC must work with Industry Canada to determine how greater consistency in standards and standards-related measures across the country could be fostered by such approaches as standards reconciliation, mutual recognition, or harmonization.

**By whom:** SCC, PTAC, Canada's safety councils and SDOAC, with support from Industry Canada and NRC.

**When:** 2000.

## 17. Make standards and conformity assessment a full part of the public policy debate

Standards represent an important instrument for the implementation of Canadian public policy objectives. Industry Canada has developed a guide for the use of standards by regulators<sup>1</sup>. The Canadian Environmental Assessment Agency and federal and provincial governments have agreed to consider significantly increasing their use of the NSS for sector-oriented environmental standards development approaches. There remain opportunities for greater use in public policies of standards-related measures, including referencing voluntary standards as an alternative to regulations and greater use of the conformity assessment infrastructure. These opportunities must be developed without compromising public policy decisions.

<sup>1</sup>Standards Systems: A Guide for Canadian Regulators. Regulatory Affairs and Standards policy Directorate, Industry and Science Policy Sector, Industry Canada. Ottawa: 1998, Industry Canada. ISBN 0-660-63787-9

## Action Required

**What:** Promote the use of standards in public policy development.

**By whom:** Industry Canada as coordinator, with the support of SCC and other federal departments and provincial/territorial governments.

**When:** Beginning in 2000.

**Notes:** Specific opportunities at the federal level exist under Fisheries and Oceans and in the biotechnology sector. There are also a number of demonstration projects underway that may lead to the identification of additional areas where a standards approach would be appropriate. These include organic agriculture, PC serviceability, tissues and organs transplantation, and labelling of genetically altered foods. These projects should be followed and documented so that case studies result from which workshops and promotional material can be developed, as well as an inventory of lessons learned and areas for improvement.

## 18. Utilize quality management systems (QMS) and environmental management systems (EMS) to achieve public policy objectives

The use of quality and environmental management systems to ensure that products are produced consistently will be a key approach to meeting public policy objectives in the future. For example, Health Canada requires manufacturers of medical devices to have a registered QMS and to have their products certified, and the Canadian Food Inspection Agency establishes process controls at critical points in the production of food.

## Action Required

**What:** Continue to demonstrate the value of the use of quality management systems or environmental management systems to achieve public policy objectives, through case studies and other means.

**By whom:** Federal departments and agencies mandated to protect health, safety or the environment, including Environment Canada, Health Canada and Human Resources Development Canada; with the support of SCC.

**When:** April 2000.

## 19. Communicate the value of environmental standards

Evidence is emerging that, for reasons of product and company liability and consumer demand, some multinational companies are making environmental standards a requirement for their suppliers. As the adoption of environmental standards becomes an increasing necessity for international competition, international trade, investment and insurance, Canadian industry will need more information and support for their adoption. Research has already been conducted by Industry Canada and the SCC on the desirability of expanding the use of environmental management standards by Canadian industry.

### Action Required

**What:** Establish a multi-stakeholder committee mandated to suggest future strategic directions for increasing the credibility and expanding the use of environmental standards in Canada.

**By whom:** National Resources Canada (NRCan), Environment Canada, Industry Canada and Health Canada, in cooperation with SCC and relevant NGOs.

**When:** Fall 2000.

**Notes:** SCC must avoid any conflict of interest between its role in promoting and disseminating information on environmental management standards and its responsibility for the accreditation of registration organizations.

## 20. Employ innovative funding mechanisms

Current funding mechanisms do not adequately address the need for broad-based participation in standards activities. There is a need to implement an alternative funding strategy for international and domestic standards work. At the same time, there is a need for increased accountability to inform participants about the returns on their investment in standardization activities.

### Action Required

**What:** Develop a funding proposal designed to ensure that resources are targeted at key priorities, including Canadian involvement in standardization activities at the international level. Also develop a reporting mechanism to inform stakeholders of progress, accomplishments and other information that will tell them how their time and financial contributions are being used.

**By whom:** SCC along with SDOAC and ACS.

**When:** To be available for public consultation by Spring 2001.

## 21. Implement a volunteer program

The success of the Canadian standards system rests on the contribution of several thousand volunteers who work in the full range of standardization activities. But the current volunteer cadre is aging, and interest in standards work is declining in some quarters. Moreover, the roles of all participants must be examined, and their commitment reaffirmed to ensure that the appropriate expertise and level of decision-makers are involved in standardization activities. Overall, there is a need for a comprehensive program to ensure sustained, effective volunteer representation within the Canadian standards system.

### Action Required

**What:** Implement the NSS Volunteer Program which has been developed over the past year by SCC and its partners.

**By whom:** SCC and NSS stakeholders.

**When:** Beginning in May 2000.

## 22. Generate strategic sectoral participation

There is a growing tendency for many standards issues and innovations to emerge within sectoral contexts of regional, national or international scale. Many of Canada's standardization activities, including participation within ISO and IEC, have been organized along narrower technology, product or issue lines. Strategic and proactive standards work (i.e., setting priorities, objectives and strategies for national and international standardization activity) requires a sectoral complement to the more narrowly focused technical approaches. This dual approach would support broader and ongoing analysis of trade flows for Canada's key products and services, as well as analysis of markets, competitors and market opportunities. A number of sectoral committees are already in operation. These include:



- the proposed Canadian Business Task Force on E-Commerce, which will replace the Working Group on Electronic Commerce (WGEC), and which is developing a Canadian standards framework for electronic commerce with a goal of identifying the needs for standardization and the relevant organizations to develop standards, as well as priorities for the development of standards; and
- the GeoConnections Secretariat, whose management board is chaired by NRCan and includes representatives from federal government departments, provincial and territorial governments, a municipality, industry, academia and an aboriginal community, provides client-centred access to government information, built on a common national framework using international standards.

## Action Required

**What:** To design mechanisms to provide sectoral input to standards activities, both at home and abroad. These mechanisms would complement current SCC advisory committees.

**By whom:** SCC, with the assistance of Industry Canada, DFAIT, industry associations and other groups with sectoral infrastructures.

**When:** New approaches to be developed by summer 2001.

**Notes:** Any sectoral approaches should build on or make use of existing sectoral committees, organizations or groups, rather than establishing new ones.

Several key sectors, dealing with innovation in standards development and conformity assessment, international market positioning, or emerging standardization requirements, have been identified as priorities. These include:

- agriculture (including “nutraceuticals”, dry food, fibre, organic, specialized livestock and biotechnology);
- information technology (including software, communications and Internet usage); and
- forestry.

It may also be appropriate for SCC to explore the concept of Canadian regional standards input. For example, Canada's northern regions are facing unique standards opportunities, particularly related to new exports and new international markets, and a relative paucity of standards infrastructure. Sectoral support in this context could include research into circumpopular standards and conformity assessment activities and cooperation. Similarly, emerging sectors in Western provinces could benefit from the development of regional standards organizations and connections to the NSS.

## 23. Facilitate consumer input to the NAFTA

Europe has established a very effective, well-funded, inter-jurisdictional body to ensure adequate consumer representation in European standards work (ANEC). A similar body could be established for the Americas in the context of the NAFTA.

### Action Required

**What:** Explore with representatives of the U.S., Mexico and the standards community the possibility of establishing a body similar to ANEC.

**By whom:** CPIC, in consultation with DFAIT.

**When:** Beginning in Spring 2000.

## List of Acronyms

<b>ACCA</b>	Advisory Committee on Conformity Assessment*
<b>ACS</b>	Advisory Committee on Standards*
<b>ACT</b>	Advisory Committee on Trade*
<b>CAC</b>	Canadian Advisory Committee*
<b>CIDA</b>	Canadian International Development Agency
<b>CNC</b>	Canadian National Committee*
<b>CNC/ISO</b>	Canadian National Committee of ISO*
<b>CNC/IEC</b>	Canadian National Committee of IEC
<b>COPANT</b>	Pan-American Standards Commission
<b>COPOLCO</b>	Committee on Consumer Policy**
<b>CPIC</b>	Consumer and Public Interest Committee*
<b>CSS</b>	Canadian Standards Strategy
<b>DEVCO</b>	Committee on Developing Country Matters**
<b>DFAIT</b>	Department of Foreign Affairs and International Trade
<b>EMS</b>	Environmental management system
<b>IEC</b>	International Electrotechnical Commission
<b>ISO</b>	International Organization for Standardization
<b>ITU</b>	International Telecommunications Union
<b>MLA</b>	Multilateral agreement
<b>NAFTA</b>	North American Free Trade Agreement
<b>NGO</b>	Non-governmental organization
<b>NRC</b>	National Research Council of Canada
<b>NSS</b>	National Standards System
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>PALCAN</b>	Program for the Accreditation of Laboratories-Canada
<b>PASC</b>	Pacific Area Standards Congress
<b>PTAC</b>	Provincial-Territorial Advisory Committee*
<b>QMS</b>	Quality management system
<b>SCC</b>	Standards Council of Canada
<b>SDO</b>	Standards development organization
<b>SDOAC</b>	Standards Development Organization Advisory Committee*
<b>TC</b>	Technical Committee
<b>TSACC</b>	Telecommunications Standards Advisory Committee of Canada

\*SCC advisory committee

\*\*ISO policy development committee

Implementation Proposal	Canadian Standards Strategy Element					
	Participate in the development of international standards	Prioritize standardization efforts and resources	Monitor and evaluate innovations in conformity assessment practices	Actively communicate the role of standards	Position standardization processes as a necessary complement to regulatory processes	Develop mechanisms guide to standardization activities in current and emerging social and economic issues
1. Create and maintain a framework for developing national positions						
2. Establish a broader mandate for technical committees under CNC/ISO and CNC/IEC						
3. Take leadership in developing international standards for electronic commerce						
4. Engage developing countries in international standardization						
5. Develop, implement and maintain processes for setting priorities for standardization activities in the areas of health, safety, the environment and other social issues						
6. Develop and maintain the capacity for standards-related policy development, analysis and dissemination.						
7. Ensure that standards development processes support social policy objectives						
8. Move toward a global accreditation regime						
9. Identify and make available to stakeholders the objectives and strategies underlying trade-related Mutual Recognition Agreements (MRAs)						
10. Examine the use of alternative conformity assessment practices						
11. Strengthen Canada's metrological infrastructure						

Implementation Proposal	Canadian Standards Strategy Element					
	Participate in the development of international standards	Prioritize standardization efforts and resources	Monitor and evaluate innovations in conformity assessment practices	Actively communicate the role of standards	Position standardization processes as a necessary complement to regulatory processes	Develop mechanisms guide to standardization activities in current and emerging social and economic issues
12. Promote the use of the National Standards System (NSS)						
13. Connect emerging industries to standardization activity						
14. Examine and evaluate management system standards						
15. Develop a Web portal for the NSS						
16. Provide support for the Agreement on Internal Trade (AIT)						
17. Make standards and conformity assessment a full part of the public policy debate						
18. Utilize quality management systems and environmental management systems to achieve public policy objectives						
19. Communicate the value of environmental management standards						
20. Employ innovative funding mechanisms						
21. Implement a volunteer program						
22. Generate strategic sectoral participation						
23. Facilitate consumer input to the NAFTA						