



Standards Council of Canada
Conseil canadien des normes

The Standards Council of Canada
Promoting Standardization – Education in Canada

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Gaithersburg Maryland
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Outline

- SCC Overview
- Background and Context
- Academic Conference
- Economic Value Study
- SCC Educational Policy for Colleges and Universities
- Canada Research Chairs
- SCC Training to Canadian Federal Regulators
- Outreach to Stakeholders
- Next Steps



Standards Council of Canada

- Standards Council of Canada (SCC), established in 1970, is a federal Crown Corporation with a mandate from the Canadian parliament to promote efficient and effective voluntary standardization in Canada.
- Mission: To lead and facilitate the development and use of national and international standards and accreditation services in order to enhance Canada's competitiveness and well-being.
- Vision: To improve Canadians' quality of life through leadership of the National Standards System.



History and Context

- April – November 2004 – SCC Council determines that there is a need for more Canadian standardization-research and education
- Result – CSS 2005 -2008 Activity #4.4 (c) – “Research and make recommendations on the development of a Canadian Centre for Standardization (CCSR) that would conduct , collect, and disseminate research on the value and importance of standardization in Canada”
- September 2005 Council Meeting – Information paper summarizes CCSR research to date, outlines existing standardization research centres & notes other possibilities in lieu of a CCSR



History and Context

- **December 2005** – “phased approach” recommended to & supported by Council in order to gauge interest in the possible future creation of a CCSR.
- December 2005- Council approves two immediate projects:
 - 1) Hold a “Standardization-Research in Canada” academic conference
 - 2) Complete a “Value of Standardization in Canada” economic study



“Standardization-Research in Canada” Academic Conference

- The Conference was held in Ottawa on 2006-11-20
- Conference Aims:
 - Stimulate academic dialogue
 - Raise awareness about the current state of standardization-research in Canada
 - Assess interest & urgency for CCSR
- Outline – Three (3) panels, cross-cutting issues, variety of academic stakeholders (e.g., public policy, engineering, trade-policy, economics, etc.)



Conference Outcomes:

- Some interim measures should be explored before revisiting the need to create a CCSR
- Many potential topics to pursue from a standardization-related research perspective
- We need to collect what has already been done and connect those already working in the area
- There is potential to leverage existing sources of research funding to pursue specific standardization-related academic projects



The Study

In 2006, the Standards Council of Canada asked The Conference Board of Canada to examine the economic benefits of standardization for Canada:

- What has the economics literature said?
- What are Canadians saying?
- What does the Canadian data say?



Key Findings

- Interviews and Case Studies

Key stakeholders provided compelling examples of the benefits of standardization

- Economic Impact of Standards in Canada

Standards have had a significant, positive impact on Canadian economic growth



SCC's Educational Focus

- The Canadian Standards Strategy 2009-2012
 - “Increase understanding of and participation in the NSS by academia”.
- SCC Corporate Plan 2008/2009-2012/2013
 - “Develop increased recognition of SCC’s role amongst key stakeholder groups within the academic community.”
 - Greater engagement of academic community in standardization activities
 - Standards integrated into course curricula
 - Partnerships to pursue standardization research



SCC's Educational Policy for Standards in Universities and Colleges

- Policy to provide access to ISO and IEC standards to universities and colleges
- Some Restrictions
- Digital Rights Management



Promotion of SCC Educational Policy

- National Council of Deans of Engineering and Applied Science
- Canadian Council of Professional Engineers
- Association of Universities and Colleges of Canada
- Association of Canadian Community Colleges
- Technical Committee members from academia



SCC's Educational Policy Current Status

- As of March 31, 2009:
- 50 license agreements with Canadian Universities and Colleges
- 594 ISO & IEC Standards made available
- 86 courses representing Information Technology, Engineering, Medical Devices, Environmental, etc.
- 1801 students with access to standards relevant to their area of study



Benefits

- Free access to published international standards from the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC);
- The application of practical industry knowledge in an educational setting;
- An understanding of the standardization process and its role in the student's field of study; and
- A smoother transition into the workplace for graduating students.



Canada Research Chairs

- Canada Research Chairs promote leading – edge research and innovation in Canadian Universities.
- As part of the CSS 2009-2012, the SCC will be exploring the opportunity to establish a Canada Research Chair in standardization.
- A standardization research chair could benefit from the large number of existing Chairs in the fields of engineering, natural sciences and information technology.



Training for Canadian Regulators

- During the past year, the SCC has also focused on providing standardization – education to Canadian federal regulators.
- In March, 2009, the SCC held three training sessions for Canadian regulators. There were approximately 50 participants
- The sessions focused on how regulators can reference voluntary standards in Canadian regulations



Next Steps

- ISO is collecting similar economic studies from its members – now have UK, Germany, Canada, and Australia
- SCC will be considering examining other sectors in future
- SCC plans to establish a working group of academics engaged in standardization-related research
- SCC will continue to participate in the ANSI Committee on Education, which provides us with an opportunity to learn from and implement best practices.



Next Steps

- SCC has plans to Discuss with the National Science and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council (SSHRC), government departments, and academia, the potential for establishing a Chair for Standardization in Canada.
- SCC will continue to try to increase references to standards, conformity assessment and accreditation that are incorporated into the curricula of Canadian colleges, universities and technical institutes.
- SCC has been invited to participate in a civil and environmental engineering advisory group at the University of Waterloo, which will provide guidance and input into the department's academic program, notably curriculum and course content.