



Standards Council of Canada
Conseil canadien des normes

Canada

Incorporation by Reference of Standards in Regulations

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SCC mandate and role

- Federal Crown Corporation established in 1970
- Reports to Parliament through the Minister of Industry

Mandate to:

- *Advise* federal and provincial governments on standardization issues
- *Support* standardization priorities of industry and governments
- *Coordinate* standardization activities in Canada
- *Represent* Canada in international and regional forums



- *Accredit* Standards Development Organizations
& Conformity Assessment Bodies
- *Approve* National Standards of Canada



SCC's Accreditation Role

- SCC accredits:
 - Standards development organizations (SDOs)
 - Conformity assessment bodies (CABs)
- Verifies competence:
 - People, expertise, resources and equipment to carry out specific tasks
- SCC accreditation programs are increasingly referenced in regulations to manage compliance





SCC Accredited Standards Development Organizations (SDOs)





How standards are developed



Multi-stakeholder/Country Participation

- Regulators, Industry, Civil Society, Consultants, Academics etc.

Consensus-based Decision-making

- Deliberate, rules-based process.
- “*Substantial agreement ...implies much more than a simple majority, but not necessarily unanimity.*”
- Double-level (stakeholders, countries) at ISO.

Transparent and Inclusive

- Public, member body review of drafts

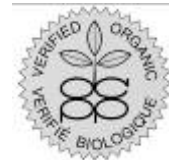
Current

- Standards have to be reaffirmed, revised or withdrawn every 5 years



Conformity Assessment Bodies

SCC accredits 440+ clients in Canada and abroad





International standards and accreditation programmes

- Reflect global supply chains
- Facilitate access to new markets
- Can reduce barriers to trade and support alignment between regional partners
- Help governments achieve Good Regulatory Practice (GRP)
- Reduce time and costs to develop and implement rules
- Standards include views of interested parties (e.g. regulators, industry, consumers, academics etc.)



Overview of key standardization trends in 2014

	2010	2011	2012	2013	2014	Trend
Number of Canadian standards	3,780	3,482	2,973	2,940	2,901	↓
Number of standards maintained by key international standardization organizations (ISO, IEC, ITU)	26,943	27,958	28,869	30,358	30,334	↑
Percentage of unique domestic National Standards of Canada approved by SCC	N/A	39%	33%	31%	--	
Number of active ISO, IEC, ITU technical committees	988	984	993	989	--	
Number of Canadian volunteer members participating in international standards development committees	2,648	2,758	2,619	2,628	2,849	↑
Number of federal government representatives participating to ISO/IEC/ITU international standardization activities	378	401	371	349	--	



Trends in standardization

- Growth in standardization activities regionally and internationally with significant number of new work items being approved
- Shrinking number of Canadian standards
- “Hollowing out” of technical expertise required to keep Canadian standards up to date
- High proportion of outdated references in federal and provincial/territorial regulations (regulations not keeping up with latest edition of standards)
- Significant interest/efforts to align standards between jurisdictions



Implications for Canada

- Standardization is recognized worldwide as a key driver of economic growth, a valuable tool for public policy and a credible framework for rule-making
- Standards development in Canada alone is not enough to meet the demands of the rapid introduction of new and diversified technologies
- Canada must maximize the limited resources it is investing in standardization to ensure market influence in areas of strategic importance to its economy



Setting Standardization Priorities

- SCC is engaging governments and industry in a sustained dialogue on Canada's standardization priorities and goals to:
 - move from the current ad-hoc, bottom up approach to a more balanced one that also establishes high level strategic priorities
 - optimize resources invested in standardization nationally, regionally and internationally
 - streamline governance mechanisms
 - agree on meaningful metrics and performance outputs



Supporting federal/provincial-territorial (FPT) government priorities

- Federal departments/agencies:
 - ADM Committee on Standardization
 - Annual standardization priorities and goals
 - Update critical standards in federal regulations
 - Find alternative standards to fill existing gaps
 - Focus on Red Tape Reduction Commission and Regulatory Cooperation Council commitments
 - Improve resiliency of infrastructure in the North
- Provincial-territorial (PT) governments:
 - Support Provincial Territorial Advisory Committee (PTAC) and other bodies
 - Facilitate PT dialogue on standardization priorities
 - Streamline FPT standards governance
 - Work on common standards to support upcoming regulations



6,000+ references to standards in FPT regulations

Organic Agricultural Products Regulation, Man Reg 51/2013 , (Organic Agricultural Products Act)

Consolidated Regulations of Manitoba — Manitoba

Vehicle Standards Regulations, PEI Reg EC856/72 , (Highway Traffic Act)

Regulations of Prince Edward Island — Prince Edward Island

[...] ORGANIC AGRICULTURAL PRODUCTS 07
présent règlement, toute **CAN/CGSB 32.310** or
Canadian General « norme **CAN/CGSB 32.310** ;
CAN/CGSB 32.310 intitulée **Systèmes de Organ**
32.310) "CAN/CGSB 32.311" means Canadian
stand

[...] Mobile Homes", (iv) **CSA Standard Z240.5-1971** entitled "Oil Requirements for Mobile Housing and
Recreational Vehicles", (v) **CSA Preliminary Standard Z240.6.1** entitled "Electrical Requirements for Mobile
Homes", 1 [...] 2 Cap. H-5 Highway Traffic Act Updated 2009 Vehicle Standards Regulations (vi) **CSA Preliminary**
Standard Z22.2 No. 149/2240.6.2-1970 entitled "Electrical Requirements for Recreational [...] No person shall
e unless the motor vehicle meets the:

Well Construction Regulations, NS Reg 382/2007 , (Environment Act)

Regulations of Nova Scotia — Nova Scotia

[...] (i) for carbon steel well casings, **ASTM standard ASTM A589**, Standard Specification for Seamless and
Welded Carbon Steel Water-Well Pipe, for Type IV Water-Well Casing Pipe, Grade [...] 17, or Schedule 80 of
ASTM standard ASTM F480, Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in
Standard Dimension Ratios (SDR), SCH 40 and SCH 80. [...] (f) a thermoplastic well liner with an inside diameter
of 102 mm must have a wall thickness of at least

Plumbing Code, 1998 GOQ 2, 1756 , [Repealed or spent] , (Piping Installations)

Storage and Handling of
(Environmental Protection)

Regulations of Newfoundland and

standard **ISO 8402:19**
time. [...] out in the c
standard **ISO 8402:19**
time. [...]

Replaced by : **Construction Code**
Regulations of Quebec — Quebec

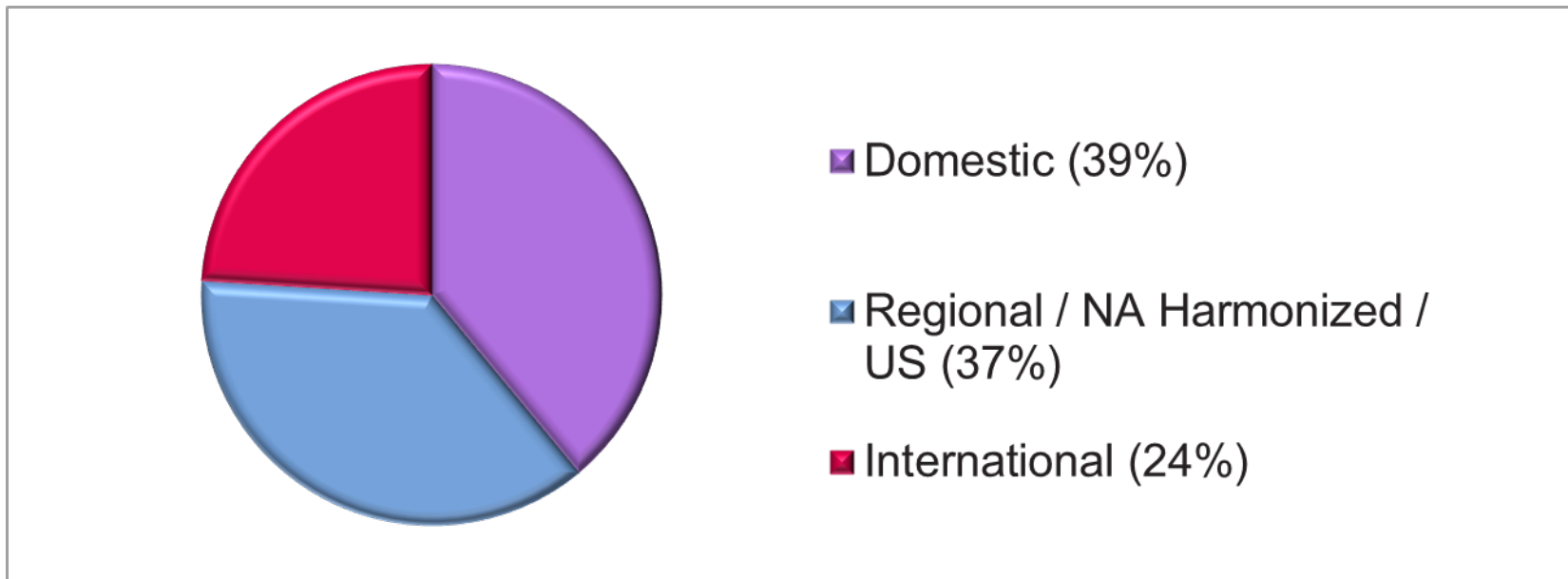
[...] (6) Shop fabricated above ground shall be constructed with the **U.L.C.** CAN4-S630, latest edition, and shall bear a horizontal storage tanks shall be constructed and shop teste edition, and shall bear a **U.L.C.** label. [...] (b) if potentially flammable or combustible liquids, be refurbished by the ma CAN4-S601 [...]

[...] **BNQ NQ 3623-075** (1986) Raccords en fonte grise pour canalisations sous pression 2.6.4.3) **BNQ NQ 3623-085** (1993) Tuyaux en fonte ductile pour canalisations sous pression 2.6.4.1) **BNQ BNQ** [...] **BNQ BNQ 3751-150** (1982) Adhésifs à solvant pour tuyaux et raccords en plastique acrylonitrile - butadiène-styrène (ABS) 2.5.10.1) 2.5.12.1) **BNQ BNQ 3751-155** (1982) Adhésifs à solvant pour tuyaux [...] [I-12.1r1.1#01, see 1998 G.O. 2, 3682] **BNQ BNQ 2613-090** (1983) Tuyaux et raccords en fonte pour canalisations sous pression - Revêtement interne au mortier de ciment - [...]



Status of standards in federal regulations (May 2014)

SCC is monitoring **1,000+** references to standards in **102** Canadian federal regulations maintained by **15** federal government departments and agencies:





Why monitoring standards benefits regulators





SCC's Monitoring Standards in Regulations (MSR) Database

- ✓ **web-based** tool custom designed by Lexum
- ✓ **automates** part of SCC's monitoring of standards in Canadian federal and P/T regulations
- ✓ access managed exclusively by SCC

Standards Council of Canada
Conseil canadien des normes

Welcome to SCCs "Monitoring Standards in Regulations" (MSR) database

Login

Password

Sign in

By LEXUM

help@lexum.com 1-855-316-2100



SCC's MSR Database (cont.)

☑ automatically
parses
regulations by
applicable SDO
(by acronym)

☑ comprehensive
research based
on CanLII data

The screenshot displays the SCC's MSR Database interface. At the top, it says "Standards Council of Canada" and "Conseil canadien des normes". The main navigation bar includes "Browse and Report", "Updates and Analysis (23)", "Edit DB Content", "Filter", and "Configure". Below this, there are "Previous" and "Next" buttons. The "Update Details" section shows "Regulation title: Nova Scotia Building Code Regulations (NS Reg 322/2009)" and "Government department: NS7 (NS Labour and Advanced Education)". A "Highlighted Text" window from CanLII shows the regulation title. Below that, the "Edit/View Records" section has a table with columns: Record No, SDO, Standard, Verbatim Referenced Text, Location of Reference, and Flag: No Longer Referenced in Regulation. The table currently shows "No data available in table".

**NOTE: CanLII (Canadian Legal Information Institute) offers public access to laws and regulations from all Canadian jurisdictions.*



Duplicative Certifications: Example of a Water Heater

For Canada:

A water heater and its components must comply with elements of the following standards:

CSA B140

CSA B51

CSA B125/ASME A112.8 (HARMONIZED)

CSA B139

CSA B149

CSA B64

CSA B4.1/ANSI Z21.10 (HARMONIZED)

CSA B4.4-M99/ Z21.22 (HARMONIZED)

CSA B 140

CSA C.22.2

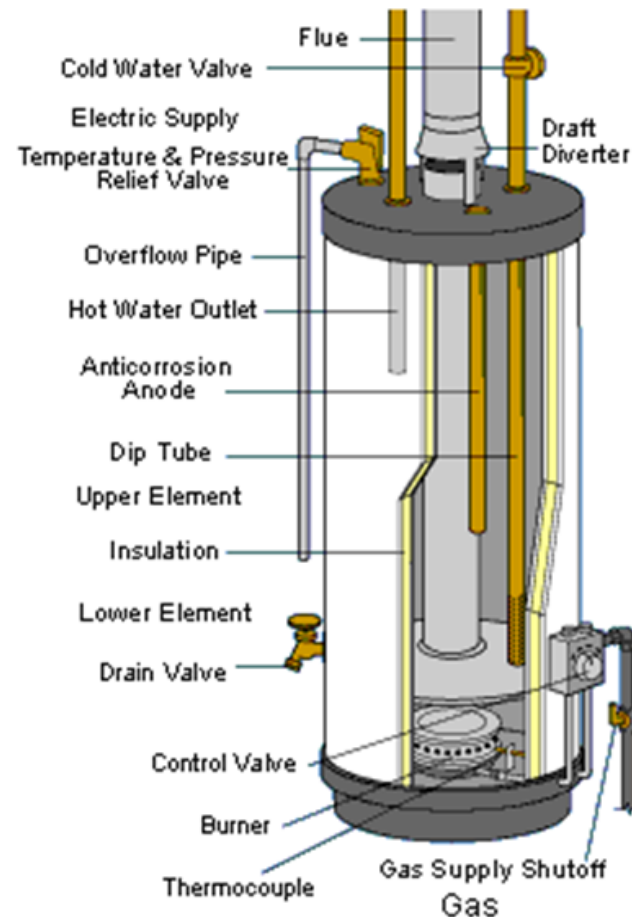
CSA C309-M90

ANSI Z535.4

ASME 1016 & 1017

ASTM A123M-00

ULC S636





Challenges for Federal and P/T Regulators

- Establish baseline data about standards in regulations and incorporation by reference approaches
- Manage outdated references/standards
- Compare standards, codes and certification requirements between jurisdictions
 - Pre-requisite for alignment/harmonization efforts
- Identify areas where standards alignment can be achieved
- Set standardization priorities for new standards and conformity assessment solutions to support
 - Current and emerging regulatory needs
 - Economic development strategies



Questions/comments?