

Building a National System for the Management of Electrical Product Safety in Canada

Final Report to the National Public Safety Advisory Committee

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The views expressed in this report are the views of the authors and not necessarily those of the National Public Safety Advisory Committee or its partners.

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Executive Summary

To address a number of issues and to develop a national approach for managing electrical product safety, the National Public Safety Advisory Council (NPSAC), made up of federal, provincial, and territorial regulators, with the support of manufacturers, retailers, and certification bodies initiated a project to review electrical product safety in Canada.

The consultants hired proceeded by way of a file review that included all relevant files and documents, federal/provincial and territorial legislation and regulations, and best practices of other countries. This was followed by a substantial consultation exercise with all interested stakeholders across the country. The latter was conducted after client approval of the consultation document sent out prior to the consultation meetings, as was the list of interviewees. So great was the interest of stakeholders that additional consultations were held across the country in all Provinces and Territories (P/Ts), and some of the major US industry associations came to Ottawa to ensure their views were also considered. An outline of the proposed Report was approved by the contract authority and early drafts submitted to ensure all aspects were being covered and expectations realized.

Strengths and Weaknesses of Current System

The exercise resulted in near general agreement on the strengths and weakness in the current system. Many stakeholders expressed positive views about the design of the current regime. The main strengths noted were the Canadian Electrical Code which sets consistent national standards for installation and products and is referenced in legislation by the provinces and territories, and the requirement for independent third party certification of all electrical products sold in Canada.

Another key strength is the industry manufacturers of electrical products who, for the most part are responsible corporate organizations that take product safety seriously, spend millions of dollars manufacturing safe products and ensuring regulatory compliance.

While all recognized the validity of the design of the current system, almost all stakeholders were of the opinion that major changes were now needed to address some systemic deficiencies which impair its effectiveness and which limit its capacity to deal with emerging issues. Part of the current difficulties are that, when the regulatory regime was set up in 1969 the Canadian marketplace consisted of mostly domestic manufacture and only one accredited Certification Body¹ (CB). It was determined that there was no need for federal involvement considering the role played by the P/Ts. Some thirty years later, while there continues to be some domestic manufacture, most products and components are manufactured outside of Canada and are part of a globalized production system that is much more difficult to manage. The market place is much larger with more electrical and electronic equipment, and the provinces and territories are struggling with a range of problems in their individual jurisdictions with no central, or national, coordination body. From the literature review and the issues raised independently by several or most stakeholders, six major categories of weaknesses were identified.

¹ A Certification Body is an organization accredited by the Standards Council of Canada to certify that products meet applicable standards.

1. The lack of adequate controls at the border to prevent the entry of non-approved and counterfeit products.

This is a major concern for all sectors, particularly consumer products, since an unapproved product, normally means that the product does not necessarily meet Canadian safety standards and is suspect. Non-approved products or components may either be illegal or are being imported for use in larger installations and submitted for field approval. Counterfeit products are even worse in that they carry bogus certification marks with no proof they meet safety standards and are illegal under provincial/territorial statutes. Since there is no national mechanism to prevent the illegal products from entering Canada, they then become a regulatory challenge to the 13 provinces/territories and jurisdictions that individually have to deal with them. In addition, sales over the internet of some electrical products are problematic as some are non-approved or carry counterfeit marks.

2. Lack of acceptance of responsibility for the safety of consumer electrical products resulting in uneven protection across the country.

Until Bill C-36 is passed or regulations are developed under the *Hazardous Products Act*, the federal government does not have the authority to regulate consumer electrical products and they will continue to fall under the P/Ts. It became abundantly clear across the country that the safety of consumer electrical products was no longer being dealt with effectively by the majority of P/Ts, though some P/Ts are more active than others. With the exception of Ontario that has comprehensive legislation and regulations for consumer products, most jurisdictions have focused on commercial and industrial products and devote only fractional resources to consumer products when they receive a complaint, or learn from another jurisdiction of problems. The results are: inconsistent protection of the public; unclear P/T authority given some of the P/T legislation/regulations; lack of financial and human resources; and no expertise to assess consumer electrical products. In addition, there is no central contact point for consumer complaints and recalls, in part because only Ontario has mandatory reporting and recall powers in its legislation.

It must be noted that although other P/Ts do not have the power of recall, most can seize uncertified or counterfeit products or order that they be taken off the shelves.

3. Lack of consistency in managing electrical product safety across the country causing confusion and frustration for suppliers and hazardous situations for citizens.

This is the result of significant differences that exist across the country in the powers of P/T authorities and in the implementation of their legislation and regulations. In addition to the inconsistent legislation/ regulations, responsibilities are limited to individual provincial or territorial borders, and there is a lack of: national policies, procedures and systems; a mechanism for national recall²; and independent testing at all levels (federal,

² Recall: Throughout the document the term recall is used in place of corrective action as the term recall is used by the majority of interested parties to describe any type of action taken to mitigate a risk associated with a product (replacement, refit, refund, recovery).

provincial, or territorial). The lack of consistency creates confusion, duplication and increased costs. Moreover, it can lead to conflicting response strategies across the country resulting in uneven protection from one P/T to another. The need for greater harmonization in regulations, policies and interpretations of the CEC was identified by all stakeholders outside of government.

4. Lack of a national repository of information making it difficult for regulators to operate efficiently and effectively.

There are no national information systems or data-bases in place which the P/Ts can access to identify trends in electrical product related incidents that should be investigated, to provide information on incidents that could assist them in identifying products that have been removed from sale elsewhere, or are defective.

Currently, the regulators rely on whatever information is published as well as referrals by Health Canada of any complaints it receives from the public (some 5 to 10 a week). All are simply referred to the appropriate P/T, and no reports are required on actions taken. The Electrical Safety Authority (ESA) of Ontario, the Canadian Standards Association (CSA) and Underwriters Laboratories (UL) publish lists on their websites of unsafe electrical products that have been recalled or for which warnings have been released. Additional sources of information include the network of Canadian Advisory Committee on Electrical Safety (CACES) members who are in regular contact by e-mail and telephone, and the recall information from the U.S. Consumer Product Safety Commission. However, there is no requirement for CACES members to report back to the group regarding actions taken in individual jurisdictions; thereby creating a vacuum of information which could result in duplicative efforts in dealing with suppliers and differential treatment in each jurisdiction.

5. Reduction of confidence in the Certification system, heretofore the foundation of electrical product safety in Canada.

The P/T regulators depend on the certification and approval marks and assume their presence means that a product meets all applicable standards. However, many of those interviewed expressed concerns that the certification system in Canada has reached the point where confidence is being lost and it requires change to restore its former integrity. They identified a number of problems that need to be addressed:

- the sheer number of CBs has increased to the point of confusion even among regulators;
- the competitive nature of certification where doubts are openly expressed about how severe the CBs are with clients using their marks;
- the large number of certified products in Ontario that are being recalled for major defects and posing significant safety risks;
- the lack of feedback from CBs on incident reports submitted to them by the regulators;
- the suspect quality and frequency of auditing conducted by CBs on their clients; and
- the cost and time taken to receive certification.

6. Misunderstanding of the roles and responsibilities of those involved in managing electrical product safety.

There seems to be some confusion among the regulators and interested parties as to what the role of a CB is, and what their responsibilities are. If nothing else, this misunderstanding creates confusion for suppliers and consumers.

Recommendations:

The weaknesses identified above are serious and need immediate attention. In considering them, the Report makes particular recommendations for their correction, at the same time stressing that these recommendations have to be part of a national model that can be supported by all the jurisdictions and stakeholders involved and by a sustainable funding model. The specific recommendations are outlined below.

Recommendation 1: That Canada takes immediate action to control unapproved and counterfeit products from entering the country. For example by adopting regulations under the *Hazardous Products Act* that would allow the border services to more easily stop products. This would not include products or components intended to be submitted to a Field Evaluation Agency for approval.

Recommendation 2: That Government officials negotiate with the providers of internet sales sites to encourage the inclusion of warnings to both providers and purchasers of electrical equipment of the need to comply with the standards and approval requirements of the F/P/T laws and regulations.

Recommendation 3. When a national model is chosen, that a meeting of the federal/provincial/territorial Ministers responsible for electrical product safety be convened and a Memorandum of Understanding be drafted and signed to clearly establish the responsibilities for consumer electrical products and the mechanisms for regulation.

Recommendation 4: A central focal point be established for consumers to register complaints or report incidents and to obtain information on recalls.

Recommendation 5: That technical and scientific expertise to assess the risk posed to the public by unsafe electrical products be part of any national approach.

Recommendation 6: That one central authority designated by F/P/T regulators be authorized to make decisions that would be applicable across all jurisdictions based on negotiated model policies and risk assessment criteria.

Recommendation 7: That consideration be given to developing national model legislation that the provinces and territories could adopt when changes are being made to their legislation or regulations.

Recommendation 8: That Health Canada open discussion with the provinces and territories to determine whether they would agree to have commercial and industrial electrical products included under the *Hazardous Products Act* and, through suitable regulation, to enable them to be the subject of national recall.

Recommendation 9: That arrangements be made for a national focal point for either in-house, or contracted out testing on all types of electrical products that will fall under the provisions of federal and P/T legislation when required to assess the risk or verify an incident report.

Recommendation 10. That a body be set up by the F/P/Ts to deal with the recall of any type of hazardous electrical products on a national basis. It should have the ability to:

- be the primary point of contact for reporting of incidents with any electrical product;
- be able to disseminate the reports to other jurisdictions to alert them to a potential hazard;
- be able to move rapidly to investigate the report and conduct or contract out such independent testing as may be required to assess the risk and to verify the report and whether a national recall is warranted in the circumstances;
- be able to rapidly institute a national recall and any required national publicity that may be required to alert the public to the hazard, and make the recall effective by having the recalled product returned or taken out of general use; and
- monitor the effectiveness of the recall.

Recommendation 11: That a national point of contact be established for information gathering, collection, analysis and dissemination with the ability to respond to all stakeholders that require assistance and information, such as, Health Canada, the P/Ts, the manufacturers, retailers, and the consumers. The information would need to be verified and the confidentiality concerns of the private sector respected. It should also have the ability to publicise information on hazardous electrical products including wide dissemination of recall and other information in both official languages.

Recommendation 12: That one report on incidents/defects should be directed nationally to satisfy the requirements of all provincial/territorial/federal governments.

Recommendation 13. That only one national data base be set up for the purpose of documenting information on incidents, unsafe products, analytical test data and enforcement actions taken and making the information available to all those responsible for electrical product safety. The data to remain confidential until it has been substantiated.

Recommendation 14: That the Standards Council of Canada in consultation with the CBs immediately move to review and increase enforcement of the requirements of the Canadian Procedural³ (Can P) documents as they relate to CB oversight of the manufacturers using their

³ Standards Council of Canada, *Canadian Procedural Documents*, www.scc.ca/

marks, CB responsiveness to issues raised by regulators and consider other remedial measures to assist the CBs in carrying out their responsibilities.

Recommendation 15: That the Standards Council of Canada review the need for additional requirements to address manufacturers from changing CBs by including provisions that a manufacturer of a product with a safety issue not be allowed to approach another CB to certify the suspect product until any outstanding safety issues with the particular product are addressed.

Chapter 4 addresses the question of resources required for a national approach, noting in particular that every jurisdiction and every stakeholder consulted as part of this Review strongly supported the need for a national system and a series of changes to the current arrangements. When asked about resources, not one formally offered to make a financial contribution to build and run the new system. Most cited lack of human and financial resources, possible lack of political support, and a notion that someone else should foot the bill. While the manufacturers and the CBs were not inclined to offer financial support, there was a concern that some kind of user pay system could be implemented in every province and territory similar to the scheme proposed for Ontario and of concern to manufacturers and retailers. In general, there were two views on possible funding presented.

- 1) Electrical product safety and the protection of citizens from death, severe injury, and major property damage is a “public good” and should be funded from tax dollars because it is the role of “government” to protect its citizens.
- 2) User pay where, if industry was going to be regulated, then it should pay the cost of regulation. The many industry representatives pointed out that they were reputable companies that spent many millions on designing and producing safe products, and questioned why should they be “taxed” to regulate the players who were not marketing safe products.

The scope of this study is not to resolve the funding issues or deal with possible cost recovery in detail. Rather, it is to suggest ways to take corrective action on perceived problems, and others that have arisen during the course of the work. However, it might be helpful to note that there are ways that cost recovery could work.

In the final analysis, no matter what mechanisms are selected to fund a national system, the consumer (purchaser) of an electrical product will pay for the national system, either through taxes, or a price increase on the purchased item to cover any industry costs if that is the route that is followed.

If a decision is made to proceed with a National Approach, a task group will have to be struck to identify the mechanisms for funding it.

Options for a National Approach

To address the concerns that were identified and suggestions for a national approach, six options were developed and examined.

- Option 1: The status quo.
- Option 2: A national data and information clearing house function for all electrical products.
- Option 3: Partnership Model. Health Canada responsible for national data and information clearing house and for being the National Coordinating Body in partnership with Provinces and Territories and the Standards Council of Canada.
- Option 4: Health Canada as National Focal Point and Assumes Responsibility for all consumer electrical products.
- Option 5: Standards Council of Canada (SCC) as a National Coordinating Body.
- Option 6. Not for Profit Model with various stakeholders coordinating a national approach.

Irrespective of whatever option is chosen, industry has strongly indicated a willingness to participate actively in the development and implementation of a National Approach to electrical product safety. Moreover, due to SCC's role in developing policies and accrediting standard development organizations and certification bodies, it would also be beneficial if it was an active partner.

While one option is to do nothing, the weaknesses identified urgently need resolution and with the introduction of the Bill C-36 and the potential for duplication with the P/Ts, the status quo is not an option. **Option 3** where Health Canada in partnership with the provinces and territories and the SCC assumes responsibility for National Data and Information Clearing House Function for all electrical products, policy development and for being the National Coordinating Body was identified as the preferred option by the consultants

The Roles and Responsibilities of the partners would be:

The federal role is:

- 1) to act as the national focal point for electrical safety in partnership with the provinces and territories and provide support for and coordinate the work of a new partnership structure such that:
 - a) Health Canada/Provincial/Territorial partnership Board be responsible for setting general policy direction and the enforcement of relevant legislation;
 - b) a Chief National Electrical Inspector would act as the Chief Administrator; and
 - c) a Technical Advisory Committee (CACES and other independent experts) be responsible for providing technical advice.
- 2) In addition, the new organization would be responsible for:
 - a) conducting risk assessments as per a methodology acceptable to the P/Ts and Health Canada;
 - b) receiving and acting on consumer complaints;
 - c) being a source of information and advice to the Chief Electrical Inspectors if/when they call;

- d) being the national point of contact in receiving defect reports from manufacturers (Bill C-36) and to work closely with Ontario to immediately inform its officials of the notices received since regulations in Ontario also require reporting of defective products;
 - e) managing the provincial-territorial consultative mechanisms by providing secretariat support, operating funds, etc;
 - f) reaching out to the public on notices, warnings etc. in both official languages; and
 - g) conducting national recalls of all electrical products in conjunction with the P/Ts.
- 3) Work with Canadian Border Services Agency (CBSA) to prevent the importation of non-approved and counterfeit products.
- 4) Determine mechanisms to deal with internet purchases/sales of non-approved electrical products.

The provincial-territorial role is:

- 1. to work in partnership with the federal government to develop and implement national policies, procedures and risk assessment methodology;
- 2. to regulate within their own borders for hazardous electrical products;
- 3. to participate actively in the national coordinating activities;
- 4. in those P/Ts where this is not currently occurring, to increase activities and surveillance of consumer electrical products within their jurisdictions.

Implementation

Irrespective of the option chosen, including Option 3, there are two items that should be the subject of immediate attention.

Item 1: Restoration of the Certification System and Strengthening Oversight by the Standards Council of Canada

Item 2: The Border Issues

Implementation of Option 3

Since this option is based on partnership, Health Canada, the provinces and territories and SCC will have to have intensive consultations on the model and obtain general agreement on it. There will also have to be discussions on resources.

When a national model is chosen, it is recommended that a meeting of the federal/provincial/territorial Ministers responsible for electrical product safety be convened and a Memorandum of Understanding be drafted and signed to clearly establish the responsibilities for electrical products and the mechanisms to manage the safety of these products. The development, design and ongoing administration of such a national system should involve all other key stakeholders including industry.

Chapter 1: Project Purpose and Methodology

1.1. Purpose

The purpose of the project is to review the management of electrical product safety in Canada and to develop alternative national approaches for the consideration of the National Public Safety Advisory Committee (NPSAC) and its partners.

Moreover, this is a pilot project and the results and approaches suggested are applicable primarily to electrical product safety. However, it may serve as a model for other product categories covered by National Codes such as fuels, plumbing, or elevators, where the management of the safety requirements varies across the country, or overlap could exist. The decision to look at doing so would be based on a study of the current system for those other products. The plumbing and heating industry have indicated that in their opinion the system to manage the safety of their products works effectively.

1.2. Scope

The project is limited to the management of the safety of all types of electrical products including those intended for consumers, commercial, and industrial users. The safety of electrical Medical Devices is outside the scope of the study.

1.3. Methodology

The project involved reviewing how the safety of electrical products is managed both within Canada under federal, provincial, and territorial legislation and regulations, and internationally (with a particular aim of identifying best practices); identifying the benefits and challenges of the current Canadian system; identifying the elements critical for any new national approach to be acceptable to stakeholders; and outlining examples of the types of approaches that could be considered. From the information obtained, a comprehensive Consultation Document was drafted and interview questions were incorporated. The questions were designed to obtain information and data from the interviewees about their current role, the resources available to manage the safety of electrical products, and their views on the existing system and a new national approach.

The Consultation Document, interview questions, and list of interviewees were approved by the Steering Committee and NPSAC. The Document was then sent out to all stakeholders prior to the interviews. The stakeholders interviewed included regulators, electrical product certification organizations, industry, retailers, and consumers. The list of stakeholders interviewed can be found in Appendix 1 and the Interview Questions in Appendix 2.

The results from these interviews based on the issues raised by several or most stakeholders were used to:

- identify the strengths and weaknesses in the current system;
- identify the criteria and the critical elements that a national approach must address;

- carry out a Strengths/Weaknesses/Opportunities/Threats (SWOT) analysis;
- determine the costs and benefits, if the financial data obtained is adequate for this purpose;
and
- develop and analyze possible options for the consideration of NPSAC.

Chapter 2: Electrical Product Safety

2.1. Electrical Product Safety in-Canada

2.1.1. Current Canadian Electrical Product Safety Regime

The current system to manage the safety of electrical products within Canada involves the Federal Government, the Provincial/Territorial (P/T) Governments, some municipalities, the Standards Council of Canada (SCC) and the private sector.

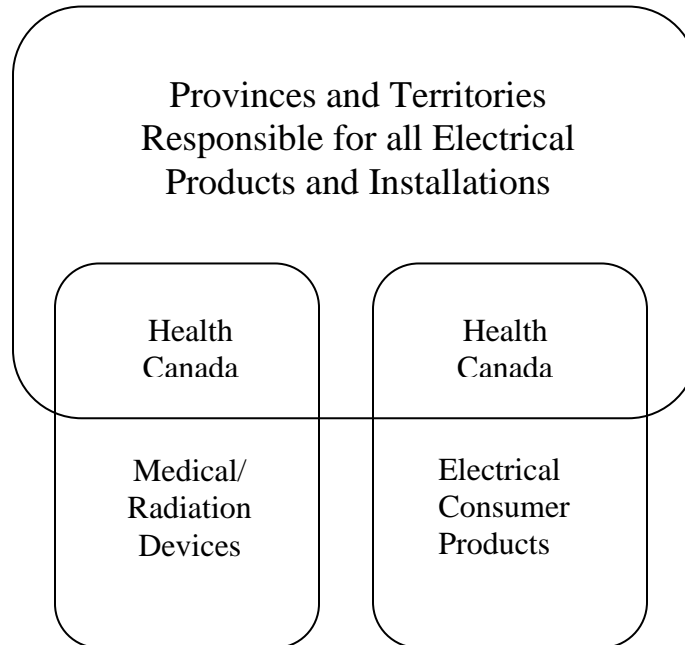
At the federal level, Health Canada has been involved in some electrical product safety issues related to consumer, clinical and industrial radiation emitting devices under the *Radiation Emitting Devices Act*. Electrical medical devices are also regulated by Health Canada under the *Food and Drug Act, Medical Device Regulations*. Although it has the authority to deal with consumer electrical products under the *Hazardous Products Act* (HPA), federal regulations were never developed for consumer electrical products. In 1969 when the Act was passed, problems related to these products were being dealt with effectively by the P/Ts and it was not deemed necessary for regulations to be established,

Every P/T has legislation and regulations to address the safety of **all electrical products** and, in some cases, they have established agreements with municipalities, or the hydro companies, to administer the legislation and/or regulations. The enforcement powers and authorities that are provided to the P/Ts through their legislation and regulations vary across the country. For example, many P/Ts do not have the power of recall but may be able to seize uncertified products or order that they be taken off the shelves. Appendix 3 summarises the various provincial/territorial legislation/regulations.

To minimize differences in the electrical product standards that must be met, the Canadian Electrical Code (CEC) was developed and is updated on a regular basis by P/T regulators and stakeholders. Part I of the CEC is the national safety standard for installation and maintenance of electrical equipment. Part II of the CEC references standards for a wide range of electrical products and equipment including medical, industrial and consumer products. There is a direct relationship between the two parts of the CEC since Part I mandates the use of “approved” electrical equipment. The term “approved” is defined to mean equipment that is certified or inspected by a Certification Body (CB) or a Field Evaluation Agency accredited by the Standards Council of Canada (SCC) for conformity with the applicable standard in Part II of the CEC. The P/Ts, by referencing the CEC in legislation or regulations, automatically adopt all of these equipment or product standards. **Moreover, the P/T statutes require that all electrical products sold, or used within their jurisdiction, are certified to the CEC standards by a CB accredited by the SCC and, as a second step, the CB is recognized by the individual Province or Territory.** Where no standard exists, P/T authorities may also accept evaluations by Field Evaluation organizations accredited by the SCC. P/T legislation/regulations require a product to carry the required certification or approval mark that shows the product has been certified or approved, and are easily recognizable to a licensed electrician and designated P/T electrical inspector.

However, federal agencies and federal buildings are exempt from having to conform with the CEC and legislation of the provinces and territories related to electrical product safety.

The relationship between P/T and federal legislative responsibilities is illustrated in Figure 1
Figure 1. Relationship between P/T and federal legislative responsibilities.



The SCC is responsible for the National Standards Systems which develops the standards, the policies for product certification and accredits and oversees the Certification Bodies.

The private sector is responsible for designing, producing and distributing electrical products that comply with the regulations within Canada.

2.1.2. Certification in Canada

Bodies that offer certification services in Canada must first be accredited by the SCC and conform to its requirements as articulated in the Canadian Procedural Documents⁴ (Can P) on conditions and procedures for the accreditation of bodies certifying products and services.

When certifying a product, a contractual arrangement is established between a CB and a manufacturer. Under such a contract, the manufacturer agrees to place the CB's mark only on products that comply with the applicable standard(s). The manufacturer contracts with the CB to carry out one or more of the following, which could be coupled with production surveillance or assessment and surveillance of the supplier's quality system:

- a) type testing⁵ or examination;

⁴ Standards Council of Canada, *Canadian Procedural Documents*, www.scc.ca/

- b) testing or inspection of samples taken from the market or from supplier's stock or from a combination of both;
- c) testing or inspection of every product or of a particular product, whether new or already in use;
- d) batch testing or inspection; and
- e) design appraisal evaluates the product to ensure that it conforms to the appropriate standard".⁶

The CB is required to monitor the manufacturing process to ensure that the certified product produced consistently meets the applicable standard(s). A CB has no regulatory powers and cannot order a mandatory recall. However, as stated in Can P 1527, a CB “will normally take strong corrective action when their mark is counterfeit” or misused and is able, if the product is hazardous, to require a manufacturer to take some form of corrective action such as public notification, removal of the mark or fixing a product⁷. Most CBs are either commercial operations or not-for-profit organisations.

Commercial and industrial electrical equipment that has to be installed requires a permit, installation by a licensed electrician and/or electrical contractor, and is normally inspected by P/T electrical inspectors or their accredited representatives. Where equipment is not certified, the P/T authorities will accept a “field approval” carried out by an SCC accredited field evaluation organizations. In very limited circumstances, equipment may also be accepted by the PT regulator as part of the electrical installation.

It would be fair to say that the backbone of the system of electrical product safety in Canada is built around the certification system, and every electrical inspector across Canada looks to ensure that only certified products are available and/or are installed and he/she does so by checking the visible certification mark on the equipment, or accepting a satisfactory field approval report from an accredited inspection body.

2.1.3. New Federal Consumer Product Safety Legislation

In April 2009, Health Canada tabled in Parliament Bill C-6 which was re-tabled in June 2010 as Bill C-36 recommending the enactment of the *Canada Consumer Product Safety Act*⁸ (CCPSA), to replace Part I of the *Hazardous Products Act*. The new proposed legislation is intended to more effectively address and respond to problems by:

- “creating a new general prohibition that would allow Health Canada to address any consumer product in Canada that poses a danger to the health or safety of the public;
- creating new authorities requiring suppliers to report health and safety related product defects and adverse incidents to Health Canada;

⁵ Tests carried out during the approval process by the Certification Body or Field Evaluation Agency.

⁶ Standards Council of Canada, *General Requirements for Bodies Operating Product Certification Systems, Can P- 3G, (ISO/IEC Guide 65:1996)*, December 1999

⁷ Standards Council of Canada, *Guidelines for Corrective Action, Can P-1527,(ISO/IEC Guide 27)*, October 2000

⁸ Bill C-36, *An Act respecting the safety of consumer products, First Reading* June 9, 2010

- creating new authorities to order national recalls or other corrective measures when products pose a danger to health or safety of the public; and
- communicating safety risks to the public: including annual compliance reports, and reports on injuries and illness”⁹.

If this Bill is passed, it will prohibit the sale of unsafe consumer products. This will result in the safety of electrical consumer products being the responsibility of both the federal government and the P/T governments whether or not regulations are developed specifically for consumer electrical products. This is one of the reasons this study was commissioned, that is, to avoid overlap, gaps, and inconsistencies that could result in confusion, duplication of effort, and extra costs for all parties. The major problems that could be created are as follows.

- Considerable duplication could exist in inspection by P/T and federal inspectors, in assessment of risks, in reporting of incidents or defects, in providing assistance or in carrying out corrective actions.
- Since property damage is of concern to the P/Ts but not necessarily to Health Canada unless there are negative health impacts, some incidents reported to and acted upon by the P/Ts may not be addressed by Health Canada and vice versa. When action is initiated by one government to improve the safety of an electrical product while no action is taken by the other, it could reflect badly on the government agency which did not take any action.
- A supplier may find that that the risk assessments carried out by two organizations are based on different frameworks and criteria and a product found compliant by a P/T may be found to be unsafe by Health Canada. Since the federal Act would apply across the country, Health Canada has the authority to take action against a product sold in a P/T irrespective of any decisions made by P/T authorities.
- P/T legislation requires that electrical equipment must be approved or certified by accredited third parties to the standards under the CEC. The federal legislation does not require certification and Health Canada would only be able to take action if the product was found to be unsafe based on the criteria to be developed. In order to require certification of a product, it would be necessary for Health Canada to mandate certification in regulation.
- Inconsistent compliance in jurisdictions depending on the level of engagement and funds available to address these issues.

The end result would be:

- suppliers not knowing whether their product is regarded as safe or not and whether it can be marketed in Canada as a whole or just inside certain P/Ts;
- confusion about which law a supplier should comply with and which law takes precedence;
- and
- confusion and antagonism between the two levels of government over the action or non action that should be followed in the case of a product involved in a serious injury or substantial property damage.

⁹ Health Canada, *Food and Consumer Product Safety Action Plan, Dec 17, 2008.*

2.2. Electrical Product Safety in Other Countries

In addition to reviewing the electrical product safety system in Canada, the regimes in other countries were examined to determine how they manage electrical product safety and whether there are best practices used elsewhere that could be applied in Canada. The full details of these regimes are included in Appendix 4. In general, most of these jurisdictions face similar problems to Canada and are finding solutions in a number of ways.

In some jurisdictions such as Australia and the European Union, the effectiveness of the systems to manage electrical product safety is compromised by the number of state or country governments who have responsibility. Therefore, there is uncoordinated surveillance and enforcement actions across countries in Europe¹⁰ and states in Australia¹¹, making cross jurisdictional action extremely difficult and resulting in:

- unsafe and non compliant products not being identified;
- delays in corrective action being taken;
- variations in enforcement and risk assessment; and
- problems identified in one jurisdiction not being dealt with by another.

As in Canada, initiatives are underway in both jurisdictions to coordinate surveillance and enforcement initiatives so there is consistency between the member countries in Europe and between states in Australia. In Europe, PROSAFE (*the Product Safety Enforcement Forum of Europe*), a non-profit organisation was established by market surveillance officers from various member countries. Its aim is to promote informal discussions between consumer product safety officers in order to share and learn from each others' experiences and to develop consistency in enforcement across Europe. PROSAFE with the financial support of the European Commission and member states has carried out a number of joint projects to identify best practices that can be used by all member states to improve consistency in surveillance and enforcement¹².

In Australia, a comprehensive review of the electrical product safety system was carried out which recommended a new system that would be underpinned by nationally consistent performance-based legislation in each jurisdiction, that surveillance and enforcement would remain the prime responsibility of State regulatory authorities with a level of national coordination using national guidelines and products; a model we will explore later in this Report. Companies would be registered and the resulting funds would help fund the system. This follows very closely Australia's initiative to reform and harmonize its consumer product safety laws as agreed to by the Council of Australian Governments. Amendments to its National legislation were passed in March 2010 and harmonization of state and territorial standards and bans is planned to be completed by 2011.

¹⁰ Personal Communication with Jan Roed, Danish Safety Technology Authority, Member of EU Low Voltage Administrative Cooperation (LVD ADCO) made up of regulators from member states involved in surveillance of electrical products.

¹¹ Electrical Regulatory Authorities Council, Review of the Electrical Equipment Safety System in Australia, Dec 2007

¹² Prosafe, *Best Practice Techniques in Market Surveillance*, February 2010, www.emars.eu

The United States has a two pronged approach to electrical product safety. The US Occupational Safety and Health Administration (OSHA) and the states and municipalities are responsible for equipment in the workplace and installed in buildings (commercial and industrial) while the Consumer Product Safety Commission (CPSC) manages the safety of consumer electrical products. CPSC does this, for the most part, not through rule making but by requiring reporting of defects which include non compliance with the voluntary standards for electrical products. CPSC also has the authority to order mandatory recalls nationally but in almost all cases, achieves national recalls through a simpler voluntary system.

OSHA also handles defective products by carrying out investigations of incidents, working with the certifiers of the products and the manufacturers regarding the necessary correction action. It then may publish a “Safety Alert” that is sent to users of the product and employers to explain the problem, the corrective action being taken by the company and recommended course of action.

While certification is required by OSHA for most electrical products in the workplace, it is not required in the US for consumer electrical products. However, most manufacturers obtain certification as a demonstration to the marketplace that their products meet the voluntary electrical and safety standards. They follow this route because proof of certification is helpful in dealing with regulators such as CPSC and is important in dealing with court cases in the event of litigation.

Since the 1980’s in the United States, two somewhat contrary trends are visible:

- (1) the movement of producer responsibility from the *control* of risk to the *prevention* of possible harm; and
- (2) the trend towards greater reliance on voluntary action, rather than on government imposition of responsibilities.

Due to the number of electrical products that are entering the market, Australia, Singapore and Japan have set requirements for reporting and certification based on the risk they pose to the public. Risk-based approaches such as these enable the regulator to focus resources on those products that present the greatest danger.

2.2.1. Approaches in Other Countries to Border Control of Unsafe Products

A major problem identified by all countries was the importation of electrical products that are found to be unsafe or counterfeit, and must be recalled.

The United States has initiated a comprehensive strategy to strength the oversight of imported products. This initiative¹³ includes:

¹³ US Consumer Product Safety Commission, *New Actions to Strengthen Oversight of Imported Products Response to Recommendations Contained in the U.S. Government Accountability Office (GAO) Report 09-803, Consumer Safety: Better Information and Planning Would Strengthen CPSC’s Oversight of Imported Products*, August 14, 2009.

- expanding the requirements for certification of products and if the product has not been properly certified, CPSC staff at the borders will be able to refuse importation;
- developing MOUs with customs services to enable CPSC staff to have access to custom's databases to investigate manifest information prior to the arrival of goods at the port;
- CPSC investigators posted at key ports of entry throughout the United States to identify unsafe products entering the country;
- training of foreign manufacturers and importers on US requirements and how to meet them; and
- a staff person (assisted by a foreign national hire) located in China to facilitate safety efforts with one of the largest exporters of consumer products to the U.S.

Moreover, the *Stop Counterfeiting in Manufactured Goods Act*¹⁴ proposed by Knollenberg, approved in US law amended the law prohibiting trafficking in products bearing counterfeit trademarks in three important ways: 1) It clarifies that criminal sanctions apply not only to those persons who traffic in goods bearing counterfeit marks, but those persons who traffic in counterfeit trademarks and certification marks themselves. 2) It would make forfeiture of the counterfeit product, the proceeds made from the sale of the counterfeit product, as well as the tools used to make counterfeit products and marks, mandatory. 3) It amended the definition of a counterfeit mark to include copies of "famous marks," which are trademarks that are very well-known and recognized by the public.

Europe is also putting into place a new import control system¹⁵ that requires traders to provide customs authorities with advance information for goods being brought into the European Community. On receiving the entry summary declaration, member States will carry out a risk analysis for safety and security purposes. Where a risk is identified, the custom officers will take appropriate action to prevent the importation of the product.

¹⁴ US Department of Homeland Security, "President Bush Signs the Stop Counterfeiting in Manufactured Goods Act" March 16, 2006, www.CBP.gov

¹⁵ HRM Revenue and Customs, *Import Control System*, www.businesslink.gov.uk

Chapter 3: Consultation Results

This Chapter presents the major findings and issues raised independently by several or most stakeholders during the interviews. There were a series of major strengths and weaknesses identified. In addition, possible solutions and recommendations to resolve these concerns are included.

3.1. Strengths of the Existing System

Many stakeholders expressed very positive views about the design of the current regime to manage electrical product safety across Canada. Those who commented on the many positive facets of the current system held the view that the strengths of the existing system should not be overlooked when formulating options for a national approach. Indeed, among the stakeholders there was general agreement that the current Canadian system provided an excellent foundation on which to build a national approach.

The existence of the CEC, described earlier, was identified as one of the major strengths of the system. Not only does it set national standards for installation in Part I of the Code but it also references national standards for a wide range of electrical products in Part II. The Code is revised on a regular cycle by a committee made up of all stakeholders including the P/Ts. All the P/Ts reference the CEC in their legislation or regulations with minimal deviations. This creates a certain level of consistency for electrical product safety across the country and reduces confusion and costs for suppliers who only have to comply with one standard.

A critical element of the existing system is the P/T requirements that all electrical products must be approved by an accredited independent third party certification body, or field approval agency to be sold in Canada. The marks applied by certification bodies and field approval agencies to products that meet the standards also assist regulators in identifying compliant products.

The existing system works particularly well for commercial and industrial electrical products that require permits and installation by licensed electricians, as noted in 2.1.2. above. The licensed electricians must check that the products being installed have been certified or approved for use in Canada. In addition, P/T electrical inspectors inspect a select number of installations to verify that the work has been carried out correctly.

The Canadian Advisory Council for Electrical Safety (CACES), which was established by P/T Chief Electrical Inspectors, was identified as a valuable forum for sharing information on electrical product safety. The Chief Electrical Inspectors are able to discuss the safety, technical, and regulatory aspects of developing, promoting, and implementing product installation and the CEC which includes the electrical product safety standards. They report on problems encountered in the field with respect to electrical safety of products and systems and provide advice to CBs on these matters. For example the committee provides advice to CBs on the application of codes or standards to electrical products including the suitability of new products, suitability of new standards, new or special requirements and the suitability of electrical product certification, listing, and examination practices. The impact of the committee is to improve consistency and the safety of products across Canada.

The Electrical Safety Authority (ESA) of Ontario was identified as an organization making a major contribution to electrical product safety in Canada through its new legislation and regulations. The regulations include provisions for the safety of consumer electrical products in Ontario, including mandatory reporting of incidents and defects, and mandatory recall powers. Corrective action taken as a result of these new regulations often results in the same action being taken across the country by major suppliers and retailers. This occurs to the point where it is almost pseudo national through its mandatory incident reporting requirements in Ontario, sharing of information with other P/Ts and the action taken by those supplying products across Canada in response to these regulations.

In addition to the strengths mentioned above, it was also noted by the stakeholders that the CBs had extensive experience in analyzing electrical products and could possibly provide technical expertise to those responsible for managing electrical product safety in Canada. Moreover, the commitment by responsible Canadian manufacturers, importers, and retailers to ensure the safety of their products was a significant contribution to the current system.

3.2. Weaknesses of the Existing System

While all recognized the validity of the design of the current system, almost all stakeholders were of the opinion that changes were needed to ensure that the system meets its objectives in an efficient and effective way. There was also recognition that the resources available to Regulators, both financial and personnel, were limited and that retention of technical skills and improved access to resources were essential elements in effecting improvements.

The most significant concerns fell into six major areas.

- 1. A major change in the Canadian market and resultant problems**
 - **Border Issues**
 - **Internet Sales**
- 2. Lack of acceptance of responsibility for the safety of consumer electrical products.**
- 3. Lack of consistency in managing electrical product safety across the country.**
- 4. Lack of a national repository of information.**
- 5. Reduction of confidence in the Certification system.**
- 6. Misunderstanding of the roles and responsibilities of those involved in managing electrical product safety.**

The focus of the next sections will be on these six major identified weaknesses and possible solutions and/or recommendations that could be implemented to address them. Many of these are based on solutions identified by the interviewees and from practices carried out in other jurisdictions.

3.2.1. A Major Change in the Canadian Market and Resultant Problems.

A major reason for change is that the marketplace has gradually moved from largely domestic manufacturing to a new global market where:

- Canada retains some manufacturing capability but a sizeable portion of electrical products and components are imported;
- the manufacturing process has become global with parts being sourced from different countries and components being substituted frequently;
- there are now many organizations who are able to certify products;
- new technologies are being rapidly adopted;
- the distinction between consumer and industrial products is becoming blurred;
- at the same time, regulatory changes since 1969 have not kept pace with these developments except for those in Ontario; and
- there has been no central coordination.

These market changes have created a number of significant problems.

3.2.1.1. Border Issues

a) Unapproved and Counterfeit Products

There is an upsurge in electrical products, particularly consumer products, arriving in Canada that do not have the required certification marks and are therefore “unapproved” for use in Canada. This does not include products, particularly industrial products, which are intended to be approved by local Field Evaluation Agencies after they have been imported and installed. It should be noted that “unapproved products” can be considered unsafe by definition given there is no way to tell whether they meet the Canadian safety standards and such products are illegal in Canada. These are products that are not certified by a CB or Field Evaluation Agency that they conform to the applicable standard under Part II of the CEC.

Yet, to date, there is no mechanisms set up to keep them out of the country before they are distributed nationwide. The situation is compounded by products that are counterfeit and bear bogus certification marks. According to IEC/IEEE¹⁶, the most common counterfeit products are small household appliances, electrical tools, electric motors, circuit breakers; fuses; switches and lighting controls; communications wire and cable and electrical connectors. The P/T regulators are unable to identify and stop unapproved/counterfeit products from entering the country since they do not have the authority to regulate importation. In a sense, the “battle” is lost if such products have already entered the country given most of the 13 jurisdictions, have the ability to prevent sales only within their borders, but have no power of recall. The CBs are attempting to deal with counterfeit products through police actions and the civil court system: a long and expensive process with no sure results. Moreover, it was pointed out that the sanctions in existing statutes are not convincing and not a sufficient deterrent to stop the supply of these products.

It became very clear from all those interviewed that stopping unapproved and counterfeit products from entering Canada was a major priority. It will dramatically lighten the regulatory load on an overloaded and fragmented system. Dealing with such products when they have

¹⁶ Pierre de RUVO, Executive Secretary IEC/IEEE, Consumer Products: counterfeit problems and anti-dumping measures, Berlin Affiliate Workshop 2006

already been distributed across Canada is difficult and the issue is critical for the regulators, suppliers, and CBs. Even worse are the “counterfeit” products that arrive bearing bogus certification marks since authorities may believe that the products bearing these marks meet the requirements of the Code. In both cases, they pose a serious risk up to and including death, serious injury, and/or major property damage. Such products are finding their way into homes and major institutions such as hospitals and schools. Currently, there has been little that has been done systematically to control them at the border.

There is also a trade element where such products are generally cheaper, of inferior quality, potentially hazardous and are competing with legitimate manufacturers who have incurred the costs of proper manufacturing, certification, and testing. Other countries are making moves to tighten up their borders; Canada can do no less.

Possible Remedy as Part of a National Model

The CBSA is charged with managing “the nation's border by enforcing Canadian laws” and “stopping people and goods posing a potential threat to Canada.” “The CBSA administers more than 90 acts, regulations and international agreements, many on behalf of other federal departments and agencies²”¹⁷. It has been successful in doing this with other products deemed to be harmful or injurious. For example, it has taken action against drugs unapproved for sale in Canada, and other hazardous items, such as products regulated under the *Hazardous Product Act* when requested. This is analogous to the situation of unapproved electrical products; the only difference is that a regulation has to be in place that the CBSA can enforce.

Currently, there is nothing to legally stop unapproved electrical products from coming into the country. Even if a regulation was to be put in place under Bill C-36, it would only apply to consumer electrical products. While this is the main threat, non-approved commercial and industrial electrical products are also coming into the country.

It is for consideration whether Health Canada could issue a regulation for all electrical products (commercial, industrial and consumer) under the *Hazardous Products Act* that would require certification of all electrical products. This would provide CBSA with the legal backing necessary to implement border control on all non-approved electrical products.

An additional factor, besides the time it takes to draft a regulation, and the time-consuming nature of the approval process, is the work required to ensure the CBSA is knowledgeable and able to do the work given CBSA’s limited resources. However, there is no need to wait on decisions on governance models and changes. The work to evaluate and initiate such a change should start now.

Recommendation 1: That Canada takes immediate action to control unapproved and counterfeit products from entering the country such as:

¹⁷ Canada Border Services Website, <http://cbsa-asfc.gc.ca>

- Health Canada examine the possibility of making regulations under the *Hazardous Products Act* for all electrical products to permit CBSA to stop unapproved electrical products from entering the country, and consider the steps required to implement the regulations in conjunction with CBSA to increase active enforcement to stop unsafe products at the border;
- training of border officials on the safety requirements and recognition of certification and approval marks;
- development of agreements or Memorandum of Understandings with foreign governments to work cooperatively; and
- training and information initiatives with foreign manufacturers to improve their understanding of Canadian requirements.

This would not include products or components intended to be submitted to a Field Evaluation Agency for approval.

3.2.1.2. Products Sold Over the Internet

The P/Ts find it very difficult to control the sale and purchase of electrical products over the internet including products that have been recalled or removed from sale by another P/T. In the USA, CPSC monitors internet sales and works with internet sales companies to ensure that to the extent possible only consumer products meeting the provisions of its legislation are sold. Moreover, Health Canada in conjunction with the US and Mexico monitors the sale of internet drugs.

Possible Remedy as Part of a National Model

Recommendation 2: That government officials negotiate with the providers of internet sales sites to encourage the inclusion of warnings to both providers and purchasers of electrical equipment of the need to comply with the standards and approval requirements of F/P/T laws and regulations.

3.2.2. Lack of Acceptance of Responsibility for the Safety of Consumer Electrical Products

It became abundantly clear in the consultative process across the country that the safety of consumer electrical products was no longer being dealt with effectively by the majority of P/Ts, though some P/Ts are more active than others. What appears to have happened is that, in the intervening years and the shifts in the marketplace, the P/Ts have concentrated their energies on regulating commercial and industrial products through various systems of licensing electricians, training them on the use of certification marks, and inspecting their work through P/T electrical inspectors. Others have arrangements with provincial Hydro companies, or, in at least two provinces, the municipalities to manage electrical product safety and carry out much of the surveillance. These regimes are more or less self supporting for commercial/industrial products. The licensing fees for electricians and charges for permits and inspections generate the bulk of their operating funds. Indeed, one province has set-up electrical inspection as a self-sustaining cost recovery agency. However, there are no mechanisms in place for cost recovery of the work on consumer electrical products.

Most P/Ts are of the view that they have a general responsibility for the safety and well-being of their citizens and, on that basis; many did at least some work on consumer electrical products. Most, if not all, are reactive when they did come across faulty or unapproved products from limited retail inspections, heard of issues and problems from other jurisdictions, or received complaints from consumers. They would react within the limits of their own jurisdictions and its legislative/regulatory provisions.

As indicated earlier, the only exception is the Province of Ontario where ESA has been proactive in the monitoring of consumer products, has enacted legislation and regulations for such products that require reporting of defects and incidents, conducts enforcement and recall actions, and publishes its results to the point where ESA could almost be considered pseudo national in scope. Its results are certainly disseminated to, and largely used by, the other provinces/territories.

The current situation has arisen due to the lack of a consensus between the federal, provincial and territorial governments as to who is responsible for consumer electrical products and how it will be funded. The net result is a series of major problems and issues.

3.2.2.1. Inconsistent Protection of the Public.

The levels of consumer protection against unsafe consumer electrical products vary considerably across the country dependent on the extent of activity in each jurisdiction.

3.2.2.2. Unclear P/T Authority to Manage Consumer Electrical Product Safety

With the exception of Ontario, within many P/Ts and the federal government, the authority to deal with consumer electrical products is not clear and it is not seen as a high priority.

3.2.2.3. Lack of Resources for Consumer Electrical Product Safety

In a number of P/Ts, electrical product safety activities are paid for from licensing and permit fees associated with industrial and commercial products with no funds available for activities related to consumer electrical products, such as market surveillance or the assessment of them. The result in most P/Ts is a limited reactive approach rather than proactive approach.

3.2.2.4. Expertise to Assess Consumer Electrical Products

Expertise does not always exist in the provinces or territories to assess the risk posed by consumer electrical products and there are no P/T testing laboratories, or funds to obtain testing services. The P/Ts very much depend on the CBs to carry out this analysis for them. The only exception is Ontario which has expert risk assessment staff and contracts out testing when required.

3.2.2.5. Contact Point for Consumer Complaints and Recalls

No one central contact point exists for consumers to report problems and defects or obtain information about defective products and products that have been recalled. An analysis of the information sites for recalled products was carried out and can be found in Appendix 5.

3.2.2.6. Lack of Adequate Sanctions

The sanctions in existing statutes are not a sufficient deterrent to stop the supply of consumer electrical products or encourage the prosecution of suppliers who choose not to comply with existing legislation. If Bill C-36 is passed, those who contravene the Act could be fined \$250,000 - \$500,000 and/or 6 months in jail for a summary conviction or on an indictment a fine of up to \$5 million and/or imprisonment up to 2 years.¹⁸

Possible Remedies as Part of a National Model

Recommendation 3. When a national model is chosen, that a meeting of the federal/provincial/territorial Ministers responsible for electrical product safety be convened and a Memorandum of Understanding be drafted and signed to clearly establish the responsibilities for consumer electrical products and the mechanisms for regulation.

Recommendation 4: A central focal point be established for consumers to register complaints or report incidents and to obtain information on recalls.

Recommendation 5: That technical and scientific expertise to assess the risk posed to the public by unsafe electrical products be part of any national approach.

3.2.3. Lack of Consistency in the Management of Electrical Product Safety Nationally

Significant differences exist across the country in the powers of P/T authorities and in the implementation of their legislation and regulations and the resultant problems and issues are outlined below.

3.2.3.1. Legislative and Regulatory Authorities

All thirteen provinces and territories have legislation and regulations for electrical product safety. While broadly the same, there are differences in provisions and enforcement powers as well as their compliance policies and the resources for enforcement. Some P/Ts wondered whether they had the authority to deal with consumer products. In addition, most do not have the power to recall a product but can seize uncertified products or order that they be removed from sale in their individual jurisdictions. A number of regulators indicated that products such as lamps or Christmas decorations removed from sale in one province were often found on the shelves in another province. This meant that the process to deal with the product had to be repeated including gathering information and

¹⁸ Bill C-36, Offences Sections 41- 48, First Reading June 9, 2010.

documenting it. There is also uncertainty as to the extent of powers in the various P/Ts with a few P/Ts indicating doubt that their legislation contained the required authorities.

The criteria for enforcement action and reporting on incidents and defective products can vary from one province or territory to another. The net result is uneven enforcement, uneven compliance, uneven protection for the public, and confusion among suppliers where a product may be removed from sale in one P/T but not in another. This confusion also creates inconsistencies in training among inspectors where some will be aware of issues and others are not. Implementation of the requirements may also differ from jurisdiction to jurisdiction.

3.2.3.2. Responsibility Limited to Provincial or Territorial Borders

The regulatory and enforcement efforts of the P/Ts are confined to their individual borders. As a result, products removed from sale in one P/T may remain on sale in other P/Ts or may be moved or dumped into another P/T to be sold. This issue is exacerbated given the plethora of internet sales occurring.

3.2.3.3. Lack of National Policies, Procedures and Systems

In addition to the differences in powers, stakeholders also indicated that there was a lack of national policies and systems to enable them to manage the safety of electrical products in an effective and consistent manner. For example:

- there is no national approach to assess risks based on uniform criteria (e.g. death, serious injury, and serious property damage) that would trigger consistent enforcement action across the country;
- there is a lack of an effective national mechanism to take problem products off the market quickly (recall).
- CACES, established as an informal network of Chief Electrical Inspectors to share information, is not supported by funding, full time staff, or recognition of the importance of this work by P/T employers (not in their job descriptions).
- there is no national compliance policy to provide direction to monitoring and surveillance and as a result, the larger retailers and companies indicated that because they are more visible they receive greater scrutiny than the smaller less visible manufacturers and retailers.

The P/Ts strongly indicated that there should be a national focal point and a responsible individual to whom they could turn for advice and to be a point of contact for enquiries/information dissemination, and help.

3.2.3.4. Lack of a Mechanism for National Recall

As noted previously, the great majority of P/Ts do not have the power of recall of products (whether commercial, industrial, or consumer). Rather they are able to ban or remove a product from sale in their own jurisdictions, but not in the other provinces and territories.

As things stand now, national recall is not possible and only Ontario can order recall within its own jurisdiction. The only way a product could be effectively banned for sale in Canada would require coordinated enforcement strategy and action in all thirteen jurisdictions banning the sale of a product, more or less simultaneously.

3.2.3.5. Lack of Independent Testing Capability

To operate a consistent program for electrical products, particularly consumer products that may be subject to a recall, there must exist the capability of obtaining unbiased technical expertise and/or test data on which to base decisions. This could be developed in-house or contracted out to an independent third party or laboratory accredited by the SCC. It cannot be the CB whose product is under scrutiny, given that the CB has a commercial and contractual arrangement with the manufacturer whose product it is certifying. Moreover, there may be liability concerns. Nor can it be carried out by a rival CB given the competitive nature of the certification business.

While Health Canada has a laboratory in which it tests items that currently fall under the *Hazardous Products Act*, it has not regulated electrical products nor had the need to establish the technical capability to test them. The P/Ts have no technical testing capability for electrical products, in large part because they have relied for many years on the CBs. From their perspective, the mere fact that an electrical product has a certification or approval mark means that the product meets Canadian standards and can be sold legally.

When Ontario is considering a product recall of a faulty electrical product, it has available to it some in-house technical expertise and, if anything further is required, it contracts out testing to an independent source to ensure that any of its risk assessment decisions are based on solid scientific evaluation.

Possible Remedies as Part of a National Model

Recommendation 6: That one central authority designated by F/P/T regulators be authorized to make decisions that would be applicable across all jurisdictions based on negotiated model policies and risk assessment criteria.

Recommendation 7: That consideration be given to developing national model legislation that the provinces and territories could adopt when changes are being made to their legislation or regulations.

Recommendation 8: That Health Canada open discussion with the provinces and territories to determine whether they would agree to have commercial and industrial electrical products included under the *Hazardous Products Act* and, through suitable regulation, to enable them to be the subject of national recall.

Recommendation 9: That arrangements be made for a national focal point for either in-house, or contracted out, testing on all types of electrical products that will fall under the

provisions of federal and P/T legislation when required to assess the risk or verify an incident report.

Recommendation 10. That a body be set up by the F/P/Ts to deal with the recall of any type of hazardous electrical products on a national basis. It should have the ability to:

- be the primary point of contact for reporting of incidents with any electrical product;
- be able to disseminate the reports to other jurisdictions to alert them to a potential hazard;
- be able to move rapidly to investigate the report and conduct or contract out such independent testing as may be required to assess the risk and to verify the report and whether national recall is warranted in the circumstances;
- be able to rapidly institute national recall and any required national publicity that may be required to alert the public to the hazard, and make the recall effective by having the product returned or taken out of general use; and
- monitor the effectiveness of the recall.

3.2.4. Lack of a National Repository for Information

There are no national information systems or data-bases in place which the P/Ts can access to provide them with information on incidents that could assist them in identifying products that have been removed from sale elsewhere and are defective or in proactively identifying trends in product related incidents that should be investigated before they become more widespread.

Currently, the regulators rely on whatever information is published as well as referrals by Health Canada of any complaints it receives from the public (some 5 to 10 a week). All are simply referred to the appropriate P/T, and no reports are required on actions taken. ESA of Ontario publishes information on all the products recalled in Ontario, while the Canadian Standards Association (CSA) Underwriters Laboratories (UL/ULC) publish lists on their websites of recalls on electrical products that they have certified or for which warnings have been released. Additional sources of information include the network of CACES members who are in regular contact by e-mail and telephone, the SCC and the recall information from the U.S. Consumer Product Safety Commission (CPSC). Care has to be taken with CPSC notices since not all of the products are sold in Canada and differences exist between the CEC and the US National Electrical Code.

The information that is needed in a national data base includes:

- information to trace and track problem products nationally such as the availability and sale of non-approved, unsafe or counterfeit products and enforcement actions across the country;
- data on death, serious injury, property damage, and analysis of trends to determine the extent of the problems;
- information on P/T/Federal legislation/regulation and product information to assist manufacturers and retailers; and
- the results of concerns over hazardous electrical products, including information on investigations and recalls.

In developing such a data-base, it is important that the information included has been verified and substantiated and the confidentiality concerns of the private sector are addressed. The release of unsubstantiated reports of safety concerns to the public can cause confusion among consumers and could adversely affect the sale of a product.

Possible Remedies as Part of a National Model

Recommendation 11: That a national point of contact be established for information gathering, collection, analysis and dissemination with the ability to respond to all stakeholders that require assistance and information, such as Health Canada, the P/Ts, the manufacturers, retailers, and the consumers. The information would need to be verified and the confidentiality concerns of the private sector respected. It should also have the ability to publicise information on hazardous electrical products including wide dissemination of recall and other information in both official languages.

Recommendation 12: It is recommended that one report on incidents/defects should be directed nationally to satisfy the requirements of all provincial/territorial/federal governments.

Recommendation 13. That only one national data-base be set up for the purpose of documenting information on incidents, unsafe products, analytical test data and enforcement actions taken and making the information available to all those responsible for electrical product safety. The data to remain confidential until it has been substantiated.

3.2.5. Reduction of Confidence in the Certification System

The P/T regulators depend on the certification and approval marks and assume their presence means that a product meets all applicable standards. However, many of those interviewed expressed concerns that the certification system in Canada has reached the point where confidence is being lost and it requires change to reach its former integrity. They identified a number of problems that need to be addressed.

3.2.5.1. The Number of Certification Bodies and Associated Problems

The number of accredited CBs has increased significantly to the point of confusion even among regulators and certainly consumers and the public do not have a good understanding of the different marks or their significance. The different marks are illustrated in Figure 2.

It was reported that “CB shopping” occurs where manufacturers and suppliers of a suspect product threaten to change or change one CB for another when a CB of record is insisting on unpopular compliance. Given the large dollar amounts involved in certification of a product, it is understandable that a CB is under commercial pressure not to lose a major account. This issue should be addressed by the SCC to ensure that any safety issue with a particular product is resolved before another CB is asked to certify that particular product.

Figure 2: Certification Marks



3.2.5.2. The Number of Certified Products Being Recalled

Ontario is the only jurisdiction that actively enforces mandatory reporting requirements for incidents involving electrical products. Their new mandatory reporting regulations have resulted in a significant increase in the number of electrical products being identified as causing, or likely to cause, serious harm or property damage and required corrective action to be taken such as a recall. An analysis was carried out of the organizations that provide information on recalled products and of ESA's database on recalled products for a period of one year from July 1, 2008 to June 30, 2009 (Appendix 5). During that period, 72 products were posted on the ESA database:

- 46 (63%) of the 72 products were certified by an accredited certification body;
- 10 (13%) of the 72 products were unapproved; and
- 14 (19%) of the 72 products were counterfeit products.

The products added to the ESA data-base had caused serious injury or substantial property damage which are defined as:

“Serious injury: Permanent impairment of a body function or permanent damage to a body structure, chronic health effects or any injury requiring hospitalization or professional medical treatment.

Substantial property damage: A loss attributed to flame emitted from a product or failure to contain an ignition source or hazardous material, or an impact on building and contents ranging from partial to total loss.¹⁹”

Since recall action is only triggered when it is judged that there is or is likely to be serious harm and 63% were certified products, this has serious implications as regulators heretofore assumed that the presence of a mark means that the product is safe. One also must keep in mind that thousands of electrical products sold in Ontario were certified by accredited CBs.

It was suggested that there is an opportunity to analyse the recall data in greater depth to determine if the recalls are being generated by manufacturers making unauthorized changes to certified products, CBs not making thorough reviews or whether in the case of joint recalls the product was actually being sold in Canada.

3.2.5.3. Lack of Feedback From CBs on Incident Reports

Typically, where there is a product failure, an incident report is filled out by the P/T regulator and it, and the product, is sent for evaluation to the CB whose mark it carries. Either no answer is received by the regulator beyond a simple acknowledgement or, if substantive answers are received, it might take months or years. It has reached the point that some P/Ts have stopped sending products to the CBs for evaluation. The problem is serious in that, for a real hazard such as fire and serious injury, the P/T needs an almost immediate answer. In Ontario, the situation is different due to the requirement in its new product safety regulation that a CB must assist in the investigation of a product.

There is also a perception that certifying bodies, regulators, police forces and border authorities do not follow up when manufacturers or retailers identify non-compliant products and did all the testing to provide evidence in support of the case.

3.2.5.4. Quality and Frequency of Auditing

There were concerns raised about the quality and frequency of auditing of manufacturing facilities carried out by CBs. For example, certain CBs only audit domestic manufacturers twice per year. This also leads to uncertainty about the quality and number of audits of manufacturers in other countries. Most CBs, or any other responsible organizations, do not normally monitor consumer products offered for sale.

¹⁹ ESA, *Final Industry Guidelines for the Management of Electrical Product Safety*, February 10, 2010

Problems exist with products coming into Canada bearing CB marks that have been granted in other countries by labs that are agents of a CB and there is some worry that this type of certification is not equivalent to that carried out in North America. As with the frequency of auditing, it was suggested that the SCC needs to provide better oversight of the work of the CBs that it accredits.

Some retailers are now auditing manufacturer's facilities (some manufacturers are being audited by 15 or 16 different retailers) and testing products prior to putting them in the stores. This is driven, not by government, but by a measure of self-protection to verify quality and, for electrical products, establish conformance, and that a CB mark is not counterfeit; in a sense, verifying the work of the certification bodies.

3.2.5.5. Cost and Time for Certification

The length of time (12-18 months) and cost (10k – 50K per product), particularly for small manufacturers, to obtain a certification mark was raised by a few suppliers as an issue. The cause may be the result of a number of factors such as delays on the part of the CB or the supplier not providing the necessary information when the application for certification of a product is made. However, delay means a product cannot reach the marketplace and with attendant loss of potential market share and profitability.

3.2.5.6. Oversight of Certification Bodies

There was a perceived lack of strict oversight by the SCC of CBs that would disaccredit a certification organization promptly for non-compliance with the Can P-3 documents.

Possible and Immediate Remedies

The very basis of the system to manage the safety of electrical products including regulations is the certification of products and associated marks attesting that the products meet the required standards. As noted above, the certification system requires considerable tightening and adjustment and this is the role of the SCC which accredits the CBs. The terms of the accreditation is contained in the Can P documents. However, the language of these documents is broad and does not specify precisely what is meant by many of the terms. The net result is some major problems as outlined in the previous chapter, particularly, the number of certified products being the subject of recalls in Ontario, and the perceived lack of cooperation of the CBs with the regulators. These important weaknesses have to be addressed.

It is the responsibility of the SCC to review the system and make the necessary oversight changes to ensure that:

- the CBs are adequately monitoring the firms that use their marks;
- the CBs supply the regulators with timely and relevant information;
- there is a clear understanding of the roles of those involved in certification;
- the complaint handling processes of the CBs are adequate; and

- the system is robust enough to account for the increase in imported products made up of multiple components manufactured by multiple suppliers and cases where there are multiple certifications of the end product and its components.

One could argue that this can be done with a rigorous application of the spirit and intent of the Can P documents without the need for extensive amendment.

In addition, the SCC must consider the major issue of how, in a competitive marketplace that the CBs can enforce their certification requirements on manufacturers who may not wish to make the required changes and who may threaten to “CB shop” if a CB does not acquiesce to less than the required measures. Remedies that should be considered include provisions that a manufacturer is not allowed to change CBs in order to obtain certification for a suspect product while there are outstanding safety issues with that particular product. If the SCC enforces a rule of this kind, it basically ensures compliance of manufacturers with Canadian safety standards since their products cannot be sold in Canada without certification to these standards.

The SCC may also wish to reconsider the possibility of having a “national mark”, one certification mark that would be recognized nationally and internationally as other countries have done. This would help to clarify the current confusion in the marketplace where consumers are faced with a plethora of marks. While authorities understand that the “c” next to a CB’s mark indicates certification for Canada, consumers and users are basically unaware of certification and have a notion that somehow “government” ensures that products offered for sale are safe. In the past, a decision was made not to proceed with one national mark due to the potential increase in costs and loss of identity by the individual CBs. However, the situation has become more confusing due to the number of CB marks that now can be found on products and further research into the issue may be useful to consider.

A lesser alternative would be a national publicity campaign to educate consumers about the importance of certification mark(s) with media advertising, posters in major retail stores, etc. conducted by either the SCC or the national coordination mechanism.

The SCC may also wish to examine the wait times in regard to small manufacturers receiving certification to determine the exact times and if there is a need for improvement and remedies are available.

Recommendation 14: That the Standards Council of Canada in consultation with the CBs immediately move to review and increase enforcement of the requirements of the Canadian Procedural (Can P) documents as they relate to CB oversight of the manufacturers using their marks, CB responsiveness to issues raised by regulators, and consider other remedial measures to assist the CBs in carrying out their responsibilities.

Recommendation 15: That the Standards Council of Canada review the need for additional requirements to address manufacturers from changing CBs by including provisions that a manufacturer of a product with a safety issue not be allowed to approach another CB to

certify the suspect product until any outstanding safety issues with the particular product are addressed.

3.2.6. Misunderstanding of the roles and responsibilities of those involved in managing electrical product safety.

There seems to be some confusion among the regulators with respect to the role and responsibilities of CBs. Regulators very much depend on the certification mark as an indicator that the product meets the appropriate standard(s) and is safe. When a problem results with a product they sent it to the CB for analysis. However, the CBs do not consider that their role is to assess the risk with a product causing an incident. They believe, as stated in Can P 3, that they are responsible only for assessing whether or not the product is in compliance with the appropriate standard or standards²⁰, even though in Can P 1527 there is a provision for action to be taken if a product is deemed hazardous.²¹ Under Can P 1500²², CBs are required to permit Canadian Regulatory Authorities to examine any information used in making certification decisions and advise the relevant Regulatory Authority Advisory Committee of any safety related product incidents. Unfortunately, the Can P document does not address the issue of a hazard not covered by the standard to which the product was certified. .

The Provinces and Territories also have the responsibility to determine which CBs' marks they will accept. Up until this point, the P/Ts have accepted any CB accredited by the SCC. Given the utility of the certification marks, the P/Ts have been reluctant to refuse or revoke this recognition. It is only in Ontario that specific criteria have been established for revocation of a CB but no action has been merited to date.

3.3. Criteria for a National Approach:

In considering possible national approaches, the Consultation Document set out a series of criteria, or guiding principles, that a successful model should satisfy. These criteria were modified based on the input received from those interviewed. The criteria are that any national approach to managing electrical product safety in Canada should:

- help reduce the risks to the public, workers and property equally across the country;
- prevent, or reduce to a minimum the possibility of unsafe electrical products entering the Canadian market;
- it must be flexible, able to respond quickly to unsafe products, and be capable of addressing the new technologies (smart grid and energy efficiency) the needs of the future;
- it must align with international trade obligations;

²⁰ Standards Council of Canada, *Can P 3G (ISO/IEC Guide 65, 1996), General Requirements for Bodies Operating Product Certification Systems*, December 1999.

²¹ Standards Council of Canada, *Guidelines for Corrective Action, Can P-1527,(ISO/IEC Guide 27)*, October 2000

²² Standards Council of Canada, *Can P 1500, Additional Requirements for Accreditation of Certification Bodies*, April 2008.

- cover all the electrical products under the purview of the Canadian Electrical Code (CEC) with the exception of Medical Devices, excluded from this study but may be considered at a later date;
- limit to the extent possible the need to make legislative/regulatory changes;
- it must be financially viable for governments;;
- ensure that electrical product safety is administered and managed consistently across the country without duplication from different levels of government;
- improve consistency in compliance policies and enforcement, and reduce unnecessary confusion and complexity among suppliers who otherwise would have to comply with the provisions of several provincial/territorial and federal Acts;
- present a minimum of unnecessary regulatory and administrative obstacles for industry;
- be compatible and consistent with the Canadian National Standards System;
- whatever information is made available must be accessible nationally and available in both official languages: and
- ensure that the chosen model treats all those regulated equally, consults them on items and issues of interest, and operates on a consistent level of understanding across Canada.

Chapter 4: Resources

Every jurisdiction and every stakeholder consulted as part of this Review strongly supported the need for a national system and a series of changes to the current arrangements. When asked about resources, not one formally offered to make a financial contribution to build and run the new system. Most cited lack of human and financial resources, possible lack of political support, and a notion that someone else should foot the bill. A number of stakeholders could be open to some kind of partnership arrangement or in-kind effort.

An estimate of costs to fund a complete program to manage the safety of electrical products including prevention, detection and enforcement was calculated for the Province of Ontario by ESA with the help of stakeholders. It was estimated to be between \$2.6 million and \$3.2 million annually²³. In the other provinces the cost of operating the program was not available. Therefore, it is assumed that the cost of running a program to manage electrical product safety nationally that is similar to the Ontario program would cost approximately 30% more. This would represent some \$3.4 to \$ 4.2 million annually.

In general, there were two views on possible funding:

- 1) Electrical product safety and the protection of citizens from death, severe injury, and major property damage is a “public good” and should be funded from tax dollars because it is the role of “government” to protect its citizens.
- 2) User pay where, if industry is going to be regulated, then it should pay the cost of regulation. The many industry representatives pointed out that they were reputable companies that spent many millions on designing and producing safe products, and questioned why should they be “taxed” to regulate the players who were not marketing safe products, who were mostly off-shore manufacturers, and who would make no contribution to fund regulatory oversight in Canada. It was noted that attempts by the Province of Ontario to raise funds for regulations of electrical products by imposing a “registration fee” on manufacturers and importers had, and has, encountered resistance from some concerned manufacturers. The province is currently reviewing the original model.

Some manufacturers and retailers view the Ontario funding proposal as not being well-designed, and are of the opinion that it would cost more in administration to the firms than the proposed fees. In addition, there is a particular worry that, if registration fees are imposed on manufacturers and importers in one province, it could happen in others, become an expensive proposition, and an administrative nightmare.

One unresolved issue is that of small importers who import electrical products into Canada for small specialty or chain stores. They are reported to be the source of much of the uncertified or counterfeit products that then cost the system major difficulties and expense. There is a

²³ Electrical Safety Authority, *Product Safety Funding Business Case*, August 8, 2008.

compelling argument that a mechanism is required to ensure that they participate in any funding mechanism being considered.

The certification bodies also rejected any notion they should help to pay for the system in Ontario to manage electrical product safety, or even to help collect fees by adding an additional amount to their bills for certification. A number of stakeholders considered this to be an efficient way of having fees collected although there may be issues related to collecting fees from CBs located outside of Canada.

The scope of this study is not to resolve the funding issues or deal with possible cost recovery in detail. Rather, it is to suggest ways to take corrective action on perceived problems, and others that have arisen during the course of the work. However, it might be helpful to note that there are ways that cost recovery could work.

4.1. Possibility of Cost Recovery

Under government financial controls, cost recovered monies are usually not retained by the government entity carrying out the work; rather they are placed into general revenue and inaccessible to the organization that collected them unless special arrangements are made. One such arrangement is the creation of a Revolving Fund used by some federal cost recovery entities to permit them to collect and retain them for particular purposes. For example, the Canadian Pari-Mutuel Agency that reports to the ADM of Administration in the Department of Agriculture and Agri-foods collects a levy of 0.8 percent of the bet on horse racing. This normally generates sufficient monies to allow it to operate as a financial entity and it applies these monies to regulate the industry (drug testing, photo finish etc.). Such arrangements are possible but not generally viewed favourably by the Treasury Board. The Standards Council of Canada retains the fees it charges for accreditation of laboratories, certifications etc. However, if cost recovery is contemplated with any of the governance options, it is for consideration whether a small revolving fund could be set up in the event the electrical manufacturers, importers and CBs would agree to contribute to fund an enhanced national approach to managing electrical product safety that could be demonstrated as being beneficial to the contributing parties.

In the final analysis, no matter what mechanisms are shown to fund a national system, the consumer (purchaser) of an electrical product will pay for the national system, either through taxes, or a price increase on the purchased item to cover any industry costs if that is the route that is followed.

If a decision is made to proceed with a National Approach, a task group will have to be struck to identify the mechanisms for funding it.

Chapter 5: Options for a National Approach

This chapter presents a number of models or options for a national approach for the consideration of NPSAC and its partners, and recommends one of the options. Support for managing electrical product safety on a national basis was strong among all those interviewed. They all wanted the national approach to be based on the foundation of the existing system and established in such a manner that all stakeholders and both levels of government would be involved.

The dilemma is that there is not one clear governance model for a national approach that stands out above all others, rather there are a series of options for consideration. It would also be fair to say that the federal officials interviewed for this project have expressed varying degrees of interest in playing a major role, but never definitely indicated their departments', or agency's, interest in being the national coordinator.

There are a number of reasons for this, uncertainty about the scope of the requirement, the lack of detailed information about what the provinces and territories were doing in electrical product safety, and the issues that inevitably arise with regard to the availability of human and financial resources to take on new work and responsibilities in times of restraint. One could argue that the worst of all possible scenarios would be to recommend mechanisms for consideration that would have no hope of implementation, or implemented in such a way that the urgency is lost among other priorities, or worse, would be implemented without proper agreement of the need for the work, and adequate funding to carry it out.

In particular, there has to be agreement among all parties, federal, provincial, and territorial (F/P/T) governments, SCC, suppliers and CBs, as to who is responsible for what, who is going to do what over the short and long term, and who is going to expend the time and resources to make sure that the individual commitments of the F/P/T entities are carried out. This needs to be not just in the spirit of any agreement, but with the required human and financial resources being continually applied over the longer term. The field of F/P/T agreements is littered with good intentions signed by Ministers but which have fallen into less than optimum states, either through lack of will, resources, or adequate oversight mechanisms to make sure the original agreements are working as intended. The authors of this Report want to suggest options and make a recommendation that will make common sense, will be sound, implementable, and stand the test of time.

In addition, all of following options have, as a consideration the overriding principle that:

there has to be equal protection of citizens irrespective in what part of Canada they live. For example, the life and property of a citizen in B.C. is just as valued as that of someone living in Ontario. This concept of consistency and greater harmonization of policies, processes and legal requirements was reiterated by many stakeholders as being an essential part and objective of any national system. It is clear that some options will satisfy this principle more than others.

Irrespective of whatever option is chosen, industry has strongly indicated a willingness to participate actively in the development and implementation of a National Approach to electrical product safety. Moreover, due to SCC's role in developing policies and accrediting standard

development organizations and certification bodies, it would also be beneficial if it was an active partner.

5.1. Option 1: The Status Quo

It could be argued that one option is to maintain the status quo; always tempting when the road ahead is not that clear, when resources are problematic, and when times of restraint are upon us. However, the status quo is no longer tenable. As noted under “Weaknesses” in the previous section, the problems are serious, urgently need solutions, and are multiplying. Canada and its citizens are vulnerable, and, the situation is forever changed with the introduction by the federal government of new consumer product safety legislation with the potential for overlap and duplication with the provinces and territories. With the exception of Ontario, the liability due to the inconsistencies will continue. The status quo is not a viable option. Moreover, the adoption of Bill C-36 creates a window of opportunity to address some of the problems discussed above.

5.2. Option 2: A National Data and Information Clearing House Function for all Electrical Products (Minimal Action)

Health Canada could simply offer the provinces/territories a national clearinghouse function for data and information collected from the provinces/territories, stakeholders, and others, **for all electrical products**, but no other services. Health Canada will have to establish databases for reported incidents and recalls that will include consumer electrical products if the Bill to establish a new Act is passed. The inclusion of a limited number of incidents involving commercial and industrial products should add only minimal costs.

This arrangement would require a federal-provincial agreement developed by mutual consent, possibly through the deliberations of NPSAC. Health Canada could collect, compile and share information about adverse incidents, identification and evaluation of potential risks, conduct risk assessments, and exchange information with other authorities (nationally and internationally), stakeholders, and the general public. It is conceivable that Health Canada could contract out this work to the Electrical Safety Authority which already does this work for Ontario.

The establishment of standards applicable to all electrical products would remain the responsibility of the existing Canadian Electrical Code Committee of CSA that is responsible for producing the CEC. With respect to compliance and enforcement, the Provinces and Territories would retain their current responsibilities. The federal government would maintain and increase its responsibilities under the new *Canada Consumer Product Safety Act*, if the proposed Act is passed.

5.2.1. Roles and Responsibilities

The federal role would be:

1. to act as a clearing house for data and information;
2. to conduct risk assessments using a methodology developed in consultation with the P/Ts and is acceptable to them;

3. to receive consumer complaints; and
4. To enforce the legislation for which it is responsible.

The provincial-territorial role would be:

1. to continue to regulate all electrical products in their jurisdictions;
2. inform Health Canada of identified problems and issues; and
3. To enforce the legislation within its jurisdiction.

5.2.2. Resources Required

For Health Canada, the following human and financial resources would be required.

Based on the Ontario experience, a maximum of 8 full time staff (FTEs) may be required with the new reporting and risk assessment functions required by the new Act specifically for electrical consumer products and associated information data base(s), analysis up to and including risk analysis, and the need for a national recall and post recall activities.

As readers may know, ESA is already doing this work in Ontario. If the federal government carried out this work, then presumably Ontario could stop this activity and basically transfer the responsibility to the federal government which would do it nationally. An alternative is for Health Canada to contract the work to ESA which has already developed appropriate data bases, knowledge, and staff capacity, and Health Canada would apply the ESA work to the national as opposed to just the provincial sphere. This would require agreements from the other P/Ts, possibly through NPSAC, that they agree to this contracting out process, and the ESA work would be acceptable to them. This may not be a problem in that the other P/Ts regularly receive ESA information and notices, have faith in them, and act on them.

The costs to Health Canada of contracting to ESA would be approximately between \$3.2 - \$4.4 million annually depending on the type of service required and whether the relationship would be solely for reaction to reports received.

Provincial-territorial resources would continue at current levels and productivity may be helped by having access to the federal data bases, risk assessments etc.

5.2.3. The Pros and Cons

Pros

- 1) Compiling information on a national and even an international basis would allow the identification of potential hazards and the initiation of corrective action sooner and more effectively.
- 2) The existing system would continue with minimum change.

- 3) All provinces/territories, especially those with smaller populations, suppliers, certifiers, and consumers would benefit from a central system for collecting and evaluating information about potential hazards.
- 4) Costs for data collection for all stakeholders would be minimized.
- 5) Since this is a minimal model the cost to the federal government would be less than the other models noted later in this document.

Cons

- 1) Suppliers would continue to be faced with differing provincial and territorial compliance requirements
- 2) There would not be a “national” system, simply a loose collection of provincial/territorial ones with some federal involvement if required.
- 3) Compliance and enforcement could vary greatly from one province or territory to another impacting on the safety of the public, the liability for the provinces/territories and lacking a level playing field for suppliers and uneven protection for consumers.
- 4) A national database would have to be set up, and mechanisms considered as to what would trigger a national “alert” and how the information would be verified and confidentiality respected.
- 5) The potential for each P/T setting registration fees would continue.

5.3. Option 3: Partnership Model

As above, Health Canada assumes responsibility for a National Data and Information Clearing House Function for all Electrical Products, takes responsibility for being the National Coordinating Body. However, a formalized inter-jurisdictional body similar to NPSAC would provide guidance at a high policy level on a national approach to electrical product safety. This F/P/T/partnership Board would be established to provide guidance on national standards, policies and risk assessment criteria for all electrical products, the collection and sharing of information concerning risks associated with these products, the enforcement of relevant legislation. This would allow the different jurisdictions to have confidence in the decision making and in a process to resolve any disagreement. Secretariat and support to the Board would be provided by Health Canada. Members would be appointed by their various F/P/T governments.

This option would be a much more proactive approach than Option 2. It would require Health Canada to staff to a higher level of involvement and coordinate a federal-provincial-territorial partnership. In doing so, it may wish to make provision for further expansion if it is later decided to take on responsibilities for other products, such as, plumbing, heating and cooling, that are regulated the same way as electrical products, through the use of certification and

inspections. By all accounts, these industries face the same problems as those being found in the electrical industry, and some of the same remedies may apply.

The F/P/T Partnership Board would create the position of “**National Electrical Product Safety Inspector**”, analogous to the Federal Fire Marshall and his leadership role in fire related hazards working with P/T Fire Marshalls. Such an office would be responsible for implementing the decisions made by the Board and coordinating all parties involved in electrical product safety at the same time respecting the autonomy of the provinces and territories.

Acting under the guidance of the Partnership Board, and working in close collaboration with the provinces, territories and Health Canada, the National Electrical Product Safety Inspector would:

1. act as the national focal point for electrical product safety;
2. Coordinate in consultation with the F/P/T Board the development of policies on matters such as risk assessment and compliance and enforcement, and seek to establish consensus on these at the national level;
3. collect information about electrical products, conduct risk assessments, and share information with interested parties;
4. coordinate national recalls, refer incidents requiring enforcement action to the appropriate jurisdiction and (if part of Health Canada) engage into compliance and enforcement action to the extent possible under federal legislation, in conjunction with the provinces where necessary;
5. work with border services and other interested parties to try prevent the importation of non-approved and counterfeit products; and
6. provide administrative support for federal-provincial-territorial consultation mechanisms.

In addition, some form of action commitment(s) must be developed and endorsed such that all parties are accountable; either agreed to in minutes of meetings, or signed commitment documents. In addition, and as an essential component, a review mechanism must be developed to determine that all parties have fulfilled their obligations. Indeed, regular reviews of past actions of all parties to the agreement should be mandated, reviewed annually, and captured in an annual Board Report to the federal and P/T Ministers. The review could be carried by the Program Evaluation group of Health Canada that reports to the Deputy Minister.

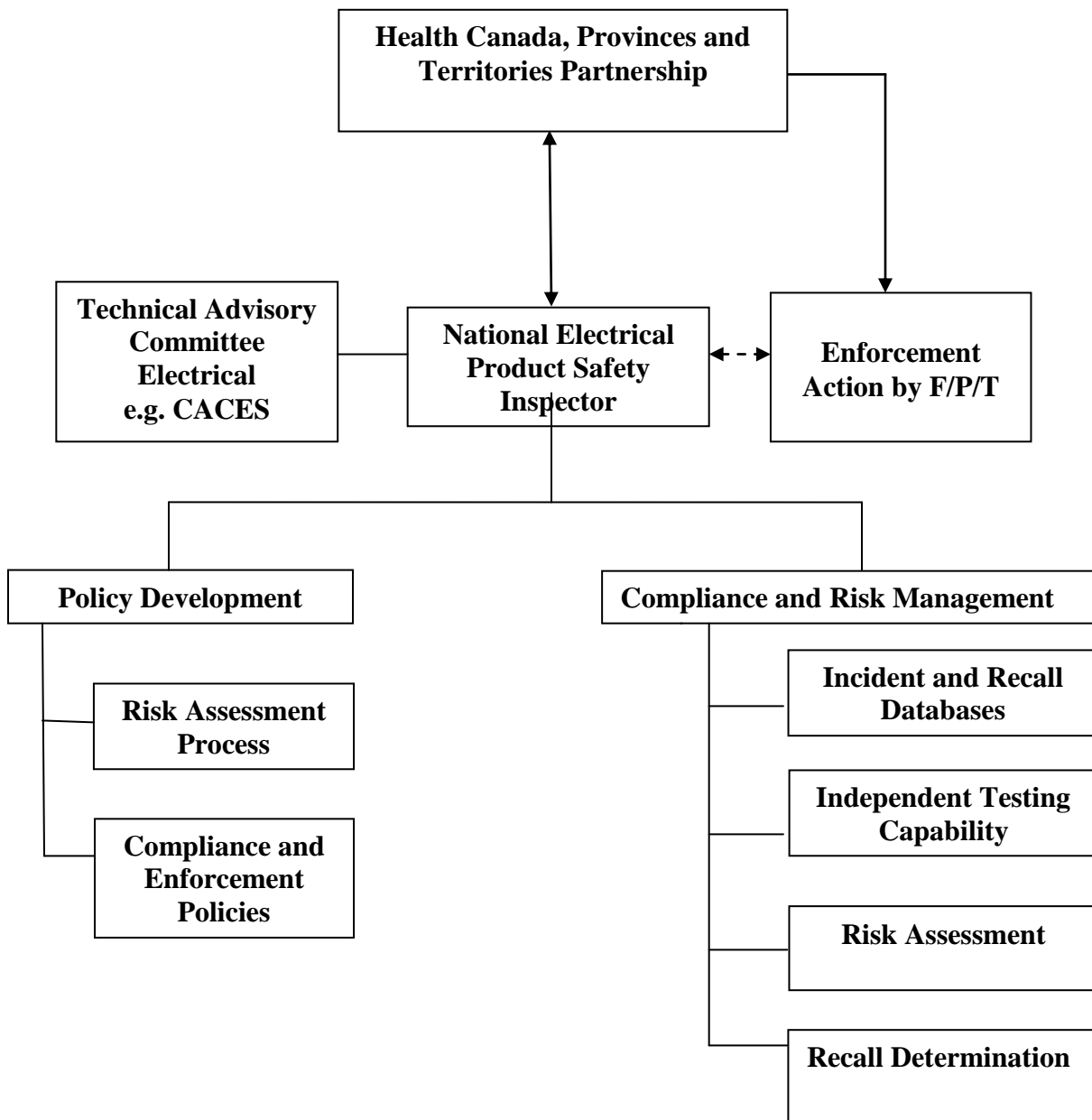
The organization will require a strong technical component to offer detailed advice and the existing CACES Committee made up of all the Chief Electrical Inspectors of the provinces-territories, would admirably fulfill part of the role in terms of their expertise in installations and the application of the CEC. Other experts could be invited to participate in the technical advisory committee on a full or part time basis depending on the expertise required.

A further requirement will be access to technical laboratory expertise for testing of electrical products either for conformance when there are doubts, or to check on the safety of items under scrutiny. This could be obtained by augmenting the federal hazardous products laboratory, or obtaining the required testing from independent laboratories with the required expertise.

Provincial-territorial governments would retain their jurisdiction on various aspects of electrical product safety (commercial and industrial). Enforcement of legislation would be carried out by the federal/provincial/territorial government officials. With federal/provincial/territorial agreement and cooperation, it is assumed that legislative changes would not be required.

Figure 3 illustrates the type of structure that may be established to implement this option or even the options 4 and 5 with slight modifications.

Figure 3: Partnership Structure



In the longer term, as part of its mandate, the partnership may also want to sponsor model legislation and regulations worked out by federal-provincial-territorial officials such that, if there is agreement to more closely align these, the various jurisdictions have the required models when occasions arise to make changes in their respective jurisdictions.

It is possible that Option 3 could be implemented incrementally as Provinces and Territories agree to participate.

Formal national coordination mechanisms to solve particular problems through cooperation with provinces/territories have been achieved in other sectors, particularly where there were/are recognized hazards. For example, the Workplace Hazardous Materials Information System (WHMIS) is an example of a federal-provincial initiative where both levels of government have cooperated successfully to deal with hazardous materials in the workplace. In this case, Health Canada serves as the national coordinator for the governance and administration of WHMIS in Canada since a decision was made at the beginning to use the *Hazardous Products Act* (HPA) which Health Canada administers. Also, Health Canada holds the national secretariat for the federal, provincial and territorial government partnership system. Each of the thirteen provincial, territorial and federal agencies responsible for occupational safety and health have established employer WHMIS requirements within their respective jurisdiction through changes to their legislation to harmonize with the federal statute. A careful review of the WHMIS model could indicate best practices and any weaknesses that could be corrected to strengthen accountabilities.

Health Canada and the provinces/territories should consider a WHMIS type of arrangement under the current *Hazardous Products Act*. The provinces and territories could ask that commercial and industrial electrical products be included under the *Hazardous Products Act*. This could allow Health Canada to make the required regulations to institute a national recall (for commercial and industrial products), essentially on behalf of the provinces and territories. The process of setting this up would take time but, once accomplished, it would have the merit of having a truly national scheme that could be operated by one entity, and cover all electrical products, be they consumer, commercial or industrial.

A potential for overlap and duplication will exist on passage of Bill C-36 where there will be an onus on manufacturers and others to report a defective product both to the federal government and to Ontario under its existing legislation. It is understood Health Canada has already determined it will become the focal point for the Bill C-36 reports. To avoid a dual reporting regime in Canada one report could be directed nationally and then distributed to the provinces and territories.

Recommendation: That Recommendation 7 be considered: That Health Canada open discussions with the provinces and territories to determine their interest in having commercial and industrial electrical products included under the *Hazardous Products Act* and, through suitable regulation, to enable them to be the subject of national recall.

5.3.1. Roles and Responsibilities

The federal role would be:

1. to act as the national focal point for electrical product safety in partnership with the provinces and territories;
2. to promote the development of generally accepted policies on matters such as risk assessment and compliance; and
3. to provide support for and coordinate the work of a new partnership structure such that :
 - a) Health Canada/provincial/territorial partnership would be responsible for setting general policy direction and the enforcement of relevant legislation;
 - b) a National Electrical Product Inspector would act as the Chief Administrator; and
 - c) a Technical Advisory Committee would be established to provide technical advice.
4. In addition, the new organization would be responsible for:
 - a) conducting risk assessments acceptable to the P/Ts;
 - b) receiving and acting on consumer complaints;
 - c) being a source of information and advice to the Chief Electrical Inspectors if/when they call;
 - d) being the national point of contact in receiving defect reports from manufacturers (Bill C-36) and to work closely with Ontario and other P/Ts to immediately inform its officials of the notices received;
 - e) managing the federal-provincial-territorial consultative mechanisms by providing secretariat support, operating funds, etc;
 - f) reaching out to the public on notices, warnings etc. in both official languages;
 - g) conducting national recalls of all electrical products in conjunction with the P/Ts.
- 5) Work with CBSA to prevent the importation of non-approved and counterfeit products.
- 6) Determine mechanisms to deal with internet purchase/sales of non-approved electrical products.
- 7) To work with the P/Ts to enforce regulations.

The provincial-territorial role would be:

- 1) to work in partnership with the federal government to develop and implement national policies, procedures and risk assessment methodology;
- 2) to regulate within their own borders for hazardous electrical products and enforce the regulations;
- 3) to participate actively in the national coordinating activities;
- 4) to contribute to the surveillance of electrical products including consumer electrical products within their jurisdictions.

5.3.2. Resources

For Health Canada, the following human and financial resources would be required.

- 1) As in Option 2, some 8 FTE in H.Q. to deal with information and analysis, including risk analysis, policy development and the need for a national recall and post recall activities.
- 2) 2 FTE for the National Electrical Product Safety Inspector and office support.
- 3) At least 2 FTE to supply secretariat and administrative services to the F/P/T Partnership Board and the CACES, plus operating and travel requirements for meetings;
- 4) Approx. 2 electrical engineers as additional laboratory staff plus equipment, or the equivalent dollars to allow contracting-out.
- 5) A further 1 FTE to do liaison activities with the Canadian Border Services, the industry and other stakeholders etc.

For Provincial/Territorial Governments

One of the difficulties in determining what resources, or additional resources, may be required to enhance P/T surveillance of consumer electrical products, and react to a national recall, is that detailed cost figures are not available for the current situation. The P/Ts devote the fractional time of individual inspectors to consumer electrical products as time permits, or in reacting to complaints. One could surmise that the addition of an inspector in each P/T jurisdiction specifically to deal with consumer electrical products may make the difference, that the 13 P/T would benefit from such an addition to the extent that meaningful involvement with consumer electrical products would be achieved, and they could interact with their regional federal counterparts involved in administering the *Hazardous Products Act* or new federal legislation.

This would suggest a requirement for, a maximum of 13 FTE, perhaps 10 FTE if the territories decide their operations do not need that level of commitment. These would have to be funded by the provinces/territories, or by the federal government, or user pay, as part of the MOUs negotiated among Ministers. Judging from the P/T meetings and discussions with Chief Electrical Inspectors, it would be a hard sell for these jurisdictions to provide the necessary resources, though more senior P/T officials could consider the issue that the federal government is willing to build the national focus if the provinces/territories are willing to partner and provide the field support required. This is all the more reason to open a dialogue with senior officials and Ministers to determine what level of support could be expected from P/Ts. If the answer is “no” or “nothing”, then Option 3 will only proceed if the funding for the minimum of 10 FTE is found within the federal system or any other source, such as, “user pay”.

5.3.3. The Pros and Cons

Pros

- 1) This model would provide a nationally consistent approach to the steps in the management of electrical product safety that include prevention, reporting/ surveillance, and risk assessment.

- 2) Greater safety of electrical products through national measures to deal with hazards.
- 3) Reduction in confusion and costs to suppliers due to improved national consistency in policies, risk assessment criteria and criteria for enforcement.
- 4) Minimal disruption to the current system already in place in the provinces and territories though some harmonization of policies to make a national system completely compatible.
- 5) Possibly limited objectives for the coordinating body at the beginning and see how its role and its coordination mechanisms evolve over time.
- 6) Covers all electrical products covered by federal and provincial/territorial legislation and regulations

Cons

- 1) Potentially added costs to the federal government and, to a certain extent, the provinces/territories as they would need to enhance staff to offer the national perspective, coordination, and information sharing required.
- 2) Some provinces/territories may not want to have federal involvement in what they perceive as provincial responsibilities.
- 3) Implementation subject to the willingness and commitment of the provincial/territorial/federal governments, certification bodies and suppliers to adopt national policies developed by a national coordinating body.
- 4) Corrective actions and enforcement would not necessarily be carried out in a nationally consistent fashion.

5.4. Option 4: Health Canada as the National Focal Point and Responsible for all Consumer Electrical Products

Health Canada would act as the National Focal Point and also assume responsibility for all consumer electrical products across Canada

In this scenario, Health Canada would assume complete national responsibility for consumer electrical products; the provinces and territories would continue to regulate commercial and industrial products but not be otherwise involved, and would cease whatever operations they conduct for consumer products. While it has been observed that these efforts vary across the country, the main effect would be in Ontario where that Province has enacted strong electrical product protection legislation and regulations that operates particularly well in the consumer electrical safety field. A major factor in Health Canada assuming national responsibility would be agreement with Ontario that it would cede this responsibility to the federal government (Health Canada) and repeal its legislation/regulations for consumer products.

Under Option 4, with Bill C-36 or regulations under the *Hazardous Products Act* and Ontario vacating the consumer electrical field, there would be only one national report on defects required from industry

The major change from Option 3 above is that Health Canada assumes all responsibility for consumer electrical products. It may choose to administer its responsibilities the same way, as outlined above, namely, to appoint a National Electrical Product Safety Inspector and to establish a Board structure and a technical advisory committee, continue to use the CEC and the use of certification marks, and add a testing component.

Health Canada may also be able to require, as per the Can Ps overhaul, or to exert pressure on the CBs to release the findings of product incident investigations as legislated under Bill C-36 and protected under the Access to Information Act. This it could do through arguments that Health Canada is the national body and the information is required to protect the public. It is possible for Health Canada, through regulations, to require registration of CBs and only recognise certain CBs for use in national regulations, not necessarily every CB that is accredited by the SCC as is currently being done by the Canadian Food Inspection Agency regulating Organic Foods, and which reserves the ability to recognise only designated CBs. Lack of cooperation could result in re-evaluation of that CB's recognition by the federal government for the purposes of regulation of electrical products.

The major additional requirement would be for federal inspectors in the regions to deal with consumer electrical products. Health Canada already has a network of inspectors located across the country to enforce its regulations and mandate under the *Hazardous Products Act*.

Health Canada would determine the need for national recalls and enforce them across the country. It has experience in conducting national recalls with non-electrical products covered by the *Hazardous Products Act*.

5.4.1. Roles and Responsibilities

The federal role would be:

1. to act as the national focal point for consumer electrical product safety;
2. to conduct risk assessments;
3. to receive information and act on consumer complaints;
4. to be a source of information and advice to the Chief Electrical Inspectors if/when they call;
5. to manage the provincial-territorial consultative mechanisms by providing secretariat support, operating funds, etc.;
6. reach out to the public on notices, warnings etc. in both official languages;
7. to conduct national recalls of all defective consumer electrical products;
8. enforce its legislation and regulations; and
9. prevent the importation of non-approved and counterfeit products.

The provincial-territorial role would be:

- 1) to regulate within their own borders commercial and industrial electrical products;
- 2) to participate actively in the national coordinating activities.

5.4.2. Resource Implications.

For Health Canada, the following human and financial resources would be required. Under this option, there would be no requirement for a technical advisory body although it could be very useful and no requirement for a National Electrical Product Safety Inspector.

1. As in Option 2, some 8 FTE in H.Q. to deal with information and analysis up to, and including risk analysis, and the need for a national recall and post recall activities.
2. Approximately 2-electrical engineers as additional laboratory staff plus equipment, or the equivalent dollars to allow contracting-out.
3. A further 1 FTE to do liaison activities with the Canadian Border Services, the industry and other stakeholders etc.
4. Some 10-13 regional inspectors

5.4.3. The Pros and Cons

Pros

- 1) A uniform system across Canada for the management of consumer electrical products.
- 2) Manufacturers and importers of consumer products would be assured that they would only have to meet one set of regulations enforced by one agency, thus keeping costs to a minimum.
- 3) A federal response would be available to deal with imports and offshore manufacturers who may not be meeting the required standards and, if required, allow the federal government to dialogue with foreign governments (government to government action) to seek appropriate remedies.
- 4) The provinces/territories would be able to focus their scarce resources on commercial and industrial products and installations since they would no longer have to consider consumer electrical products.
- 5) Consumers would be protected equally across the country from unsafe consumer electrical products and have one agency to deal with if a problem occurs.
- 6) Economies of scale could be achieved by regrouping all activities concerning consumer products under one roof.

Cons

- 1) A regime of this kind would introduce split jurisdiction where commercial and industrial electrical products would be covered by provincial/territorial legislation and “consumer” products by federal inspectors, inviting endless debate as to whether a product is defined as a “consumer product” or not, and who would be responsible for it.
- 2) For many years, provinces and territories have been assuring the electrical safety of consumer products through their individual legislation/regulations. While there are some differences among them as to how they operate, and uncertainty as to the degree of scrutiny applied to consumer products by some P/Ts by and large, the provincial/territorial systems worked reasonably well up until the change in the market place. A federal system imposed on these arrangements could be perceived to be duplicative and wasteful.
- 3) Some provinces may strongly object to what they would view as federal intrusion into areas of provincial/territorial jurisdiction.
- 4) Under this model, the federal government would be mounting a large program expansion that would require substantial expenditures and the hiring of additional qualified staff in a time of recession and scarce resources.
- 5) If the federal government did not require third party certification of consumer products, Certification Bodies and suppliers, who would be obligated to market safe products, would be negatively affected.

5.5. Option 5: Standards Council of Canada (SCC)

The previous options have projected major roles for Health Canada as being the logical federal government focal point. Not only was Health Canada involved in initiating the project to investigate the possibility of developing a national approach in collaboration with the P/Ts and others, but it will be responsible for administering the federal Bill C-36 if it is passed. However, another possible national government focus to coordinate a national approach is the SCC, a Crown Corporation that reports to the Minister of Industry.

The SCC’s current mandate is that of stewardship of the National Standards System including responsibility for accrediting Standard Development Organizations and CBs. It is under its aegis that the CEC is developed, and the resulting standards are used by the CBs to certify that electrical products meet the required Canadian standards. In a real sense, the SCC is heavily involved in ensuring that the foundation of the current regulatory regime based on national standards and certification for electrical products in Canada is sound.

The SCC is a standalone operation, well staffed, and well managed. In the interests of not reinventing the wheel, it represents an already created organization, already involved in electrical product safety and, in a similar way with standards and regulations of the other industries, (such as, plumbing, heating and cooling). Indeed, the SCC recently started to explore the possibility of it becoming a national clearing house for reports on electrical product safety issues of certified products and their dissemination to the P/Ts but has hesitated for lack of funding and a mandate.

An alternative for consideration is that the SCC could act as the national focal point and coordinate a F/P/T partnership...

As regards the SCCs roles and responsibilities under this Option 5, it could develop a managerial structure the same as that outlined for Option 3 above, that is, with a National Electrical Product Safety Inspector, the consultative committees, and linkages to the P/Ts. Its responsibilities could include:

1. to act as the national focal point for the coordination of electrical product safety;
2. to coordinate the development of national policies and procedures;
3. to establish and administer national databases and information sources;
4. to coordinate the assessment of risks acceptable to F/P/T governments;
5. to receive information and consumer complaints;
6. to be a source of information and advice to the Chief Electrical Inspectors if/when they call;
7. to manage the provincial-territorial consultative mechanisms by providing secretariat support, operating funds, etc.;
8. to reach out to the public on notices, warnings etc. in both official languages;
9. to deal with the border control issues as a federal entity in liaison with the CBSA.
10. to refer issues that require enforcement action to the appropriate government.

.The resources required would be the same as for Option 3, namely:

- 1) As in Option 2, some 8 FTEs in a central office to deal with information and analysis up to, and including risk analysis, and the need for a national recall and post recall activities.
- 2) 2 FTE for the National Electrical Product Safety Inspector and office support.
- 3) At least 2 FTE to supply secretariat and administrative services to the F/P/T Partnership Board and the CACES, plus operating and travel requirements for meetings;
- 4) Approx. 2-3 electrical engineers as additional laboratory staff plus equipment, or the equivalent dollars to allow contracting-out.
- 5) A further 2 FTE to do liaison activities with the Canadian Border Services, the industry and other stakeholders etc.
- 6) There is also the unresolved question of some 13 to 10 FTE required by the provinces/territories to handle their side of the partnership for consumer electrical products. The same arguments as outlined above are applicable.
- 7) There is a further dimension that favours the SCC as a possible national focus. It is a Crown Corporation, collects monies for the services it renders, and is able to keep and use this money to fund its services. It also has a direct relationship with the Certification Bodies, indeed charges them for accreditation and for ongoing surveillance. Should SCC decide that any new national approach should be partially funded by the CBs, it is in a position to either raise the accreditation fees, or impose an additional fee on them.

Further, since it is a Crown Corporation, and should it be determined and agreed to by industry, that manufacturers and importers would pay one national fee for regulatory oversight; it could be directed to the SCC, and used exclusively for its new role. This Option 5 offers the possibility of being able to readily collect funds from stakeholders (assuming there is stakeholder agreement).

5.5.1. The Pros and Cons

Pros.

- 1) The SCC has direct control over the CBs accreditation. Hence, it has the means of enforcing cooperation on electrical product safety issues; obtain test results and other relevant data from the CBs with, of course, guarantees of privacy and commercial-confidentiality for privileged information.
- 2) The SCC has experience in establishing and maintaining information data bases.
- 3) By becoming the coordinator, SCC would literally be able to draw the CBs into the process where they would be truly part of the regulatory process, not on the fringes in some quasi manner that, to this point, has been unclear given their commercial contractual arrangements with manufacturers.
- 4) SCC is known nationally and internationally and is well known and respected
- 5) SCC should be able to make representations to the Canadian Border Service in regard to non-approved and counterfeit products and with the backing of its Minister (Minister of Industry).
- 6) Its staff is familiar with electrical products and their regulation, and the P/T regulators and their staff, many of whom serve on either SCC committees or standard writing committees.
- 7) SCC would be able to use CACES as a technical advisory body, perhaps NPSAC if more broad policy considerations are required.

Cons

- 1) It would require a change of mandate for the SCC beyond its current role.
- 2) As a Crown Corporation it may not be able to negotiate on a Department to Department basis and may have difficulties in doing this.

5.6. Option 6: Not for Profit Model

A not-for-profit National Coordinating Body be formed and responsible for all coordinating activities for electrical product safety.

Part of the difficulty with the previous scenarios, except perhaps for that of the SCC, is that they are all government driven, and rely totally on government officials and resources; this in a time of fiscal restraint. However, if the base for consideration was opened to include the stakeholders and they were willing to self-regulate as some other industries have done, such as the chemical industry, then there is an argument to be made that the stakeholders, themselves, with some government involvement, could contribute to electrical product safety. One model proposed to NPSAC was that of ACI Central. This is a non-profit organization, incorporated under the laws of Prince Edward Island and provides a design registration service, the issuing of Canadian Registration Numbers and maintains an online database of registration numbers information data that has been used by a number of provinces and territories. Currently, the Maritime Provinces and the territories rely on ACI Central to review boilers, pressure vessels, pressure fittings and pressure piping against approved designs and procedures. This is done on behalf of all the participating members and saves the participating members from having to deal with enforcing regulations²⁴. A National Coordinating Body on the ACI model could be the centrepiece and gear up to do the work itself, or it could contract it out. If contracting out was the chosen route, such items could be:

- the collection, collation and analysis to incidents, data, and reports contracted to the Electrical Safety Authority of Ontario (as proposed previously), a university, or an industry association, such as, the Electro-Federation Canada. One could argue that ESA is already doing this with, so far, no charge to the federal government but, given its (ESAs) need for funds, this situation will not continue much into the future.
- contracting out risk assessment to a university or a private sector firm;
- contracting out electrical testing to independent laboratories that have expertise in the area of electrical product safety.

In essence, the National Coordinating Body could assume the same roles as proposed for the SCC under Option 5 except it could be a not-for-profit body, and could be attractive if the SCC rejects the change in mandate that Option 5 would require. The same coordinating mechanisms, a senior policy advisory structure and a technical one could be in place. One addition would be the Board of Directors made up of those organizations that would be asked to contribute the required resources. (see below under resources)

There are also a range of possibilities for a model of this kind. For example, this model could also be used as a regulatory model whereby a not-for profit is created with each province/territory/SCC and HC being a Director. They would all share the costs and appoint members. The National Electrical Product Safety Inspector would be like the CEO reporting to a Board of Directors.

There would, of course, need to be a close liaison between the National Coordinating Body and Health Canada and its legislation when it came to recalls. As with the previous discussion in regard to the regulation banning the import of unapproved and also counterfeit products,

²⁴ ACI Central website, www.acicrn.com/aboutus

assuming Health Canada agrees to enact it, then Health Canada would, on an ongoing basis, be dealing with the Canadian Border Services Agency on these issues.

5.6.1. Roles and Responsibilities

The role of the National Coordinating Body

- 1) to act as the national focal point for electrical product safety;
- 2) to conduct risk assessments;
- 3) to receive information and consumer complaints;
- 4) to be a source of information and advice to the Chief Electrical Inspectors if/when they call;
- 5) to manage a provincial-territorial consultative mechanism by providing secretariat support, operating funds, etc.;
- 6) reach out to the public on notices, warnings etc. in both official languages.

The role of Health Canada would be:

- 1) liaison and participation with the national coordinating body;
- 2) continue to regulate consumer electrical products;
- 3) conducting national recalls; and
- 4) stopping (with CBSA) the importation of non-approved and counterfeit products.

The role of the provinces-territories would be:

- 1) liaison and participation with the national coordinating body;
- 2) continue to regulate all electrical products in their jurisdictions;
- 3) offer advice and information on problems and issues.

5.6.2. Resources

The National Coordinating Body would require funding and would look to a variety of sources. Since its formation would avoid the need for the growth of the public service, yet it will be doing a “public good” one could surmise that a contribution from Health Canada could be anticipated. Thereafter, it would be up the industry, including the CBs, whether they would like to also make contributions. In essence, the organization would represent a particular form of government-industry partnership.

As to the resources required by the National Coordinating Body, it would be:

- 1) as in other Options, some 8 FTEs to deal with information and analysis up to, and including risk analysis;
- 2) 2 FTE for a Chief Executive Officer and office support.

- 3) at least 2 FTE to supply secretariat and administrative services to the Advisory Board and the CACES, plus operating and travel requirements for meetings;
- 4) a further 2 FTE to do liaison activities with the Canadian Border Services, the industry and other stakeholders etc.; and
- 5) And/or funds for contracting out the services noted above.

Health Canada would also need to have resources to deal with national recall and border issues, perhaps 3-4 FTE.

There is also the unresolved question of some 13 to 10 FTE required by the provinces to handle their side of the partnership for consumer electrical products. The same arguments as outlined in other options are applicable.

5.6.3. The Pros and Cons

Pros

- 1) Contacting out would limit the number of FTEs required to start and run the operation.
- 2) The mechanism could lend itself to industry involvement in collecting and analyzing information and, assuming the industry would see this as an advantage to itself, to police the market, and industry may be willing to make a financial contribution that would lighten the requirements for government funds.
- 3) It moves the onus from the regulators to a partnership with industry.
- 4) It could have all major stakeholders contributing to the public good.
- 5) It could be the least costly option.

Cons

- 1) It could be viewed as less effective than a “government” entity with the presence that entails when it comes to dealing with other departments and agencies.
- 2) A national system that is “contracted out” may not attain the required stature, both domestically and internationally, that is required.
- 3) Contracting out is often more expensive than in-house work since each contractor is undertaking the work for a measure of profit.
- 4) It is not clear that all P/Ts would accept work done by ESA. While most P/Ts recognize its advanced legislation/regulations, some are of the view that P/T autonomy is paramount.

- 5) Agreements would have to be reached with Health Canada, all provinces/territories the CBs, and most stakeholders, to establish such an activity and its funding mechanism.

Implementation may require legislative amendments depending on the exact role that the agency carries out.

Chapter 6: Conclusions and Implementation

Recommendation

Option 3, which is a partnership between Health Canada and the provinces/territories, is the preferred option. Under this option, Health Canada would assume responsibility for National Data and Information Clearing House Function for all Electrical Products, takes responsibility for being the National Coordinating Body, and works in partnership with the provinces and territories.

6.1. Rationale

Electrical product safety is a “public good” and in the Canadian context there is a strong argument that it should be a federal government entity that acts as the National Coordinating Body and works in partnership with the provinces and territories. Health Canada is a natural choice because of its experience with the administration of the *Hazardous Product Act*, and its tabling of Bill C-36 that replaces Part I of this Act. Certainly, this option meets most, or all, of the criteria that were put forward against which the possible options could be measured.

Should there be some impediment to implantation of Option 3, then a second option would be that of the SCC to be the focal point. It is recognized as not being as “clean” as the option proposed, but it is a feasible model.

The other options are also “workable” but, for a variety of reasons were not chosen because they seem more difficult to implement, are more complex, and it was/is not certain what might be their degree of acceptability.

6.2. Immediate Implementation

Irrespective of the option chosen, including Option 3, there are two items that should be the subject of immediate attention.

Item 1: Restoration of the Certification System and Strengthening Oversight by the Standards Council of Canada

If the SCC agrees, this can proceed on an immediate basis to make the required corrections to the certification process and restore the system to its pre-imminence as the backbone of the certification system.

Item 2: The Border Issues

While other nations are moving to protect themselves against the importation of unsafe or counterfeit products, Canada has not yet done so. If Health Canada agrees, it should move immediately to implement the following Recommendation that is:

Recommendation 1: That Canada takes immediate action to control unapproved and counterfeit products from entering the country such as:

- Health Canada examine the possibility of making regulations under the Hazardous Products Act for all electrical products to permit CBSA to stop unapproved electrical products from entering the country and consider the steps required to implement the regulations in conjunction with CBSA to increase active enforcement to stop unsafe products at the border;
- training of border officials on the safety requirements and certification and approval marks;
- development of agreements or Memorandum of Understandings with foreign governments to work cooperatively; and
- training and information initiatives with off shore manufacturers to improve their understanding of Canadian requirements.

These regulations should include all electrical products, industrial, commercial, and consumer, so that any item that does not have a certification mark, and by definition is an unsafe product for use in Canada, will be barred from importation.

A regulatory change will take time to implement, hence the need to start immediately. At the same time, and while the regulations are published and awaiting public comment, there will be a need to determine how exactly this will be done by Health Canada and the CBSA. Other countries are looking into various schemes, for example, where Europe is putting into place a new import control system, and the US CPSC is taking the initiatives shown on page 8. It is also understood the US border service is offering to register US companies' ports of entry and to alert them to any shipments supposedly for them that are arriving in other ports.

Moreover, it may be valuable to explore CBSA's mandate with respect to administering legislation on behalf of the provinces

6.3. Implementation of Option 3

Since this option is based on partnership, Health Canada and the provinces and territories will have to consult intensively on the model and policies such as risk assessment and compliance to obtain general agreement on them. There will also have to be discussions on resources since there are unanswered questions about funding the minimum of 10 FTE needed in the provinces/territories to follow-up on the regional work required on consumer electrical products. Health Canada will have to identify whether it will hire staff or contract out some of the headquarters requirements. When there is general agreement on the model, the steps to implement the option will include:

1. analysing provincial/territorial policies to determine what if any changes will have to be made in policies and procedures to enable a national system to be developed;
2. drafting and reaching agreement on Memorandum of Understanding between the provinces/territories and Health Canada that sets out the roles and responsibilities;

3. establishing the Board of Regulators and Advisory Committees and their terms of reference;
4. developing common policies, methodologies and criteria that would establish the foundation for the regulatory organizations to work more closely together, make consistent decisions and have confidence in the results and decision of the other organizations;
5. drafting of a common compliance policy regarding the actions to be followed for different types and levels of harm;
6. drafting of procedures to be followed; and
7. joint training would be required to ensure that the inspectors and analysts are applying the common policies, methodologies and criteria in a consistent manner.

Meeting between Ministers to sign the agreed commitments of officials may be somewhat difficult given that, in the various jurisdictions, electrical product safety is not the responsibility of Ministers of Health, but rather a number of different ministries such as labour, etc. depending on the province/territory.

A key aspect for implementation is to ensure that there is sufficient accountability built into the model so that there is regular third party review on progress to ensure that all sides are living up to the commitments.

In the event that not all provinces/territories wish to immediately subscribe to this approach it could be implemented incrementally until such time as all or most provinces participate.

6.4. Conclusion

The findings in this Report were reached through near general agreement on the strengths and weakness in the current regime. The weaknesses are serious and need immediate attention. As to the range of options, it is clear that the Status Quo is not viable, that Canada has to move forward and make changes. A range of options are presented of which Option 3 is recommended, that is, a partnership between Health Canada and the provinces/territories. Irrespective of which option is chosen, it is essential that it can be supported by all the provinces, territories and federal governments, all other stakeholders and that a sustainable funding model is identified.

Signed,

Elizabeth Nielsen
Peter C. Cameron
Mario Simard.

Appendix 1: List of Stakeholders Interviewed.

Consumer Associations

Mel Fruitman, Consumers Association of Canada,
Bill Huzar, Consumers Council of Canada,
Norma McCormick, Chair, Consumer and Public Interest Committee
of the SCC
Genevieve Reed, Option Consommateurs,

EFC (Montreal)

Mario Foucault; GE Canada
Pascale Daviau, Thomas & Betts Limited
Angelo Greco, Stellpor Design
Eric Deschenes, Schneider Electric
Pierre Desilets, Leviton Mfg. of/du Canada

EFC Toronto

Joseph Neu, EFC
Shelley Bacon, Northern Cables Inc.
Elan Azar,, Mitsubishi Electric Sales Canada Inc.
Bruce Rebel, LG Electronics Canada, Inc.
Dorothy Tully-Petersen, Alcan Cable;
Warrington Ellacott, Whirlpool Canada;
Maurice D'Mello, GE Canada industrial group;
Michael McCrea, MABE Canada Inc;
John Archer, MABE Canada Inc ,
Gary Bennett, Hubbell Canada LP;
Serge Michaud, Thomas & Betts Limited;
Jason Crossman, Hubbell Canada LP,
Mathias Gebser, Siemens;
Richard de Lhorbe, Schneider Electric Canada.
Richard Martel – CAMA staff member

CIPH

Jason Bourque /Ralph Suppa
Scott Macdonald, Envirogard Products
Thomas Gervais, LAARS Heating Systems

Canadian Manufacturers and Exporters

Paul Clipsham

Joint Meeting,

Canadian Process Control Association

Trish Torrance—Manager
Michael Holterman, Peacock
Kevin Martyn, MagnetrolAnd

Heating and Refrigeration and Air Conditioning Institute of Canada

Martin Luymes—Vice President
David Terlizzi—Technical Advisor

Canadian Process Control Association (CPHA)

Richard Lewandowski, General Manager, Endress +Hauser
Ryan Kershaw, Bestobell AquaTronix
Trish Torrance,

Retail Council of Canada Toronto

Gary Rygus, RCC
Tracey Jones, Home Hardware Stores
Doug Smith, Sears
Scott Harwood, Sears
Jennifer Barbazza, Walmart
Cynthia Hill, CTC

Retail Council of Canada Vancouver Best Buy

Brendan Alexander, Director, Loss Prevention
James Hardcastle, Director, Merchandising Operations
Christopher Gouglas, Senior Corporate Counsel
Kristian Littmann, Corporate Counsel, Legal Services
Nicole May, Merchandising Manager
Lindsey Leclair, Associate Corporate Counsel.

US Associations:

Vince Baclawski, NEMA, (USA)
Josh Rosenburg, IT Industry Council, ITIC, (USA)
Megan Hayes, Consumer Electronics Association, CEA (USA)
Guy Benjamin Agilent Technologies
Joseph Neu, Electro-Federation Canada

BNQ, Quebec, Oct 27, 2009

Jacques Girard, Director, Du Québec
Sylvie Gingras
Marie-Claude Drouin
Jean Rousseau

CSA Toronto Nov 2, 2009

Doug Geralde
William Burr
James Brown
Daniel Langlois
Robert J. Falconi

Intertek Toronto Oct 9, 2009

Derwyn Reuber
Paul Moliski

QPS - Meetings were postponed

ULC/UL Toronto Oct 26, 2009

Rae Dulmage
Ann Weeks
Don Ackerman, UL
Gunsimar Paintal

Standards Council of Canada

Stephen Head

Stephen Cross
Mike Bourassa
John Walter

Alberta
Chris M. Tye, Executive Director, Safety Services, Public Safety Division,
Municipal Affairs
Pierre McDonald, Administrator/Chief Inspector-Electrical Safety Services

British Columbia
Jeff Vasey, Executive Director, Building and Safety Policy Branch,
Ministry of Housing and Social Development
Tracy Green, Liaison Manager, Building and Safety Policy Branch,
Ministry of Housing and Social Development

BC Safety Authority
Harry Diemer, President and CEO, BCSCA,
Catherine Roome, Chief Operating Officer
Stephen Hinde, Provincial Electrical Safety Manager

BC City Electrical Inspectors
Farmand Ghafari, Supervisor Electrical Inspections/Safety, Burnaby;
Ark Tsisserev, Chief Electrical Inspector, Vancouver

Manitoba
Bryan Beger, Electrical Inspector, Manitoba Labour and Immigration;
Mike Anderson, Chief Electrical Inspector, City of Winnipeg;
Lawrence Ferchoff, Manager of Electrical Codes and Standards, Chief
Electrical Inspector, Manitoba Hydro

New Brunswick.
Arnie Wilkins, Director, Technical Inspection Services
Shawn Paulsen, Chief Electrical Inspector

Newfoundland and Labrador
Rene Molloy: Chief Electrical Inspector, Manager of Electrical Safety
Services, Government Services
Dennis Eastman: Director, Engineering and Inspection Services,
Government Services
Donna Kelland, ADM, Government Services

NWT
Ron McRae, Manager, Electrical/Mechanical Section, Inspection Services.
Public Works and Services
Richard Marion, Chief Electrical/Elevator Inspector,
Ron Hiscock, Electrical Inspector

Nova Scotia
Robert Cormier, Director of Public Safety, Department of Environment
and Labour,
David Wigmore, Risk Management, Building, Fire and Technical Safety
Division;
David MacLeod, Provincial Chief Electrical Inspector,
David Clements, Nova Scotia Power;
Craig MacDonald, Halifax Regional Fire and Emergency

Nunavut
Ed Zeebee

Ontario ESA
Peter Marcucci
Maria Iafano
Norm Breton
Ministry Official Larissa Hretchka –Manager, Policy Branch
Ed Gulbinas, Ontario Fire Marshall’s Office

PEI
Ted Kitson, Chief Electrical Inspector, Public Safety
David Blacquiére, Provincial Fire Marshal

Quebec Régie du Bâtiment du Québec,
Claude Thibeault, Ministère du Travail
Gilbert Montminy, Régie du Bâtiment du Québec
Serge Goulet, Régie du bâtiment du Québec

Saskatchewan
Garry Magnien, Supervisor Business and Technical Services, SaskPower,
Brian Krasium, Executive Director and Chief Inspector, Ministry of
Corrections, Public Safety and Policing

Yukon
Randy Taylor, Manager Building Safety, Consumer and Protective
Services
Doug Badry, Chief Electrical Inspector, Consumer and Protective Services

Health Canada Consumer Product Safety Bureau
Sandra Wright, Manager, National Coordination Division (NCD),
Denis Roy, Project Officer, Mechanical and Electrical Hazards Division
Mark Veitch, National Co-ordination Division (NCD)
Graham Stewart, Project Officer, Consumer Product Safety Bureau

Canadian Association of Chief Electrical Inspectors
Shawn Paulsen, Chairman

Appendix 2: Interview Questions

The main purpose of this consultation document is to elicit the views of a broad band of stakeholders. The foregoing text sets the stage for a series of questions cast to make sure that all stakeholders have an opportunity to fully express their views on possible changes to the current system to manage electrical product safety. It should be noted that some of the questions differ depending on the stakeholder(s) being interviewed. This is because not all stakeholders have the same interests or involvement in electrical product safety across Canada. However, in the spirit of complete transparency, all of the questions are being sent to all stakeholders so that everyone has a full understanding of the lines of enquiry.

The results of the interviews will be confidential and only a summary of the amalgamated comments will be made available to decision makers and included in the final report. As mentioned previously, the information obtained from these interviews will be used to:

- identify the criteria and the critical elements that a national approach must address;
- verify the legislative and regulatory information in Appendix A;
- identify the benefits and challenges to establishing a national approach;
- carry out a SWOT analysis,
- determine the costs and benefits, if the financial data obtained is adequate for this purpose;
- develop and analyze possible options; and.
- prepare a final report for the consideration of NPSAC.

5.1. General Questions for all Stakeholders.

1. What role do you play in the current regime to manage electrical product safety?
2. What resources financial and human are required to maintain this role?
3. From your perspective, is there any advantage in adopting a national approach to the management of electrical product safety, in terms of:
 - a. Standard setting?
 - b. Information collection and sharing?
 - c. Assessment of risks?
 - d. Compliance and enforcement?
 - e. Providing information on non-complying products to the concerned parties or the public?
 - f. Sharing or consolidation of expertise?
 - g. Sharing of financial burden and economies of scale?
4. A number of criteria are presented in the consultation document against which any model proposed in the end will be measured. Are these criteria appropriate? Are there other criteria or alternative criteria that should be considered?

5. What are your views on the electrical product safety system in Canada? Are there any problems? If yes, what is the cause?
6. If you had the option to be able to change the management of electrical product safety in Canada, what would you do, and what sort of mechanism would you prefer?
7. Of the models proposed in Section 4.0. which one(s) seems to be the most appropriate with respect to these aspects, and why?
 - a. Federal government to cover consumer electrical products and the Provinces/Territories cover commercial and industrial products and installation?
 - b. Federal government acting as a center for collection, evaluation and sharing of information?
 - c. National Provincial/Territorial/Federal Coordination Body?
 - d. Contracting out all or certain responsibilities to an existing public or private authority?
 - e. Establishment of National Commission or Agency?
 - f. A combination of some of the above?
 - g. Other type of approach?
8. What would you see as your organization's role in a new approach to manage electrical product safety system? Why?
9. If a national approach was followed, what are the critical aspects that need to be considered, or included, in order for it to be acceptable to your organization? What are the main benefits of a national approach? What obstacles, if any, would have to be overcome to achieve a national approach? How could they be addressed?
10. How could a national approach be funded?
11. Are there any questions that we should have asked but did not? If yes, what are they and why?

5.2. Specific Questions for Health Canada

1. In putting forward the Canada Consumer Product Safety Act were consultations held with the provinces and territories on the safety of electrical products, and, if yes, what were their views at the time?
2. Is Health Canada currently working on regulations for consumer electrical products that would support the Bill and, if yes, could these be shared with your consultants?
3. How does Health Canada plan to implement the Bill with respect to consumer electrical products? What resources are available to accomplish this?
4. How does Health Canada identify potentially hazardous electrical products?

5. What risk assessment process is followed and what criteria are used to determine when corrective or enforcement action should be initiated?
6. When a risk posed by an electrical consumer product is identified, how is it handled?
7. How does Health Canada interact with the provinces/territories on such risks? Or with the certification bodies? Is there any follow-up?
8. To what extent do you rely on the various levels in the supply chain?
9. Under Bill C-6, does Health Canada consider, for example, that an electrical outlet or an electrical furnace installed in a home will fall under the definition of a consumer product?
10. How is Health Canada planning to deal with the potential duplication of responsibility?

5.3 Specific Questions For The Provincial and Territorial Governments

1. Your government has been administering the safety of electrical products for many years. Could you describe
 - how your organization ensures compliance;
 - how does it monitor the market; and
 - how does it enforce its Act and regulations in terms of industrial and consumer electrical products?
2. With reference to the table in Appendix A, could you please elaborate on the powers your inspectors have? Are there additional powers that would be helpful?
3. Are there shortcomings to the current level of service and, if so, what is the cause (e.g. factors that have arisen as part of the changing marketplace, global trading, imports, counterfeit or unapproved products, resources)? If yes, what are the possible remedies?
4. When you receive a complaint about an electrical industrial or consumer product, how do you handle it?
5. Do you receive notifications of recalls from other provinces/territories and what actions are taken in response to any received?
6. What risk assessment process is followed and what criteria are used to determine when corrective or enforcement action should be initiated?
7. How is information on complaints or incidents shared internally and nationally, for example, with a certification body, other jurisdictions or other stakeholders? What is the outcome of sharing this information? If the result is an enforcement action, do other jurisdictions take similar enforcement actions?

8. How do you see the passage of the *Canada Consumer Product Safety Bill*, impacting on your work?

5.4. Specific Questions for the Standards Council of Canada and the Certification or Approval Bodies

The Standards Council of Canada (SCC)

1. Does the SCC ever receive complaints from regulators, manufacturers or other interested parties about product(s) that carry a certification mark and do not meet the required standards? If yes, could you provide a breakdown from last year, or the year before?
2. How does the SCC follow-up with them?
3. Does SCC have the responsibility, or has it taken the responsibility, to publicly report problems and issues?
4. How does the SCC interact with the provincial/territorial regulators of electrical products?

The Certification or Approval Bodies

1. What is your role as a certification or approval body with respect to the safety of electrical products within the current system?
2. What are the policies and procedures of your organization with respect to certifying or approving an electrical product?
3. What do you do if you receive a complaint or information that a product is defective and has not met or is not meeting, the standards on which the mark is based?
4. What do you do if you determine that the product is not meeting the standard?
5. What is your current relationship with the regulators, Federal, Provincial/Territorial?
6. Do you have contract guidelines in place that allows you to inform regulators when a manufacturer is not meeting the electrical standards that are signified by your mark?
7. Does your organization inform the Standards Development Organization or Regulator if a problem is identified with a standard?

5.5. Specific Questions for the Manufacturers, Importers, and/or Sales Agents

1. How does the Canadian electrical product safety regime differ from those in other jurisdictions?

2. Are there cost implications of complying with the current system and, if so, what are they, are they reasonable or unreasonable and why?
3. What is the relationship between your organization and the accredited body (or bodies) you use for certification or the provincial/territorial authorities for approval?
4. When your organization identifies a product that poses a risk, how do you deal with it? Is it reported to a government inspector? To the Certification Body? Others? Does your organization take any corrective action?
5. Do the differences in provincial/ territorial regulations cause your organization any administrative, financial problems? If so, how do you think they could be resolved?
6. What are your views on the charging of registration fees to fund a national electrical safety system?

5.6. Specific Questions for the Retailers

1. Do retailers have any obligation related to the electrical safety of consumer or industrial products in their stores?
2. Who do you rely on to determine that an electrical product you are selling complies with regulatory requirements?
3. Do the differences in provincial/ territorial regulations cause you any administrative, financial problems?
4. When you identify a product that poses a risk, how do you deal with it? Do you report it to a government inspector? To the Certification Body? Others? Do you take any corrective action?

5.7. Specific Questions for Consumer Representatives

1. Are there particular aspects of electrical product safety under the current scheme that are not being addressed from the perspective of consumers?
2. Are consumers aware that electrical products need to be certified to safety standards and carry a certification mark or be approved by a provincial/territorial authority before being sold in Canada?
3. What, from the perspective of the consumer is important to consider when designing a national approach? For example, should there be one central place to report incidents or should it be local? How best to get safety information or information about certification marks to consumers?

4. Where would a consumer go to make a complaint? Is it an easy or difficult process? How could it be improved?
5. Do consumers find it difficult to obtain information about recalled consumer products? What would be the most effective way of informing them? Does there need to be a central place where they are listed?
6. Even if a model from this document was acceptable to all sides, would it completely cover your (consumer) concerns, that is, would there still be gaps or omissions?
7. If a national approach was implemented, would consumers be willing to pay for any increase in cost required to fund such an approach?
8. If a number of changes are suggested and not all can be implemented for cost reasons, are their particular priorities your organisation would like to have?

Appendix 3: Summary of Provincial Territorial Legislation.

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|-----------|--|--|---------------|------|------------------|---------------|--------|---------|----------------|--|---|
| AB | Manufacture, install, sell or offer for sale uncertified or unapproved products | Safety Codes Act, Electrical Code Regulations | CEC 20 | x | x | x | x | x | x | Safety Services Branch, Municipal Affairs, Accredited Municipal Govt | Safety Codes Council, Municipal Govt |
| BC | Use , offer for sale, sell, display or dispose uncertified electrical products | Safety Standards Act, Electrical Safety Regulation | CEC 21 | x | x | x | x | x | x | Building and Safety Policy Branch, Ministry of Housing and Social Development, BC Safety Authority, Municipal Govt | |
| MB | Uncertified or unapproved products used in the generation, transformation, transmission, distribution, supply or utilization of electric power or energy | Manitoba Electrical Code; Electricians' Licensing Act ; Manitoba Hydro Act; Workplace Safety and Health Regulation Part 38 Electrical Safety | CEC 21 | x | x workers | x | x | | x | Manitoba Labour and Immigration (part II stds in CEC) ; Manitoba Hydro; City of Winnipeg | Manitoba Hydro, City of Winnipeg appoints Chief Electrical inspectors |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|-----------|---|---|----------------|-------------|-------------------------|------------------------------|---------------|----------------|-----------------------|--|---------------------|
| NB | No person shall install, attempt to dispose of, dispose of or use any electrical product and their components which are not certified by the CSA, the ULC or any other recognized testing laboratory acceptable to the Chief Electrical Inspector or approved by the Chief Electrical Inspector | Electrical Installation and Inspection Act, | CEC 20 | x | x | x | x | | | Dept of Public Safety, Technical inspection services | |
| NL | “Offers for sale, sells or installs electrical equipment and appliances in the province the person shall ensure that equipment or appliances are certified by an agency that has been accredited | Public Safety Act; Electrical Regulations | CEC 22, Part 1 | x | x | x Order corrective action | x | | x | Government Services, Engineering and Inspection Services | |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|-----------|---|---|---------------|-------------|-------------------------|-------------------------------------|---------------|----------------|-----------------------|--|--|
| | by the Standards Council of Canada.” | | | | | | | | | | |
| NT | No person shall sell, display, advertise, use, offer for sale or otherwise dispose of, in the Territories, any electrical equipment that has not been approved in accordance with these regulations | Electrical Protection Act Electrical Protection Regulations | CEC 22 | x | | x | x | | x | Public Works and Services | |
| NS | No corporation, company, or person shall sell, have for sale, display, rent, lease, advertise, install or use any electrical device, appliance or equipment unless it is certified as approved equipment, as defined in the | Electrical Installation and Inspection Act Electrical code Regulations | CEC 22 | x | | x Power to order a recall | x | | x | Department of Environment and Labour, Public Safety Division, Chief Electrical Inspector | Fire Marshal Fire inspectors Nova Scotia Power and other utilities |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|-----------|--|--|---------------|-------------|-------------------------|---|---------------|----------------|-----------------------|---|-------------------------------|
| | Code, by a certification organization acceptable to the Chief Inspector. (2)The Chief Inspector may approve the installation and use of electrical equipment in accordance with the Code. | | | | | | | | | | |
| NU | “No person shall sell, display, advertise, use, offer for sale or otherwise dispose of, in the Territories, any electrical equipment that has not been approved in accordance with these regulations | Electrical Protection Act and Regulations, under revision, | CEC 18 | x | | x | x | | x | Depart of Community and Government Services | |
| ON | No person shall use, advertise, display, sell, offer for sale or other disposal | Electricity Act 1988 Product Safety Regulations | CEC 21 | x | x | X Power to order a recall, cor- | x | x | x | Electrical Safety Authority | Ontario Fire Marshalls Office |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|------------|--|--|---------------|-------------|-------------------------|-------------------------------------|---------------|----------------|-----------------------|--|--------------------------|
| | any electrical product or device unless it has been approved in accordance with this Regulation. (certification or field approval) No person shall affix to any electrical product or device an approval label that was not issued for that electrical product or device | | | | | rective action, public notification | | | | | |
| PEI | All electrical installations and electrical work done in Prince Edward Island shall conform with the edition of the Code adopted under the regulations, and any amendments, variations, | Electrical Inspection Act; General Regulations; Canadian Electrical Code regulations | CEC 21 | x | | x | x | | | Communities, cultural affairs and labour, Planning and Inspection services | PEI Fire Marshall |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|-----------|--|--|---------------|-------------|-------------------------|----------------------|---------------|----------------|-----------------------|--|--|
| | additions, or deletions made thereto in regulations. | | | | | | | | | | |
| QE | Any electrical equipment used in an electrical installation or any equipment permanently connected to such installation shall be approved for the use for which it is intended. | CEC is adopted under the Building Act | CEC 20 | x | | x | x | | x | Régie du bâtiment du Québec | Corporation des maîtres électriciens du Québec Sécurité publique (fire prevention) Municipalités Office de protection du consommateur (economic fraude) |
| SK | No person shall manufacture, sell or offer for sale, display, advertise, rent, use or otherwise provide or offer for use any electrical equipment, or attempt to do any of those things, unless the electrical equipment is: (a) approved; or (b) certified by a | Electrical Inspection Act and Regulations; Canadian Electrical Code (Sask. Amend) | CEC 21 | x | x | x | x | x | x | SaskPower, Corrections, Public Safety and Policing | |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|--------------|--|------------|-------------------|-------------|-------------------------|----------------------|---------------|----------------|---|--|---------------------------------|
| | prescribed testing laboratory. | | | | | | | | | | |
| YT | no person shall install any electrical equipment that is not approved by an accredited certification organization. | | CEC latest | x | x | | x | | Dept of Community Services , Electric al Safety Standards Board | Commissioner in Executive Council may appoint inspectors | |
| | | | | | | | | | | | |
| HC PS | “No manufacturer or importer shall manufacture, import, advertise or sell a consumer product that (a) is a danger to human health or safety; There are also other items. | | Consumer product | | x | x | x | x | x | Health Canada, Consumer Product Safety | |
| HC MD | 9. (1) A manufacturer shall ensure that the medical device meets the safety and | | Medical devices | | x | | x | x | x | Health Canada, Medical Device Bureau and HPFB Inspectorate | Global Harmonization Task Group |

| | Prohibitions | Act | CEC | Cert | Incident Reports | Order Removal | Search | Seizure | Search records | Responsible Agency | Partnerships |
|--|--|------------|------------|-------------|-------------------------|----------------------|---------------|----------------|-----------------------|---------------------------|---------------------|
| | <p>effectiveness requirements.</p> <p>(2) A manufacturer shall keep objective evidence to establish that the medical device meets those requirements</p> <p>Medical devices are evaluated prior to being placed on the market.</p> | | | | | | | | | | |

Appendix 4: Management of Electrical Product Safety in Other Countries

Part of this study was to examine the legislative/regulatory regimes for other countries to determine how other nations are approaching electrical safety, whether there are lessons to be learned for Canada, whether there are best practices used elsewhere, and, if yes, to incorporate these into items for consideration. What are presented below are the experiences of other countries which were reviewed, and parts of their experiences have been incorporated into our main Discussion Document.

1. Australia and New Zealand

In Australia and New Zealand, the responsibility for regulating electrical product safety rests with Australian States and Territories and New Zealand Electrical Regulatory authorities and it is managed through local legislation, regulatory requirements and compliance interventions. The laws generally cover electricity safety, supply and efficiency and also create systems for licensing and equipment approvals. To ensure effective coordination and cooperation between the regulatory bodies the Electrical Authorities Regulatory Council (ERAC)²⁵ was established by the eight Australian States and Territories and New Zealand. This council is made up of representatives from the regulatory electrical authorities of New Zealand and the Australian states, territories and commonwealth. The Council meets semi annually and shares information regularly between themselves and with industry in order to develop recommendations on operational policy so they are consistent between the different government agencies.

The electrical product safety system was developed and designed in a period when most electrical products were manufactured and/or supplied by local companies. It is comprised of a mixture of pre-market approvals and post-market surveillance. Although minor inter-jurisdictional differences exist, the broad objectives are consistent. In a recent review of the system by ERAC, it was reported, that

- “It is based on approvals by individual State, Territory and New Zealand Regulatory Authorities that, while it has national application through mutual recognition arrangements, has led to inconsistent practices and procedures, including:
 - different acceptance requirements for certification by accredited third party certification bodies and testing by unaccredited independent consultants and others;
 - different requirements for acceptance of applications for approvals from overseas (and in one State, from interstate and New Zealand), and
 - substantially different fees and charges and processing time for approvals resulting in unnecessary “forum shopping.

It is compromised by underfunded and uncoordinated surveillance and enforcement arrangements that make cross jurisdictional action extremely difficult and could result in unsafe

²⁵ Electrical Regulatory Authorities Council, www.erac.gov.au/

and non compliant products not being identified and if found, result in delays in action being taken.”²⁶

Standards for the purpose of testing electrical equipment to verify compliance with safety requirements are developed by Standards Australia and are based on IEC standards with specific national deviations. Some products such as household appliances are classified as “prescribed” products that must be approved to the relevant electrical safety approval and test specification before they can be sold in Australia. The approval of these products is undertaken by the state electrical authority or an approved independent third party, is valid for up to five years and is recognized by all the electrical regulatory authorities.

The changing marketplace with a greater reliance on imported products and the emergence of non-traditional retail sources, such as the internet, introduced challenges to the system. These emerging problems and challenges led regulators to initiate a formal and comprehensive review of the electrical equipment safety system to ensure that it operates consistently across the jurisdictions. The recommendations made by those carrying out the review included “a new Electrical Equipment Safety System²⁷ (EESS) which would be established on nationally consistent performance-based legislation in each jurisdiction; a process of registration of both suppliers and of products to fund many elements of the system; and compliance with regulatory requirements to be demonstrated by suppliers and backed up by increased surveillance and enforcement.

In addition, it recommended that products be classified into three risk levels, (Level 1 low risk, Level 2 medium risk, and Level 3 high risk) which would be reviewed regularly based on market experience. Suppliers would be required to be registered and the products classified before the product is marketed. Applications for the registration of Level 3 (high risk) and Level 2 (medium risk) will need to be accompanied by a *Supplier’s Declaration of Conformance (SDoC)*. Prior to submitting a SDoC for the purposes of registering Level 3 (high risk) and Level 2 (medium risk) equipment on the Registration Database, *Responsible Suppliers* (i.e. those located in Australia or New Zealand that are the first point of sale) need to hold or have access to specific Evidence of Conformance depending on the risk category of the equipment as follows:

- Level 3 (high risk) equipment – a Certificate of Conformance from a certification body accredited by Standards Australia or New Zealand.
- Level 2 (medium risk) equipment – A Supplier’s Compliance Folder (SCF) containing specified support documentation
- Level 1 (low risk) equipment – No specific Evidence of Conformance is required.

After receiving the approval by six ministers responsible for electrical safety, ERAC is now progressing with the implementation of the new EESS which will include:

- “a national database for the registration of responsible suppliers and the registration of electrical equipment;

²⁶ Electrical Regulatory Authorities Council, Review of the Electrical Equipment Safety System in Australia, Dec 2007

²⁷ ERAC, Final Report ERAC Electrical Equipment Safety System Review, December 2007.

- a supporting website for the databases;
- a co-ordinated approach to regulatory enforcement for participating members; and
- consistent electrical equipment requirements across Australia and New Zealand²⁸.

This follows very closely Australia's initiative to reform and harmonize its consumer product safety laws as agreed to by the Council of Australian Governments. Amendments to its National legislation were passed in March 2010 and harmonization of state and territorial standards and bans is planned to be completed by 2011.

2. Electrical Safety System in the European Union

To achieve its basic objective for the free movement of goods, the European Union established European wide requirements for many products including electrical products. This was accomplished through the development of the Low Voltage Directive (LVD) which was adopted into the laws of the Member States for electrical equipment designed to be used within certain voltage limits. The Directive sets out essential requirements which must be met before electrical products can be supplied in the European Community. The hazards covered by the LVD include not just electrical ones but also mechanical, chemical and all other types of hazards. A number of principles are also incorporated into the Directive:

- "only electrical equipment which does not jeopardize the safety of people, domestic animals and property shall be placed on the market;
- only electrical equipment which satisfies the CE marking requirements will be taken as complying with the requirements of the modified Low Voltage Directive and is entitled to free circulation throughout Europe unless there are reasonable grounds for suspecting that the product does not in fact meet the requirements;
- electrical equipment is not required to be tested or marked for approval by an independent third party;
- enforcement is the responsibility of each Member State within its national jurisdiction."

The LVD excludes the following electrical equipment:

- electrical equipment for use in a potentially explosive atmosphere;
- electrical equipment for radiology and medical purposes;
- electrical parts for lifts;
- electricity meters; and
- electrical equipment that is covered by other directives such as plugs and socket outlets for domestic use, electric fence controllers, specialised electrical equipment, for use on ships, aircraft or railways²⁹.

It is presumed that electrical products conform to the safety objectives of the LVD if the equipment is manufactured according to technical standards which, in order of priority are:

- European harmonized standards drawn up by CENELEC;

²⁸ ERAC News; www.erac.gov.au/news_erssr.htm

²⁹ European Commission, *Guidelines on the Application of Council Directive 73/23/EEC*, Feb. 2001.

- published, international rules issued by the two international bodies, the International Commission on the rules for the approval of electrical equipment (CEE) or the International Electro technical Commission (IEC);
- where standards do not yet exist, the national standards of the Member State of the manufacturer³⁰.

The enforcement of the LVD is implemented differently in member countries depending on the structures in place and the regulations that are passed. For example, in the United Kingdom, local trading standards offices are responsible for market surveillance while in the Netherlands Customs and the Inspectorate for Health Protection is responsible for enforcement activities. The enforcement is normally carried out in conjunction with the enforcement of the CE-Mark and in the case of consumer electrical products, the General Product Safety Directive. Since significant numbers of unsafe products including electrical products have been found on the European market, member states have agreed that there is a need for greater cross-border surveillance cooperation, improved information system, and increased consistency between national systems.³¹ To deal with some of these issues as they relate to electrical products, the EC has established five committees to improve cooperation and consistency in the areas of standards, conformity assessment, surveillance, policy and technical.³²

The procedure to demonstrate conformity with the Directive is made up of three main elements. Initially, the manufacturer must put together technical documentation which makes it possible to demonstrate that the electrical equipment complies with the requirements of the Directive. Next, the manufacturer, or his authorised representative, in Europe is required to prepare a declaration of conformity. Before the product is marketed a CE mark must be affixed to it by the manufacturer or his authorized representative. In the event that conformity is challenged by authorities, a report drawn up by a Notified Body is accepted as evidence that the electrical equipment complies with the safety objectives. Therefore, most reputable manufacturers³³, before making a claim of conformity to the LVD and affixing a CE Marking, choose to have their product assessed by a qualified independent third party. These third parties are called Notified Bodies and they are appointed by national government authorities in each European member state.

Achieving compliance with the LVD can be complicated and time consuming for manufacturers since appropriate standards or the relevant safety objectives must be identified, and reviewed for each product. Risk assessments and testing may become necessary and documentation may need to be prepared.

With respect to consumer electrical products, PROSAFE (*the Product Safety Enforcement Forum of Europe*) a non-profit organisation established by market surveillance officers from

³⁰ DIRECTIVE 2006/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 December 2006 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

³¹ Halpaus Yvonne, Partner, QNET LLC, EU CE-Marking Enforcement, www.ce-mark.com/euen.html

³² Enterprise and Industry, EC, Working Structure within the EU: Low Voltage Directive Working Groups, 19.01/2007

³³ *European Certification for Electrical Products, The Contribution of Third Party Certification to the Safety of Electrical Products on the European Market*, www.eepca.org/info.shtml

various member countries responsible for enforcement of the General Product Safety Directive may also be involved. The aim of PROSAFE is to promote informal discussions between consumer product safety officers in order to share and learn from each others' experiences and to develop consistency in enforcement across Europe. PROSAFE with the financial support of the European Commission and member states has carried out a number of joint projects on the safety of consumer electrical products to identify best practices that can be used by all member states to improve consistency in surveillance and enforcement³⁴.

To try to deal with the problem of imported defective products or counterfeit products, Europe is putting into place a new import control system³⁵ that requires traders to provide customs authorities with advance information for goods being brought into European Community. On receiving the entry summary declaration, member states are required to carry out a risk analysis for safety and security purposes. Where a risk is identified, the custom officers will be able to take appropriate action.

3. Electrical Safety System in the United States

The management of the safety of electrical products in the United States involves the federal government, the states and some municipalities. Like Canada, a National Electrical Code (NEC) is developed and it is normally mandated by state or local Acts or rules. The National Fire Protection Association (NFPA) sponsors the development of the NEC which is approved as an American national standard by the American National Standards Institute (ANSI) for the safe installation of electrical wiring and equipment. It includes standards for conductors and electrical equipment that is installed. Third party certification of only some products to the standards referenced in the code is required. This demonstrates that these products have been designed, manufactured, tested or inspected. They carry a mark that meets the testing and other requirements set by an approved certification or listing agency. Only a listed or certified device can carry the "Mark" of the listing or certification body.

For the most part, commercial and industrial product safety is dealt with by the States and municipalities in cooperation with the Occupational Safety and Health Association (OSHA) of the Department of Labour. OSHA regulations require that most electric equipment used in the workplace be certified by a Nationally Recognized Testing Laboratory (NRTL). NRTLs are third-party organizations recognized by OSHA as having the technical capability to perform safety testing and certification of particular types of products. NRTLs provide testing and certification services to the manufacturers and carry out inspections of factory production runs and field inspections to monitor and to assure the proper use of its identifying mark or labels on products.

The safety of consumer electrical products is addressed by the federal government under the federal *Consumer Product Safety Act* (CPSA) administered by the U.S. Consumer Product Safety Commission (CPSC). This independent regulatory commission is made up of five-members who are appointed by the President. The main purpose of the CPSA³⁶ is to protect the public

³⁴ Prosafe, *Best Practce Techniques in Market Surveillance*, February 2010, www.emars.eu

³⁵ HRM Revenue and Customs, *Import Control System*, www.businesslink.gov.uk

³⁶ 15 U.S.C. Section 2051

against unreasonable risks of injury associated with consumer products. In a presentation to the CPSC's Electrical Committee, John Gibson Mullan, Director of Compliance for CPSC explained how the safety of consumer electrical products is dealt with by CPSC and the individual States.³⁷ He explained that other than in the case of electrical toys there are no product specific mandatory standards for consumer electrical products under the CPSA. Basically, CPSC depends on voluntary standards and consumer electrical products should meet the appropriate voluntary standards such as those referenced in the NEC and he recommended that the products be certified by an accredited body. In fact, some US States and retailers require products to be certified before they can be sold.

The CPSA requires that suppliers report immediately to CPSC if they obtain information that a product contains a defect that could create a substantial product hazard or creates an unreasonable risk of serious injury or death. Violation of a voluntary standard is considered by CPSC to be evidence of the defective nature of a product. The Commission has the authority to remove hazardous products from the marketplace under section 15 of the CPSA.³⁸ This, however, is a lengthy process since it must be shown that the product poses a substantial hazard and a court must agree. In order to encourage suppliers to identify and remove defective or dangerous products quickly, CPSC has developed a fast track recall process. According to CPSC, "if a company reports a potential product defect and, within 20 working days of the filing of the report, implements with CPSC a consumer-level voluntary recall that is satisfactory to the staff, the staff will not make a preliminary determination that the product contains a defect which creates a substantial product hazard. This program allows the staff and company to work together on a corrective action plan almost immediately, rather than spending the time and other resources necessary to investigate the reported defect further to determine whether it rises to the level of a substantial product hazard".³⁹

Since the 1980's in the United States, two somewhat contrary trends are visible:

- (1) the movement of producer responsibility from the *control* of risk to the *prevention* of possible harm; and
- (2) the trend towards greater reliance on voluntary action, rather than on government imposition of responsibilities.

4. Japan

Japan's Ministry of Economy, Trade and Industry (METI) is responsible for the administration of the *Electrical Appliance and Material Safety Law*. The purpose of this law is to prevent the occurrence of dangerous incidents caused by electrical appliances through the regulation of the manufacturer and sale of electrical appliances. The law introduces a third-party certification system where specific electrical products are inspected prior to sale and certified to technical standards by domestic or foreign testing organization registered and approved by METI. These products are then allowed to bear the PSE mark. The PSE is a mandatory mark that products

³⁷ Mullan John Gibson, Director of CPSC Office of Compliance, Electrical Products, August 31, 2005

³⁸ US Consumer Product Safety Commission, *Regulated Products Handbook*, January 2005.

³⁹ US Consumer Product Safety Commission, *Recall Handbook*, May 1999.

subject to regulation must bear.⁴⁰

A manufacturer or importer of electrical appliances and materials including second hand products is required by the Act to notify the METI and provide its name and address, classification of electrical product or material and name and location of manufacturing site. In addition, the notifying manufacturer or importer must ensure that the product complies with the technical requirements stipulated by METI or standards harmonised to IEC standards before it can be sold.

Electrical appliances and materials are classified into two groups

- “specific electrical appliances or materials” those products likely to be dangerous or cause trouble because of their structure, methods of use, or other conditions of use, and
- “non-specific electrical appliances or materials”.

Any company that intends to manufacture or import products classified by the government as “specific appliances or materials” must have the product certified to the appropriated technical requirements by a testing organization registered by METI and carry a PSE mark. Self-confirmation is permitted for non specific electrical appliances or materials. In either case, manufacturers/importers of electrical products are required by the law to notify METI, ensure conformity to technical standards, holding the testing records, and labelling the products.

Where a product does not conform to technical standards from the viewpoint of consumers' safety, the METI may order to ban labelling attached to electrical appliances and materials or may order that necessary corrective actions be taken or penalties be imposed. Punishment for selling prohibited items is penal servitude of one year or less, or penalty of one million Japanese yen or less - or both.

In the *Electrical Appliance and Material Control Law*, technical standards for 450 electrical appliances, 112 of which are the designated "specific electrical appliances" and 338 non-designated appliances, subject to control were established.

5. Singapore

SPRING Singapore is a government agency responsible for enterprise development and for the development and promotion of standards and accreditation programs. It also is the Safety Authority which manages the Consumer Protection Registration Scheme (CPS). Under this scheme, certain categories of household electrical appliances and electronic devices must meet the specified safety standards before they are given the Singapore SAFETY Mark and can be sold in Singapore. The scheme requires that

- the products specified as “controlled products” are certified to the appropriate safety standards, by an independent 3rd party;
- suppliers of controlled goods for consumers, or for use in schools, educational institutions, hotels, offices, etc. (which are operated other than by staff and professionals) must be registered with the Safety Authority as “Registered Supplier”;

⁴⁰ Ministry of Economy, Trade and Industry, www.meti.go.jp

- each model of controlled goods is registered by the supplier with the Safety Authority;
- the supplier has paid the \$180 fee for registration of each model; and
- maintains a technical file on each model.

The supplier is then able to apply a Safety Mark to the product to inform consumers that the product meets appropriate safety requirements. SPRING is responsible for market surveillance and investigation of any incidents.

Appendix 5: Recalls of Electrical Products

1. Analysis of Products Posted on ESA's Recall Database July 1, 2008 to June 31, 2009

An analysis was carried out of the Electrical Safety Authority's database on recalled products for a period of one year from July 1, 2008 to June 30, 2009. During that period, 72 products were posted on the database as detailed in the chart below. In summary, the products were posted there for the following reasons:

- 58 electrical products were recalled since they met the criteria for causing serious injury or property damage;
- 14 were advisories published by certification body;
- 46 (63%) of the 72 products were certified by an accredited certification body;
- 10 (13%) of the 72 products were unapproved; and
- 14 (19%) of the 72 products were counterfeit products.

| Date | Product | Source | Country | Recalled | Warn | Certified | CB | Un-app | C-feit | Other Posting |
|-----------|----------------------------------|---------------|---------|----------|------|-----------|-----------|--------|--------|---------------------------|
| 01-Jul-08 | Desk Lamp | UL | | | x | | | | x | UL |
| 17-Jul-08 | HP Fax Machine | HP/ESA | China | x | | x | UL | | | HC,UL, Alberta, SCC |
| 01-Aug-08 | Venmar Heat Recovery Ventilators | ESA/Venmar | Canada | x | | x | Intertek | | | CBC, CSA, NSPOWER |
| 01-Aug-08 | Kyvas Retractable Awning | ESA/Kyvas | China | x | | | | x | | CBC |
| 08-Aug-08 | Schneider NEMA Size 2 enclosures | ESA/Schneider | Mexico | x | | x | CSA or UL | | | UL, CSA |
| 11-Aug-08 | Progress Lighting Fixture | ESA/Progress | China | x | | x | ULC | | | HC, CBC, Alberta, SCC |
| 14-Aug-08 | Lithonia Lighting | ESA/Lithonia | USA | x | | x | UL | | | HC,CBC, ULC, Alberta, SCC |
| 15-Aug-08 | Greenway Water Dispensers | ESA/Greenway | China | x | | x | CSA | | | HC,CBC, CSA, Alberta, SCC |

| Date | Product | Source | Country | Recalled | Warn | Certified | CB | Un-app | C-feit | Other Posting |
|-----------|--|------------------------|---------|----------|------|-----------|------------|--------|--------|---|
| 18-Aug-08 | Euro-pro Deep Fryer | ESA/ Europro | China | x | | x | Intertek | | | HC, CBC, Alberta |
| 28-Sep-08 | euro-pro Deep Fryer | ESA/ TTI Floor Care NA | China | x | | x | UL | | | HC, CBC |
| 30-Sep-08 | Electrical Splice | ESA/ Gardner Bender | USA | x | | x | CSA | | | HC, CBC |
| 01-Oct-08 | Cordless drill Charges | UL | | | x | | | | x | ULC |
| 03-Oct-08 | Sony VAIO Notebook | ESA/ Sony | Japan | x | | | UL | | | HC, CBC, ULC, NSPOWER, Alberta, SCC |
| 09-Oct-08 | AC Adapter | UL | | | x | | | | x | ULC, SCC |
| 20-Oct-08 | Eaton/Cutler Hammer Pressure Transmitter | ESA/ Eaton | Canada | x | | | | | | |
| 22-Oct-08 | Motor Capacitor | UL | China | | x | | | | x | ULC |
| 30-Oct-08 | Kenmore Toaster | ESA/ Sears | China | x | | x | Intertek | | | HC, Alberta |
| 18-Nov-08 | GE Wall Ovens | ESA/ Mabe Canada | USA | x | | x | UL and CSA | | | HC, CBC, Alberta, SCC |
| 25-Nov-08 | Fujifilm Battery Chargers | ESA/ Fujifilm | China | x | | x | UL | | | HC, CBC, ULC (*CPSC Recall), Alberta |
| 12-Dec-08 | GN Netcom Wireless Headset batteries | ESA/ GE Netcom | China | x | | x | UL | | | HC, CBC, ULC (refers to US CPSC recall) |
| 29-Dec-08 | HP Computer Batteries | ESA/ HP | Japan | x | | x | UL or CSA | | | HC, Alberta |
| 29-Dec-08 | Toshiba Sony Battery Packs | ESA/ Toshiba | Japan | x | | x | UL | | | HC, Alberta, SCC |
| 09-Jan-08 | Specialife Heat Caps | UL | China | | x | | | | x | |

| Date | Product | Source | Country | Recalled | Warn | Certified | CB | Un-app | C-feit | Other Posting |
|-----------|---|----------------------------|------------------------|----------|------|-----------|----------|--------|--------|---------------------------------------|
| 15-Jan-08 | Streamlight Flashlight LEC | ESA/ Streamlight | USA | x | | x | UL | | | HC |
| 15-Jan-08 | BSH Home Appliances Dishwashers | ESA/ BSH | USA | x | | x | UL | | | HC, CBC, NS POWER, Alberta, SCC |
| 19-Jan-09 | Viking Range Four Slice Toasters | ESA/ Viking | China | x | | x | UL | | | HC, CBC, NS POWER |
| 23-Jan-09 | Goodman Air Conditioner/ Heat Pump | ESA/ Goodman | USA | x | | x | Intertek | | | HC, CBC, Alberta |
| 26-Jan-09 | Counterfeit Extension Cords | UL | | | x | | | | x | HC |
| 09-Feb-09 | Counterfeit Capacitors | UL | | | x | | | | x | HC |
| 18-Feb-09 | Thomas Lighting Fixtures | ESA/ Thomas Lighting | Canada and China | x | | x | CSA | | | HC, CBC |
| 18-Feb-09 | Intermatic Digital Timers | CSA/ Intermatic | | x | | x | CSA | | | HC, CSA, Alberta |
| 20-Feb-09 | Exito Cord Set | UL | | | x | | | | x | |
| 23-Feb-09 | Counterfeit Compact Floresecent lamps | UL | | | x | | | | x | HC, CBC |
| 02-Mar-09 | GE Digital Toasters | ESA/ Walmart | China | x | | x | UL | | | HC, CBC, NS POWER, Alberta |
| 02-Mar-09 | Globe-Electric 15W Undercabinet Light | ESA/ Globe- Electric Co | China | x | | x | UL | | | HC |
| 02-Mar-09 | Medport Fit & Fresh Blend Mixer | ESA/ Medport | China | x | | x | UL | | | HC, CBC, Alberta |
| 10-Mar-09 | Magtag Refrigerators | ESA/ Magtag | USA | x | | x | UL | | | HC. CBC, Alberta, SCC |

| Date | Product | Source | Country | Recalled | Warn | Certified | CB | Un-app | C-feit | Other Posting |
|-----------|---|-------------------------------|----------------|----------|------|-----------|---------------------|--------|--------|----------------------------------|
| 16-Mar-09 | San Remo Lighting Fixture | ESA/ San Remo Lighting | China | x | | | Counterfeit UL mark | | x | HC, Alberta |
| 16-Mar-09 | Fluorescent Portable Lamp Guangzhou Glorious Lighting | UL | China | | x | x | UL | | | HC |
| 17-Mar-09 | Counterfeit AC Adaptors | UL | | | x | | | | 1 | HC, CBC |
| 18-Mar-09 | Ritchie Immersion Heaters | ESA/ Springfield Wire | USA and Mexico | x | | | CSA | | | HC, CBC, Alberta |
| 19-Mar-09 | Cybox Treadmills | ESA/ Cybox Int. | USA | x | | | Intertek | | | |
| 25-Mar-09 | Home Care Cordless Stick Vacuums | ESA/ Electrolux | China | x | | | | | | HC, CBC, Alberta |
| 27-Mar-09 | Appliance Controls | UL | | | x | | | | x | |
| 01-Apr-09 | Conair Clothing Irons | ESA/ Conair Consumer Products | China | x | | x | UL | | | |
| 01-Apr-09 | Rocketfish Portable AC.DC/USB Power Supply | ESA/ Best Buy | China | x | | x | Intertek | | | |
| 02-Apr-09 | LCD Insignia TV | ESA/ BestBuy | China | x | | x | UL | | | HC, CBC HC, CBC, Alberta, SCC |
| 14-Apr-09 | All Clad Metal crafters Belgian Waffle Maker | ESA/ All-Clad Metal-crafters | China | x | | x | UL | | | HC, CBC, SCC |
| 15-Apr-09 | Skylead Trading Battery in Remote Control Helicopter | ESA/ Skylead Trading | China | x | | | | x | | |
| 15-Apr-09 | Digital Power Saver Power Saver Devices | ESA/ Power Saver Devices | China | x | | | | x | | HC |

| Date | Product | Source | Country | Recalled | Warn | Certified | CB | Un-app | C-feit | Other Posting |
|-----------|---|------------------------|----------------|----------|------|-----------|---------------|--------|--------|---------------|
| 15-Apr-09 | Eprom Inc power bar | ESA/ Eprom Inc | China | x | | | | x | | HC |
| 15-Apr-09 | Under Cabinet Lighting | UL | China | | x | | | | x | HC |
| 27-Apr-09 | AV7 Protouch Hair Straightener | ESA/ AV.7 | China | x | | | | x | | HC, CBC |
| 01-May-09 | Haier Toaster Oven/Broiler | ESA/ Haier America | China | x | | x | UL | | | CBC |
| 11-May-09 | Houston Tech Infrared Electric heater | ESA/ Houston Tech | China | x | | x | CSA | | | |
| 11-May-09 | Lenovo Thinkvision AC Adaptors | ESA/ Lenovo | China | x | | x | TUV Rheinland | | | HC, CBC |
| 11-May-09 | Home Ideas Ocean Lamp | ESA/ Home Ideas | China | x | | | | x | | HC |
| 14-May-09 | Ridge Tool Universal Motor | ESA/ Ridge Tool Co | USA | x | | x | CSA | | | HC |
| 14-May-09 | Catalina Lighting Halogen Clamp Lamp | ESA/ Catalina Lighting | China | x | | x | UL | | | |
| 14-May-09 | Phillips Senseo One cup Coffeemaker | ESA/ Philips | China & Poland | x | | | | x | | CBC |
| 14-May-09 | DTX Popcorn Machines | ESA/ DTX | China | x | | x | Intertek | | | HC |
| 19-May-09 | Atico Signature Gourmet Coffeemaker | ESA/ Atico | China | x | | x | UL & Intertek | | | |
| 19-May-09 | Wagner Spray Tech Corp Control Spray Plus | ESA/ Wagner Spray | China | x | | x | ULC | | | HC |
| 21-May-09 | Fluke Clamp Metres | ESA/ Fluke Corp | China | x | | x | CSA | | | HC, CBC |
| 25-May-09 | Splash Int. Desk Lamp | ESA/ Splash Int | China | x | | | | x | | HC, CBC |

| Date | Product | Source | Country | Recalled | Warn | Certified | CB | Un-app | C-feit | Other Posting |
|-------------------|---|--------------------------|---------|--------------|--------------|--------------|-----------|--------------|--------------|---------------|
| 27-May-09 | Kobian Xtatik Ac Adaptor with Portabel Power kit | ESA/ Kobian | China | x | | | | x | | HC |
| 28-May-09 | Schneider Throw safety Switches | ESA/ Scheider Electric | USA | x | | x | CSA or UL | | | |
| 28-May-09 | Bunn-o-matic single cup tea/ coffee maker | ESA/ Bunn-o-matic | USA | x | | x | UL | | | |
| 08-Jun-09 | Video Game Charger | UL | China | | x | | | | x | |
| 23-Jun-09 | Tyler Refrigerations Commerial Frozen Food Merchandiser | ESA/ Tyler Refrigeration | USA | x | | x | UL | | | |
| 23-Jun-09 | Black & Decker spacemaker Coffeemaker | ESA/ Applica Canada | China | x | | x | Intertek | | | HC, CBC |
| 25-Jun-09 | DCG Hot Melt Glue Guns | ESA/ DCG Imports | China | x | | | | x | | HC,CBC |
| | | | | 58 | 14 | 46 | | 10 | 14 | |
| % of total | | | | 79.45 | 19.18 | 63.01 | | 13.70 | 19.18 | |

2. Organizations that Collect Complaints and Provide Information on Hazardous Electrical Products

| Organization | Corrective Actions | Email Subscription Service | Complaints or Incident Reports | How to access |
|--------------------------------------|--|----------------------------|---|--|
| Alberta Municipal Affairs | Provides copies of recalls and advisories posted by – ESA, CSA, CPSC, UL No recall notices after April 2009 | | Forms for employers to report incidents | www.municipalaffairs.alberta.ca/cp_electrical_advisories.cfm |
| British Columbia Safety Authority | Very limited number of recalls listed for electrical products None after 2008 | | Mechanism to report incidents | www.safetyauthority.ca/?q=safetyinformation_publicsafetyalerts |
| Canadian Anti-Counterfeiting Network | In process of being developed. | | | |
| CBC | Provides listing of all consumer recalls including electrical product recalls. | | N/A | www.cbc.ca/consumer/recalls/ |
| CSA International | Product Alerts and Recalls on products certified by CSA | Yes | Mechanism to report incidents with CSA certified products | www.csagroup.org/product_recalls/Default.asp?Language=English |
| Elecsafe (Ontario) | Corrective action data base contains hyperlinks to ESA website, CSA | No | No | |

| Organization | Corrective Actions | Email Subscription Service | Complaints or Incident Reports | How to access |
|-------------------------------------|--|----------------------------|---|--|
| Electro-Federation Canada | Linkages to product recalls and alerts on websites of all Certification bodies, and provincial authorities | No | No | www.electrofed.com/industry/Anti-Counterfeiting/Support_Organizations |
| Health Canada | Recall information on most electrical products on ESA recall site. | Yes | Mechanism to take consumer complaints and reports New reporting system available for voluntary reporting of incidents | www.healthycanadians.ca/pr-rp/recall-retrait_e.php |
| Intertek | Sent email to enquire. Only info on website is link with US CPSC | | | No listing on website refers clients to ESA listing |
| NB Dept of Public Safety | Hyperlinks to CSA. ULC | No | No | www.gnb.ca/o246/safety/english/safcode_e.asp |
| Nova Scotia Power | Recalls only from CSA, UL, CPSC, US Govt. Not all listings are included | | | www.nspower.ca/en/home/residential/electricalinspections/productrecalls.aspx |
| NWT Public Works and Services | Listing of recalls with hyper links to websites of CSA, CPSC, Intertek emails to CACES, UL | Yes | Workplace incidents | www. Pws.gov.nt.ca/elec-mech/productRecalls.htm |
| Ontario Electrical Safety Authority | All types of corrective actions and alerts undertaken by CBs, manufacturers, | Yes | Mechanisms for private sector to report serious incidents and for consumers to make a complaint or report defective product | Corrective Action www.esasafe.com/Recalls.php Reporting by private sector www.esasafe.com/Corporate/rea_001.php |

| Organization | Corrective Actions | Email Subscription Service | Complaints or Incident Reports | How to access |
|---|---|----------------------------|---------------------------------------|--|
| | | | | Reporting/complaints by public www.esasafe.com/GeneralPublic/epa_002C.pl |
| Ontario Office of the Fire Marshall | Listing of corrective actions, warnings from a number of organizations including ESA, Health Canada, CPSC, UL, CSA. | | Refers complaints to reporting at ESA | www.ofm.gov.on.ca |
| Saskpower | Listing of recalls of CSA certified products from Feb 2002 to Feb 2009 | No | | www.saskpower.com/safety/bulletins/index.shtml |
| Sécurité publique du Québec | Fire services list electrical product recalls and warnings from 2004 to 2008 | | | Recalls and warnings www.msp.gouv.qc.ca/incendie/incendie_en.asp?txtSection=rapp_manuf |
| Standards Council of Canada | Listing of products certified by SCC accredited CBs Only 30 listed dated from June 2006 to April 2009 | No | No | www.scc.ca/en/search/recall |
| Underwriters Laboratories of Canada and Underwriters Laboratories | Safety alerts posted for all products certified by ULC/UL, alerts of counterfeit marks, CPSC recalls. | Yes | Incident reporting form on site | www.ul.com/Canada/eng/pages/newsroom/publicnotices |