

Canada: Voluntary Report to Plenary APEC TEL 40, Mexico, September 2009

1. Broad Policy Initiatives

Ministers Welcome Report by Science, Technology and Innovation Council

On May 5, 2009, the Honourable Tony Clement, Minister of Industry, and the Honourable Gary Goodyear, Minister of State (Science and Technology), received Canada's *Science, Technology and Innovation System: State of the Nation 2008*, the first public report by the Science, Technology and Innovation Council (STIC). The report charts Canada's progress and compares Canadian performance with that of the world's science, technology and innovation leaders. The Council examined more than 50 international and domestic standards of excellence to help identify strengths and weaknesses in Canada's science, technology and innovation system.

The Council was appointed in October 2007. It is chaired by Dr. Howard Alper, who is joined by 17 members representing the research, education and business sectors. Its mandate is to provide the Minister of Industry with evidence-based policy advice on science and technology issues and to produce regular national reports that measure Canada's science and technology performance against international standards of excellence.

In *Canada's Science and Technology Strategy, Mobilizing Science and Technology to Canada's Advantage*, the Government of Canada committed to consolidating external science and technology advisory bodies and launched the STIC. The report can be downloaded at www.stic-csti.ca.

Government of Canada Releases Progress Report on Science and Technology Strategy

On June 5, 2009, the Honourable Gary Goodyear, Minister of State (Science and Technology), released *Mobilizing Science and Technology to Canada's Advantage: Progress Report 2009*. The report is the Government of Canada's update on the implementation of Canada's Science and Technology (S&T) Strategy, which was launched by Prime Minister Stephen Harper in May 2007. The progress report outlines advances that have been made toward the S&T Strategy's key objectives of developing an entrepreneurial advantage that encourages firms to innovate; fostering a knowledge advantage that puts Canadians at the forefront of research and discovery; and creating a people advantage of the best-educated, most skilled and most flexible workforce. This year, through Canada's Economic Action Plan, the government is making one of the largest investments in S&T in Canada's history — more than \$5.1 billion. Part of that involves funding research infrastructure projects at universities and colleges and support for the state-of-the-art equipment and laboratories required to conduct research. For more information on the Government of Canada's S&T Strategy and to read the progress report, please visit www.ic.gc.ca/s&tstrategy.

2. Policy and Regulatory Developments in Canadian Telecommunications

Call for comments – Identification, scope, and prioritization of issues regarding obligation to serve, basic service objective, and local service subsidy regime

On September 11, 2009, the Canadian Radio-television and Telecommunications Commission (CRTC) established action plans to review existing regulatory measures. The action plans identified the obligation to provide telephone service (obligation to serve) and the local service subsidy regime as matters to be reviewed; however, in the proceedings that led to the development of the plans, parties provided little or no reasons for reviewing these particular measures. While neither plan mentioned the basic service objective for review, the Commission considers that this measure is associated with both the obligation to serve and the local service subsidy regime, and that these three measures are interrelated.

The Commission is seeking comments regarding the identification, scope, and prioritization of the issues, if any, associated with the obligation to serve, the basic service objective, and the local service subsidy regime that the parties consider warrant review at this time. Once the Commission has examined and analyzed the submissions in this proceeding, it will determine whether a review of these regulatory measures is warranted, and if so, the scope of such a review.

The Commission seeks comments from parties with respect to the following:

- Indicate, with supporting rationale, whether a review of the obligation to serve, the basic service objective, and/or the local service subsidy regime is necessary at this time.
- If a review is considered necessary, (a) indicate whether these measures should be reviewed together in one proceeding or in separate proceedings, and (b) identify, including with respect to scope, and prioritize, with supporting rationale (e.g. importance, necessity, impact, etc.), the substantive issues associated with any of the identified regulatory measures that the Commission should address.
- If a review is not considered necessary at this time, explain why not.

Further information can be found at <http://www.crtc.gc.ca/eng/archive/2009/2009-575.htm>

Broadband Canada: Connecting Rural Canadians Launches its Call-for-Applications Process

On September 1, 2009, Industry Canada announced the launch of the call for applications process for Broadband Canada: Connecting Rural Canadians. The call for applications follows the formal program launch announced by Prime Minister Stephen Harper on July 30, 2009.

The program will consider applications to provide service to as many unserved and underserved Canadians as possible, allowing them to participate in the digital economy by giving them access to information, services and opportunities that would otherwise be out of reach. For unserved and underserved Canadians, the program represents an important improvement in service.

Applications will be evaluated against a series of criteria with emphasis on best value and most households served. Applications must also show capacity to deliver within the timeframe and demonstrate a viable business model.

Successful applicants will receive federal support equalling up to 50 percent of their one time costs. Such costs include the purchase, adaptation or upgrade of equipment, hardware or software; long-term investments in network capacity (such as the lease of satellite transponder capacity); network deployment costs; and other costs directly related to extending broadband infrastructure.

Further information can be found at <http://www.ic.gc.ca/eic/site/ic1.nsf/eng/04943.html> and <http://www.ic.gc.ca/eic/site/719.nsf/eng/home>.

CRTC issues second annual report on the communications industry

On August 5, 2009, the Canadian Radio-television and Telecommunications Commission (CRTC) issued its second annual Communications Monitoring Report. The report, which is based on 2008 data, provides information on the various sectors of the telecommunications and broadcasting industries, as well as on how Canada compares internationally.

The communications industry made an important contribution to the Canadian economy as revenues increased by 6%, climbing from \$51.3 billion in 2007 to \$54 billion in 2008.

Telecommunications

Telecommunications revenues came in at \$40.3 billion for the twelve-month period that ended on December 31, 2008. This improvement of \$2.1 billion, or 5.5%, in one year was achieved on the strength of the wireless and Internet sectors. Revenues generated from the provision of home telephone service rose by 0.5%, or from \$4.85 billion in 2007 to \$4.87 billion in 2008. In addition, 8% of Canadian households subscribed only to wireless telephone service.

Competitors continued to gain ground on the established telecommunications companies, with their total revenues increasing by 10%, going from \$15.9 billion in 2007 to \$17.6 billion in 2008. While their share of residential Internet subscribers held steady at 55%, competitors gained an additional 4.6% share of the residential telephone market.

Approximately 94% of Canadian households can access broadband Internet services through telephone, cable or fixed-wireless networks, and 91% of Canadians can access these services by using their cellphones.

Broadcasting

Broadcasting revenues were up \$900 million, or 7.3%, and totalled \$14 billion for the twelve-month period that ended on August 31, 2008. The delivery of television services showed the highest growth with revenues going from \$6.3 billion to \$7 billion in one year. According to Statistics Canada, the cable and satellite services index increased twice as much as the consumer price index between 2002 and 2007, or by 22.7% compared to 11.4%.

The amount of time Canadians spend online increased in 2008. Anglophones spent 13.8 hours online per week, up from 13.4 hours in 2007, while francophones spent 11.1 hours online, up from 9.8 hours. Eighteen per cent of anglophones and 16% of francophones reported viewing a television program online. Canadians also spent more time listening to podcasts as anglophones and francophones reported usage increases of 46% and 40%, respectively.

In 2008, the broadcasting industry contributed more than \$2.8 billion to the development of Canadian talent and to the creation and broadcast of Canadian programming.

Further information can be found at

<http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2009/cmr.htm> and <http://www.crtc.gc.ca/eng/NEWS/RELEASES/2009/r090805.htm>.

CRTC takes steps to improve access to communications services for Canadians

On July 21, 2009, the Canadian Radio-television and Telecommunications Commission (CRTC) announced new requirements to facilitate access to telecommunications and broadcasting services. The requirements build on existing initiatives and consist of concrete measures for the more than four million Canadians living with disabilities. While certain measures will be implemented immediately, others will be put into practice gradually given the current economic climate.

Given the increasingly converged nature of the communications industry, the Commission examined accessibility issues as they relate to both broadcasting and telecommunications services.

Telecommunications Services

Further to its review, the CRTC will:

- require that telephone companies offer a new service that will allow an operator to convert text messages sent over the Internet into voice calls, and vice versa (known as Internet Protocol relay, this service is used by persons who are deaf or hard of hearing to communicate)
- require that telecommunications companies, including cable and satellite companies, improve the accessibility of their customer service
- request that wireless companies offer at least one type of cellphone to serve the needs of people who are blind and/or have moderate-to-severe mobility or cognitive disabilities, and
- investigate possible improvements to 911 services for Canadians with hearing or speech disabilities.

Broadcasting Services

During its next licence-renewal exercise, the CRTC will require that broadcasters:

- improve and monitor the quality of closed captioning, and develop standards for its delivery in digital and high-definition signals
- make available high-quality audio descriptions of programming, especially for news broadcasts (audio descriptions provide Canadians with visual impairments with voice-overs of the text or graphics that appear on-screen, such as weather updates, sports scores or financial data), and
- provide at least four hours per week of described-video programming (described video is added during pauses in dialogue to provide information on the settings, the actors' costumes or body language, or other purely visual information).

For the first time, the CRTC's requirements for described video will apply to French-language broadcasters, as well as the Canadian Broadcasting Corporation's English- and French-language networks. This will result in the provision of described video by a minimum of 15 additional English-language and five additional French-language television services.

Further information can be found at

<http://www.crtc.gc.ca/eng/NEWS/RELEASES/2009/r090721.htm>.

CRTC approves carriage of The Weather Network and MétéoMédia's services, allowing for an emergency alerting system

On June 11, 2009, the Canadian Radio-television and Telecommunications Commission (CRTC) today issued a decision that will allow Canadians to receive emergency alerts. As an enhancement to its existing services, Pelmorex Communications Inc. (Pelmorex), the owner of The Weather Network and MétéoMédia, will make emergency alerts available to broadcasters across the country.

The Commission recognizes that The Weather Network and MétéoMédia make a unique contribution to public safety and are exceptionally important to the achievement of Canada's broadcasting policy.

In a decision dated February 28, 2007, the Commission removed regulatory obstacles to the provision of emergency alerts to Canadians. It stated that if, in two years' time, it became apparent that a voluntary approach is not adequate, it might consider additional measures to ensure that Canadians receive timely warnings of imminent perils.

The decision in no way impedes the efforts of federal, provincial and municipal governments to implement a national public alerting system, but rather complements their efforts.

In its application, Pelmorex proposed to act as the national aggregator for emergency alerts issued by municipal, provincial and federal authorities. The alerts would be made available to participating cable and satellite systems, television and radio broadcasters, and other media outlets. When there is an alert, programming would be interrupted in order to relay messages to Canadians. The national reach of the emergency alerting system will ensure the quick delivery of important safety messages to Canadians.

The Commission will review the company's progress in implementing the emergency alerting system next year, at the same time as it considers the licence renewal applications for The Weather Network and MétéoMédia. Cable and satellite companies will have to carry these channels from September 1, 2010, to August 31, 2015. Afterwards, The Weather Network and MétéoMédia will have to submit a new application to the Commission.

Further information can be found at <http://www.crtc.gc.ca/eng/news/releases/2009/r090611.htm>.

CRTC extends exemption for new media and calls for a national digital strategy

On June 4, 2009, the Canadian Radio-television and Telecommunications Commission (CRTC) announced that, after a careful examination and a full process, it will maintain its approach for broadcasting content distributed over the Internet and through mobile devices. The Commission will continue to exempt new media broadcasting services from its regulation and monitor trends as they evolve.

The Commission was not presented with convincing evidence that would suggest additional support, as proposed, was needed for the creation and presentation of Canadian broadcasting content in new media.

Given the dynamic nature of the new media environment, the Commission expects to review its approach within the next five years. In the meantime, the Commission will introduce a reporting requirement for new media broadcasting services to ensure that it has the best information available for future reviews.

The Commission will initiate a reference to the Federal Court of Appeal to clarify the status of Internet

service providers (ISPs). The Court will be asked to determine whether the Broadcasting Act should apply to ISPs when they provide access to broadcasting content.

Finally, the scope of the Commission's examination of the new media phenomenon was limited given its mandate under the Broadcasting Act. The digital era presents many opportunities and challenges, which can only be addressed through a holistic approach. Many countries have already developed their own plans to respond to this environment.

Further information can be found at <http://www.crtc.gc.ca/eng/news/releases/2009/r090604.htm>.

CRTC extends National DNCL registration period from three to five years

On April 20, 2009, the Canadian Radio-television and Telecommunications Commission (CRTC) announced that telephone numbers registered on the National Do Not Call List (DNCL) will remain on the list for five years rather than three years.

The new registration period will automatically apply to the more than 6.7 million telephone numbers already registered on the National DNCL, as well as to any future registrations. The Commission will continue to review the National DNCL's operations and make improvements to provide a better service to consumers.

In addition, the CRTC has clarified two of its telemarketing rules. First, it has determined that telecommunications from electoral candidates who are not affiliated with a registered political party are exempt from the National DNCL Rules. The second clarification concerns restrictions on calling hours for Automatic Dialing and Announcing Devices. Organizations that make use of these devices for non-telemarketing purposes, such as debt collection, must follow the CRTC's rules only if calling-hour restrictions are not specifically set out in provincial legislation.

Further information can be found at <http://www.crtc.gc.ca/eng/news/releases/2009/r090420.htm>.

Telecommunications Service in Canada: An Industry Overview

The Telecommunications Service Industry Reference Tool provides an overview of economic activity, financial performance, and corporate and regulatory developments in the Canadian communications service industries. The publication draws on information brought together from several different publicly available sources and Web sites, including those of Statistics Canada, the key service providers, and the Canadian Radio-television and Telecommunications Commission (CRTC). The material is available online at: <http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/en/sf05637e.html>

APEC TEL Mutual Recognition Agreement (MRA):

Canada is actively implementing Phase I and Phase II of the APEC TEL MRA on conformity assessment for telecommunications equipment. Under Phase I, Canada has designated twelve Canadian testing laboratories to test to the technical requirements of six participating economies, and has recognized 58 foreign testing laboratories to test to Canadian requirements. For more information on Phase I please visit the following web sites:

<http://ic.gc.ca/epic/internet/inceb-bhst.nsf/en/tt00065e.html>, and
<http://ic.gc.ca/epic/internet/inceb-bhst.nsf/en/tt00064e.html>.

Under Phase II, Canada has designated two Canadian certification bodies to certify to the technical requirements of three participating economies, and has recognized 22 foreign certification bodies to certify to Canadian requirements. For information on Phase II, please visit the following web sites:
<http://ic.gc.ca/epic/internet/inceb-bhst.nsf/en/tt00068e.html> and
<http://ic.gc.ca/epic/internet/inceb-bhst.nsf/en/tt00067e.html>.

3. Trust and Confidence in the Digital Economy

It has long been recognized that the migration of commerce to the Internet poses significant challenges, and requires a continuing strategy to capitalize on its potential. This, together with the combined forces of technological change and globalization, pose significant challenges for public policy. Canada continues to work with stakeholders to forge a strategy for building trust and confidence in the Internet through the development of legislative and policy frameworks. Existing elements include:

- privacy legislation (www.ic.gc.ca/eic/site/ecic-ceac.nsf/eng/h_gv00045.html)
- e-signature legislation (www.justice.gc.ca/eng/index.html);
- principles and a code of practice for consumer protection in electronic commerce (<http://e-com.ic.gc.ca/epic/internet/inecic-ceac.nsf/en/gv00086e.html>); and
- principles for authentication (www.ic.gc.ca/eic/site/ecic-ceac.nsf/eng/h_gv00090.html)

New developments are as follows:

Anti-Spam Legislation:

The Canadian government is concerned about the alarming growth of spam, and related online threats, the impact on productivity and costs to consumers and business. In September 2008, Canada's Prime Minister announced an intention to introduce government legislation designed to combat spam and related threats. In April 2009, a bill aimed at protecting consumers from spam and related online threats was tabled in the House of Commons (see http://www.ic.gc.ca/eic/site/ecic-ceac.nsf/eng/h_gv00482.html). The bill passed second reading in May 2009 and is under review by the House of Commons Standing Committee on Industry, Science and Technology (INDU). The *Electronic Commerce Protection Act* (ECPA), proposes legislative measures that will help deter the most damaging and deceptive forms of spam and other conduct from occurring in Canada and from reaching Canadians. The legislation aims to boost confidence in online commerce by protecting the privacy and personal security concerns that are associated with spam, counterfeit websites and spyware.

At the international level, Canada is actively encouraging international cooperation on spam/malware policies and enforcement, including bilateral agreements with various countries and participation in multi-lateral fora including the OECD and the London Action Plan, an International Forum for Anti-spam Enforcement Authorities. To date, bilateral agreements have been concluded with Australia, United Kingdom, Japan, the European Commission and Chinese Taipei.

Data Breach Reporting and Notification Requirements:

Canada's private sector privacy legislation, the *Personal Information Protection and Electronic Documents Act* (PIPEDA) sets rules that organizations must abide by when collecting, using and disclosing personal information in the course of commercial activity, (see www.ic.gc.ca/eic/site/ecic-ceac.nsf/eng/h_gv00045.html for a copy of the Act). The Act is mandated to be reviewed by Parliament every five years after coming into force. In May 2007, the first parliamentary review was completed followed by the tabling of the Government Response to 25 recommendations in October 2007. One element of the response was a legislative requirement for individuals to be notified of data breaches. During 2008, Industry Canada worked with stakeholders to develop an effective model for data breach notification. These new provisions in the legislation will ensure that individuals have the information they need to mitigate harm resulting from a data breach play and will encourage better information handling practices on the part of organizations. To complement this legislative requirement, the Department plans to undertake various cybersecurity awareness and education initiatives aimed at both business and individuals.

Industry Canada is also considering other amendments to PIPEDA aimed at better protecting and empowering consumers, as well as provisions that would clarify and streamline rules for business, and enable effective law enforcement and security investigations. The Department will be moving forward with its legislative proposals at the earliest opportunity. Strengthening and improving Canada's private sector privacy legislation has been identified as one the first deliverables of a digital economy strategy and action plan announced by the Minister of Industry at a stakeholder consultative forum held in June 2009.

APEC Privacy Framework:

At the international level, Canada continues to contribute to work aimed at implementing APEC's Privacy Framework, and with the APEC Electronic Commerce Steering Group and the OECD's Working Party on Information Security and Privacy, on developing cooperation on cross-border enforcement of privacy laws. Canada is also engaged in discussions on privacy and trans-border data flows with the US and Mexico as part of a North American initiative on common principles for electronic commerce.

Authentication and Identity Management:

Published in 2004, Canada's Principles for Electronic Authentication (www.ic.gc.ca/eic/site/ecic-ceac.nsf/eng/h_gv00240.html) represent a public/private sector "accord", or shared agreement, on how electronic authentication services should be designed, developed and deployed in Canada. Based on the requirement for a five year review of the Principles, Canada will be looking to assess the need to update the Principles to address technological advances, developments in the marketplace (domestic and international) as well as new public policy pressures. A review of the Principles is needed to ensure their applicability to new authentication environments (e.g., mobile commerce, RFID technology), assess the need for additional policy instruments to underpin the Principles (e.g., to provide additional guidance) and to explore their relationship to digital identities online. Building on the Principles for Authentication, Canada has developed an Issues Paper on the protection and management of digital identities and participates at various international

fora (ISO and OECD), where digital identity management has been identified as a key element to ensuring trust and confidence online. In 2009, a national committee was established to co-ordinate and harmonize Canadian positions on policy and standards relating to identity management. The Canadian Government welcomes the opportunity to identify and understand the potential of emerging technologies and trends that can be harnessed to enhance the reliability, viability and sustainability of the Internet.

Modernizing Techniques for Law Enforcement

Evolving technologies create both benefits and challenges for society and steps must be taken to ensure that technology is not misused for criminal purposes. Canada continues to work on initiatives aimed at ensuring law enforcement and national security agencies are equipped to keep pace with today's technology. One such initiative involves the creation of a cost-effective regime for telecommunications service providers to build and maintain an interception capability on their networks that allows for the lawful interception of communications by law enforcement and national security agencies. This will ensure that authorities have the procedural tools to investigate high-tech crime as well as traditional crime both domestically and internationally. More information on this initiative can be found at www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=4007628&Language=e&Mode=1. A complementary initiative seeks to modernize investigative powers for the 21st century. See: www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=4008179&Language=e&Mode=1 for more information.

At the international level, Canada works with the G8 High-Tech Crime Subgroup to enhance the abilities of law enforcement and industry to gather information on, prevent, investigate, and prosecute criminal and terrorist acts that make use of computer networks and other new Internet and wireless technologies. The role of government and the private sector within the expert group is to create a balance between the needs of law enforcement with public policy interest respecting individuals and industry. This information is essential to the continued development of policies relating to Canada's agenda to build business confidence and consumer trust in the online environment.