Canadian Standards Strategy Update - 2005-2008

DRAFT

October, 2004

Background:

The original Canadian Standards Strategy (CSS) was commissioned by the federal Minister of Industry, and developed by a Stakeholders Advisory Council including representatives from industry, federal, provincial and territorial governments, non-governmental organizations, standards and conformity assessment bodies and the Standards Council itself. The CSS was launched in March 2000, and since then, the activities detailed in the document have resulted in many accomplishments including the creation of an SCC policy group, the re-engagement of Canada in international standardization development related assistance (via the Canadian Advisory Committee on Developing Country Matters – CAC/DEVCO), the creation of an SCC Member (volunteer) program and the development of several key policy documents.

Since the launch of the CSS, we have also witnessed much change on both the international and domestic stage. Issues surrounding security, the environment, sustainable development, international and regional trade, developing countries, social responsibility, healthcare, food safety and new technologies (to name but a few) have often led governments, businesses (both large and small) and citizens to re-examine existing processes and structures in search of innovative solutions. Many of these solutions have considered or included a standards or conformity assessment related component. The updated CSS builds on the accomplishments and lessons learned during the development and implementation of the original CSS. It contains a mix of research, communication, cooperative and practical activities that strike a balance between new and ongoing standardization issues. Perhaps more important, the revised CSS is a "living document" and is designed to accommodate new standardization challenges as they arise.

Process:

In June 2003, a proposal to update the original CSS was approved by SCC's governing Council. The approach used was stakeholder driven, practical, efficient and relevant. From November 2003 until May 2004, nine SCC Advisory Committees (ACs) participated in facilitated sessions and developed CSS update recommendations and activities. Additional materials (including formal written submissions, e-mails, etc.) were provided by other NSS stakeholders including the Government of Canada, related advisory groups / bodies, SCC staff and management and individual Canadians. This material was reviewed, organized and drafted into the updated CSS. Efforts were also taken to ensure consistency, where applicable, between the revised CSS and the FY 2005/2006-2009/2010 SCC Corporate Plan.

Organization:

The updated CSS is a more streamlined document. The six goals (three international & three domestic) of the original CSS have been maintained. Supporting these goals are

twelve objectives (formerly implementation activities), each with a number of corresponding activities.

The activities are presented in a clear and concise fashion. Leads have been identified, measures have been included and a corresponding update mechanism has been developed. This structure will enable the SCC's governing Council, National Standards System (NSS) stakeholders and the public to monitor progress and success of the updated CSS. Additional details on resources and timelines will be provided as the activities are undertaken. Progress reports on the specific activities will be provided at regular meetings of Council and in the SCC Annual Report.

Purpose and Goals of the Revised Canadian Standards Strategy:

The purpose of the updated CSS is to provide ongoing direction and leadership on how to use standardization to best advance the social and economic well-being of Canadians in a global economy. A key theme is the strategic balancing of health, safety and environmental concerns with the rewards of trade, innovation and economic competitiveness.

The original Strategy had a positive impact in many areas and has served as an effective guide for many standardization projects and processes. Therefore, the updated CSS remains committed to its six original goals. These are:

International:

- 1. Influence the formation, evolution and operation of standardization bodies that are important to Canada
- 2. Improve access to existing and new markets for Canadian goods and services
- 3. Build competitive advantage through technology and information transfer and global market intelligence

Domestic:

- 4. Meet the needs of an evolving regulatory and policy environment
- 5. Represent fully the range of standardization stakeholders
- 6. Communicate effectively the role and benefits of standards and conformity assessment practices

Canada has proven itself to be an innovative standardization actor on both the domestic and international stage. If the revised CSS is to be as successful as its predecessor, the SCC must continue to learn from past experiences, listen to our many stakeholders, make strategic choices and cooperate effectively to achieve our new objectives. Therefore, the SCC will continue to play a central role in the coordination of the diverse activities and varied organizations that make up the Canada's NSS.

CSS Goals – International:

1. Influence the formation, evolution and operation of standardization bodies that are important to Canada

Canada has a proven track record as a leader of and valued contributor to international standards development activities. Canadians have provided thoughtful and balanced input into the development of product, safety, service and conformity assessment standards. Our long-standing participation in ISO, IEC and JTC-1 and our key roles in the development of numerous cornerstone standards (e.g., ISO 9000, ISO 14000, etc.) has been supported by a well-developed and cooperative national infrastructure. Canada should continue to influence, either directly or indirectly, the policy formation and governance of international standards development organizations. We should also continue our participation in key standards-development committees and pursue opportunities to participate in new, cross-cutting standards-development projects (e.g., security, social responsibility, climate change, etc.).

An important vehicle to influence these international activities is participation in regional organizations. Regional standardization bodies (e.g., the Pacific Area Standards Congress - PASC and the Pan American Standards Commission - COPANT) provide an excellent forum for collaborative policy development and information exchange on a host of standardization issues. Canada should seek to influence the growth and governance of these organizations for the mutual benefit of their respective members and for our own strategic interests.

Developments in other standardization bodies (i.e., those not directly related to ISO & IEC) must also be monitored from a strategic perspective. For example, Canadian activities in such organizations as the International Telecommunications Union (ITU), Codex Alimentarius (Codex), the International Bureau of Weights and Measures (BIPM) and the International Organization of Legal Metrology (OIML) must be observed to ensure consistent approaches. In addition, the multiple demands of the global marketplace have led to the creation of new, or the modification of existing organizations in order to meet specific standards or conformity assessment demands. Members of the NSS, specifically the SCC, must be prepared to work cooperatively with new national, regional and international partners and build on existing relationships to pursue the benefits of standardization.

2. Improve access to existing and new markets for Canadian goods and services

Trade continues to be the engine for the global economy and its impact on Canada's economy remains significant. Our reliance on international trade, especially our trade with the United States and major emerging markets (e.g., China, India & Brazil), has increased over the past several years. This growth has been facilitated by the development and expansion of trade agreements at both the international (e.g., World Trade Organization – WTO) and the regional / bi-lateral level (e.g., Free Trade Area of the Americas – FTAA, the Asia-Pacific Economic Cooperation – APEC, the North American Free Trade Agreement – NAFTA, Canada – Costa Rica FTA, Canada – Chile FTA, etc.).

What has become clear is the fundamental role that standardization plays in trade relationships, both positive (i.e., as an approach to meet multiple national / regulatory requirements) and negative (i.e., as a method to erect obstacles to the free movement of goods and services). Given the relative size of the Canadian economy and the multiple relationships required to ensure access to foreign markets, it remains crucial for the SCC and our NSS partners to be engaged at two (2) distinct, yet closely related levels:

1. formal trade agreements (i.e., government-to-government)

Canada remains committed to the prudent usage of standards and conformity assessment measures to facilitate the reduction of technical barriers to trade (TBTs). Trade disputes can have serious impacts on the Canadian economy and efforts must be taken to promote commonalities and work through differences wherever possible. It is therefore crucial that the SCC retain and nurture a healthy relationship with International Trade Canada and, through this relationship, provide advice and input into standardization-related aspects of formal trade agreements.

2. institutional (i.e., voluntary) arrangements and schemes

Canada's participation in accreditation based-arrangements (e.g., International Accreditation Forum – IAF, International Laboratory Accreditation Cooperation – ILAC, the Pacific Accreditation Cooperation – PAC, the Asia-Pacific Laboratory Accreditation Cooperation – APLAC and the Interamerican Accreditation Cooperation – IAAC) and other conformity-assessment schemes (e.g., IEC Worldwide System for Conformity Testing and Certification of Electrical Equipment – IEC CB Scheme) remains important for the recognition and acceptance of Canadian products and services. Strategic action in these fora will remain important as arrangements and regions mature, business patterns change and regulators make further use of these mechanisms.

3. Build competitive advantage through technology and information transfer and global market intelligence

Among the many benefits associated with the application of standards and conformity assessment mechanisms, one in particular stands out - the immediate and ongoing infusion of current technologies, methodologies and techniques into the businesses, departments or organizations that use them. By employing these standardization "building blocks", a firm or, indeed, a country can meet or exceed international best practices and apply the knowledge contained in the standardization documents to fashion innovative products and services that meet a variety of demands.

A crucial component for truly "international" standards development and conformity assessment activities involves the meaningful participation of developing countries. Successful exports often hinge on properly manufactured and tested products and an internationally recognized standardization infrastructure. Many countries, at varying stages of development, do not possess the necessary resources or expertise to meet the standardization-related requirements for access to foreign markets.

From a standardization perspective, Canada remains committed to working with developing countries, either individually or via international/regional associations, to cultivate and enhance their capacities to participate in standards and conformity assessment activities. Through the work of the Canadian Advisory Committee on Developing Country Matters (CAC/DEVCO) and ongoing cooperation with organizations and departments such as the Canadian International Development Agency (CIDA) and International Trade Canada, the SCC and our NSS partners will continue to engage in activities such as training seminars, twinning and capacity building to ensure that developing countries have the opportunity to benefit fully from standardization.

CSS Goals – Domestic:

4. Meet the needs of an evolving regulatory and policy environment

Standardization, that is to say both standards development and conformity assessment, is employed to meet a number of regulatory and policy requirements. Various components of the NSS provide both economical and widely accepted approaches in many regulated areas including product safety and the certification of qualified personnel. As new products and services, innovative certification and testing procedures, environmental considerations and changing regulatory requirements challenge all levels of Canadian government and our citizens, standardization should and will often be considered as a potential approach.

The case for a wider (and in some cases deeper) application of standardization in a regulatory context must be supported with sound research, empirical data, active support from governments and regulatory officials and a proven record of past successes. The SCC and our NSS partners realize that the task is an incremental one, requiring participation in a host of policy venues, discussions and much confidence building. We also note that these efforts can result in benefits for all segments of Canadian society. From implementing climate change policies, to facilitating the application of alternative energy technologies, to providing common criteria for the recognition of professional credentials, to providing a variety of avenues to meet regulatory requirements, the NSS continues to hold much potential as an effective instrument for the development and implementation of Canadian (federal, provincial, territorial and municipal) public policy.

Through existing and new partnerships, inter-jurisdictional and inter-departmental cooperation, regulatory dialogue and engagement and thorough research, the SCC and our NSS colleagues will continue to work to meet the multi-faceted needs of our domestic regulatory and policy environments in an efficient and practical manner.

5. Represent fully the range of standardization stakeholders

Canada, like many other "western" countries, is beginning to grapple with the implications of an aging population, declining birth-rates and static immigration levels. Over the next ten to twenty years, it is anticipated that these factors may contribute to a drop in Canadian productivity levels. Competition for skilled employees and immigrants among G-7 nations is expected to increase accordingly. Canadian population centers are also changing with over one half of Canadians living in or around four main metropolitan areas: Toronto (ON), Montréal (QC), Edmonton-Calgary (AB) & Vancouver (BC) – other Canadian provinces and territories are experiencing decreases in population. These trends may have a negative impact on the approximately 15,000 person volunteer base of the NSS. The SCC and our NSS colleagues must be aware of these trends and attempt to anticipate their impacts.

In addition to securing adequate levels of volunteers for the NSS, we must also acknowledge groups that are currently under-represented in the system and explore ways to correct these imbalances. Aboriginal groups, other standardization organizations and arrangements, non-governmental organizations, municipal governments, etc. are possible groups that could benefit from greater levels of engagement. The development of a more robust stakeholder base will result in a more representative system with applicable and acceptable standardization products.

Coupled with these considerations is the ongoing necessity for innovative and sustainable funding approaches to support the NSS (including participation in standards development activities). Earlier work by the SCC's Task Force on Innovative Funding Solutions (TFUNS) resulted in several recommendations and a commitment to further study. The SCC and fellow NSS stakeholders will continue to address concerns regarding "representation" and strive to implement achievable objectives.

6. Communicate effectively the role and benefits of standardization and conformity assessment practices

Communication, specifically the task of increasing general knowledge levels about standardization, its associated benefits, the NSS and the SCC is a constant challenge. In the current environment of competing messages, multiple delivery methods (presentations, internet, print based material, trade-shows, etc.) and a finite level of resources, it is sometimes difficult to engage and hold the attention of specific audiences (e.g., key government officials, senior business managers, etc.) in order to underscore the value of standards and conformity assessment.

Closely linked to communications is the concept of promotion. An understanding of the structure and function of standardization bodies and their activities must be complemented by practical and successful examples of standardization "in-practice". Seeing how standardization could be applied successfully in specific sectors or circumstances is crucial to its acceptance by governments, private industry and consumers.

The SCC and our NSS partners will therefore continue to communicate and promote the role and benefits of standards and conformity assessment in an effective and strategic manner. A sustained effort to ingrain the key messages of standardization in the consciousness of decision makers and the general public is crucial to the success of not only individual standardization projects, but also to the continuity of the NSS as a whole.

Goals & Objectives:

International:

- 1. Influence the formation, evolution and operation of standardization bodies that are important to Canada
 - 1.1 Enhance the strategic coordination and oversight capacities of Canadian National Committee on the International Organization for Standardization (CNC/ISO) and the Canadian National Committee for the International Electrotechnical Commission (CNC/IEC)
 - 1.2 Facilitate consumer input into national, regional and international standardization fora
- 2. Improve access to existing and new markets for Canadian goods and services
 - 2.1 Continue to strengthen global accreditation networks
 - 2.2 Support the reduction of standardization-related trade barriers
- 3. Build competitive advantage through technology and information transfer and global market intelligence
 - 3.1 Continue to engage developing countries in international standardization

Domestic:

- 4. Meet the needs of an evolving regulatory and policy environment
 - 4.1 Pursue strategic standardization partnerships, projects and processes that support social policy objectives (including health, safety and the environment)
 - 4.2 Support inter-jurisdictional standardization-based cooperation
 - 4.3 Engage regulatory and public policy officials regarding the applicability of standardization approaches
 - 4.4 Research and analyze new and ongoing standardization issues
- 5. Represent fully the broadening range of standardization stakeholders
 - 5.1 Support the further development of the SCC Member Program
 - 5.2 Employ innovative and sustainable funding mechanisms to support future activities
- 6. Communicate effectively the role and benefits of standardization and conformity assessment practices
 - 6.1 Promote the use of the National Standards System (NSS)

Objectives with corresponding Activities:

- 1. 1 Enhance the strategic coordination and oversight capacities of the Canadian National Committee on the International Organization for Standardization (CNC/ISO) and the Canadian National Committee for the International Electrotechnical Commission (CNC/IEC)
 - a) Research and make recommendations regarding alternative methods to ensure Canadian input into / influence in regional and international standardization organizations (e.g. COPANT, PASC, CANENA, etc.) including the creation of national mirror committees for regional groups
 - Lead: CNC/IEC & CNC/ISO with input from ACS, ACCA, ACT & CPIC
 - b) Develop a mechanism to identify "essential Canadian requirements" to support the implementation of IEC's "Global Relevance" approach
 - Lead: CNC/IEC with input from CNC/ISO, ACS, ACCA & CPIC
 - c) Develop and/or adapt a mechanism to identify and prioritize new areas for Canadian standards development activity
 - Lead: CNC/ISO & CNC/IEC with input from all SCC Advisory Committees
 - d) Research and make recommendations on the creation of a web-based forum to facilitate strategic coordination and cooperation amongst North American IEC National Committees (i.e. Canada, US & Mexico)
 - Lead: CNC/IEC with input from CNC/ISO, ACS, ACCA, ACT & CPIC

1.2 Facilitate consumer input into national, regional and international standardization fora

a) Promote the uptake and usage of the CPIC Priorities Setting Mechanism by other SCC ACs to ensure a consistent / strategic approach to dealing with standardization issues

Lead: CPIC with input from all SCC ACs

b) Examine and make recommendations on alternative methods and approaches to facilitate consumer input into standardization activities at the national, regional and international level

Lead: CPIC with input from all SCC ACs & NSS stakeholders

2.1 Continue to strengthen global accreditation networks

a) Examine and make recommendations on the rationalization of SCC's existing slate of voluntary accreditation-based arrangements and agreements

Lead: SCC with input from ACCA, ACT, PTAC & other SCC ACs as required

b) Develop and apply a measurement tool(s) to assess the impact of existing and/or proposed voluntary accreditation-based arrangements on the Canadian marketplace and communicate the results to Canadian regulatory officials (federal, provincial & territorial) and other interested parties

Lead: ACT & ACCA with input from all SCC ACs

c) Examine and make recommendations on methods and activities that could increase regulatory understanding, acceptance and promotion of multilateral recognition arrangements (MLAs) in Canada

Lead: ACCA, ACT & PTAC with input from all SCC ACs

2.2 Support the reduction of standardization-related trade barriers

a) Identify and examine opportunities for the application of existing standards and conformity assessment measures that could overcome traderelated obstacles in Canada's existing network of multi-lateral and bilateral trade agreements

Lead: ACT with input from other SCC ACs

b) Examine alternative approaches to standards development and conformity assessment and identify best practices that could be applied to improve Canadian trade-related activities

Lead: ACT with input from other SCC ACs

3.1 Continue to engage developing countries in international standardization

a) Develop a vision statement for CAC/DEVCO to guide it in future standardization-related development assistance activities

Lead: CAC/DEVCO with input from ACT

b) Develop and apply a measurement tool(s) to assess the effectiveness, impact(s) and outcomes of SCC's standardization-related development assistance activities

Lead: CAC/DEVCO with input from SCC staff

c) Develop an enhanced system for data collection and assessment with regard to assessing the suitability of countries and/or regions for standardization-related development assistance from CAC/DEVCO

Lead: CAC/DEVCO with input from SCC staff

- 4.1 Pursue strategic standardization partnerships, projects and processes that support social policy objectives (including health, safety and the environment):
 - a) Examine and make recommendations on possible partnerships / cooperative opportunities with standards development organizations and processes currently "outside" of the NSS

Lead: ACS with input from all SCC ACs

b) Research and make recommendations on the development of a national database of health and safety incidents related to products, systems and services

Lead: CNC/IEC with input from all SCC Advisory Committees and specific federal departments and agencies

c) Research and make recommendations on the strategic application of standardization in the Canadian healthcare system

Lead: SCC with input from PTAC, other SCC ACs and various NSS stakeholders

4.2 Support inter-jurisdictional standardization-based cooperation

a) Based on Chapter Four of the Agreement on Internal Trade (AIT), identify areas of common trade-related difficulty among Provinces and Territories and promote standardization approaches and/or solutions for these trade impediments

Lead: PTAC with input from ACT & ACCA

b) Conduct research to identify sectors from a Provincial and Territorial perspective that could benefit from the use and acceptance of accreditation-based MLAs

Lead: PTAC with input from ACT & ACCA

4.3 Engage regulatory and public policy officials regarding the applicability of standardization approaches

a) Seek the development and acceptance of a Government of Canada policy statement regarding the usage of standards and conformity assessment procedures in federal regulations

Lead: SCC, Industry Canada with input from all SCC ACs

b) Identify measures to increase the number of regulatory officials (federal, provincial, territorial and municipal) involved in the NSS activities including standards development, conformity assessment and policy development

Lead: SCC with input from all SCC ACs and NSS stakeholders

c) Actively recruit Canadian regulators (federal, provincial/territorial and/or municipal) for participation in the standards development and conformity assessment activities of the National Standards System (NSS)

Lead: SCC with input from all SCC ACs

4.4 Research and analyze new and ongoing standardization issues

a) Research and make recommendations on the future directions, capabilities and of SCC Conformity Assessment programs and services (especially from a health and safety perspective)

Lead: SCC with input from all SCC ACs & Stakeholders

b) Re-examine and make recommendations on the need to develop a National Standard of Canada for Occupational Health and Safety (OH&S)

Lead: SCC with input from all SCC ACs and NSS stakeholders

c) Research and make recommendations on the development of a "Centre for Standards Research" that would conduct, collect and disseminate research on the value and importance of standardization in Canada

Lead: SCC with input from specific NSS stakeholders

d) Research and make recommendations on ways to overcome obstacles to the wider uptake of management system standards Canadian among small and medium-sized enterprises (SMEs)

Lead: Industry Canada with input from SCC and specific ACs

5.1 Support the further development of the SCC Member Program

a) Examine and make recommendations on the future directions of, and challenges facing, the SCC Member Program (including demographics, funding and mentoring)

Lead: CPIC with input from all SCC ACs

b) Identify and engage groups that are currently under-represented in order to make NSS activities more representative of, and more broadly understood by, Canadians

Lead: SCC with input of NSS stakeholders

c) Research and make recommendations on the opportunities to cooperate with Canadian SDOs in the delivery of specific training programs within Canada

Lead: SCC with input from SDOAC

d) Research and develop a retention strategy for the SCC Member Program

Lead: SCC with input from SCC ACs and NSS stakeholders

e) Research and make recommendations on the development of a standardsdeveloper mentor program to ensure Canada maintains its capacity to participate in standards development activities

Lead: SCC with input from CNC/ISO, ACS and ACCA

f) Research and make recommendation on the development and application of a "Standards & Conformity Assessment" education module for use by technical colleges and universities

Lead: SCC with input from all SCC Advisory Committees

5.2 Employ innovative and sustainable funding mechanisms to support future activities

a) Continue to study and develop long term and sustainable approaches to the funding of standards development in Canada

Lead: Council with input from specific SCC ACs as required

b) Initiate dialogue with the appropriate department(s) of the Government of Canada in order to address liability concerns of SDOs when standards or conformity assessment procedures are referenced in federal regulations

Lead: SCC with input from SDOAC

6.1 Promote the Use of the National Standards System (NSS)

a) Promote the applicability of standards-based approaches to key government and private industry-related issues

Lead: SCC with input from all SCC ACs

b) Develop a series of print-ready articles and "value propositions" that detail the benefits of the standardization and the NSS (citing particular success stories, case studies, examples, etc.)

Lead: SCC with input from specific SCC Advisory Committees

c) Promote the application of standards and conformity assessment as a key component of comprehensive development-related assistance strategies with key federal departments, development assistance agencies and standardization peers

Lead: CAC/DEVCO with input from specific SCC ACs

d) Develop a virtual "Conformity Assessment Tool Box" that explains the basics of conformity assessment (including different approaches, circumstances for application, benefits, etc.) to a variety of key stakeholders in order to increase understanding and usage of conformity assessment

Lead: ACCA with input from specific SCC ACs & SCC Staff

Proposed Template for Activity Updates:

CSS Goal	e.g., 1-6 – insert goal
Objective	e.g., 2.1 – insert objective
Activity	e.g., 2.1(a) – insert specific activity
Lead / partners	e.g., ACCA, ACS, etc.
Approach / Description	e.g., The project consists of insert text
Deliverable(s)	e.g., Report on insert text
Measure(s)	e.g., Report completed – list of priorities
Current Status	e.g., Ongoing research underway

List of Acronyms:

ACCA Advisory Committee on Conformity Assessment*

ACS Advisory Committee on Standards*
ACT Advisory Committee on Trade*
CAC Canadian Advisory Committee*

CASCO Committee on Conformity Assessment**

CANENA Council for the Harmonization of Electrotechnical Standards of the

Nations of the Americas

CIDA Canadian International Development Agency

CNC Canadian National Committee

CNC/ISO Canadian National Committee of ISO*
CNC/IEC Canadian National Committee of IEC*
COPANT Pan-American Standards Commission
COPOLCO Committee on Consumer Policy**

CPIC Consumer and Public Interest Committee*

CSS Canadian Standards Strategy

DEVCO Committee on Developing Country Matters**

EMS Environmental Management System FTAA Free Trade Area of the Americas

IEC International Electrotechnical Commission
ISO International Organization for Standardization

ITC International Trade Canada

ITU International Telecommunications Union

JTC-1 Joint Technical Committee 1

MLA Multilateral Recognition Agreement
MRA Mutual Recognition Agreement

NAFTA North American Free Trade Agreement

NGO Non-governmental organization
NRC National Research Council of Canada

NSS National Standards System

OECD Organization for Economic Cooperation and Development PALCAN Program for the Accreditation of Laboratories-Canada

PASC Pacific Area Standards Congress

PTAC Provincial-Territorial Advisory Committee*

QMS Quality Management System SCC Standards Council of Canada

SDO Standards Development Organization

SDOAC Standards Development Organization Advisory Committee*

TC Technical Committee

TSACC Telecommunications Standards Advisory Committee of Canada

^{*} SCC advisory committee

^{**} ISO policy development committee