

## 6.0 The Evolution of Competition in the Canadian Telecommunications Service Market

### 6.1 Introduction

Competition has been introduced gradually to the Canadian telecommunications service market over a number of years through policy and regulatory initiatives by the federal government and its regulator, the Canadian Radio-television and Telecommunications Commission (CRTC). The process started in 1979 with the end of the telephone companies' monopoly on private lines interconnected with the public switched telephone network. This was soon followed by similar liberalization in 1980 of the market which provides telephones and other customer premises equipment. In the 1980s, competition was allowed in the resale of certain telecommunications services. In 1984, the government established a more competitive industry structure in the mobile cellular telephone market, through its licensing of two providers in each region of the country.

The pace of liberalization accelerated in the 1990s. In 1992, the market for public long distance voice services was opened to competition. This was consistent with the policy objectives of legislation introduced by the government earlier that year, which passed into law in 1993 as the [Telecommunications Act](#) (the Act). The Act provided the legislative framework for future initiatives to introduce competition in the telecommunications market. Through the licensing of Personal Communication Service (PCS) spectrum in 1995 under the [Radiocommunication Act](#), two more competitors were allowed into the mobile cellular telephone market. In 1997, the CRTC announced the regulatory framework for competition in local telephone services. In 1998, the CRTC liberalized the public pay telephone service market. Also in 1998, the CRTC opened the facilities-based international telecommunications market to competition and established a new regulatory framework for all international services, thus fulfilling part of Canada's commitment in the [World Trade Organization](#) (WTO) Agreement on Basic Telecommunications Services. In further fulfilment of the WTO agreement, Canada ended Telesat Canada's monopoly on satellite telecommunications carriage, effective March 1, 2000.

In southern Canada there are a few geographic areas served by "independent" local telephone companies which are not yet fully open to competition but are in the process of being liberalized. These companies serve rural areas and small towns, and represent less than 5% of total telecom revenue. In the case of northern Canada, (Northwest Territories, Yukon, Nunavut and northern British Columbia), the CRTC issued a decision in November of 2000 that introduces long distance competition in the territory served by Northwestel.

Following the brief description of the roles of the government of Canada and the CRTC set out below, this section provides a description of the *1993 Telecommunications Act*. It then traces the evolution of competition in the Canadian telecommunications industry by describing the major regulatory and policy initiatives that contributed to the development of what has become a very open and competitive industry structure. Table D-1 in Appendix D, provides a list of major milestones in this evolution.

## Government of Canada

Industry Canada, the government department headed by the Minister of Industry, has responsibility for telecommunications policy and international submarine cable licensing under the *Telecommunications Act*, as well as responsibility for spectrum policy and management under the *Radiocommunication Act*.

Under the *Radiocommunication Act*, licences issued by Industry Canada are required for the use of radio spectrum to provide a wide range of radiocommunication services including satellite and wireless communications services. Industry Canada allocates the spectrum with a view to advancing public policy objectives, preventing harmful interference and enforcing international obligations. When exercising powers under the *Radiocommunication Act*, the Minister of Industry may take into account all matters considered relevant for ensuring the orderly establishment or modification of radio stations and the orderly development and efficient operation of radiocommunication in Canada. The Minister may also have regard to the Canadian telecommunications policy objectives set out in the *Telecommunications Act*.

More information regarding international submarine cable licensing requirements can be found in section 6.3 of this document. In addition, more information on spectrum policy and management can be found on Industry Canada's [Spectrum Management and Telecommunications Web site](http://strategis.gc.ca/spectrum) at <http://strategis.gc.ca/spectrum>.

## The Canadian Radio-television and Telecommunications Commission (CRTC)

The CRTC is responsible for the regulation and supervision of telecommunications and broadcasting services in Canada. The CRTC is an independent federal agency with quasi-judicial status. Its institutional structure and powers are outlined in the *CRTC Act*, the *Broadcasting Act* and, as described above, the *Telecommunications Act*. The *CRTC Act* provides for up to 13 full-time and 6 part-time members (Commissioners), to be appointed by the Governor in Council for terms not exceeding five years. The CRTC currently functions with 13 full-time members and no part-time members.

More information about the CRTC can be obtained on the [CRTC's Web site](http://www.crtc.gc.ca) at <http://www.crtc.gc.ca> or by calling toll free at 1-877-249-CRTC (2782) or TDD 1-877-909-2782.

## 6.2 The 1993 Telecommunications Act

Introduced in Parliament in February 1992, Canada's *Telecommunications Act* came into force on October 25, 1993. The Act consolidated and updated laws governing Canadian telecommunications, some of which dated from 1908. The legislation brought amendments to the *Radiocommunication Act*, and to the special acts relating to Bell Canada, BC Tel, Teleglobe Canada and Telesat Canada. It repealed the *National Telecommunications Powers and Procedures Act* and the *Telegraphs Act*, and those sections of the *Railway Act* which formerly dealt with telecommunications. It represented a hard-won consensus, which was built on consultations with industry, business users, consumers, unions and the provinces. Key factors underlying the need to modernize Canadian law in this field included:

- rapid developments in telecommunications technologies and accelerated introduction of new services;
- a global trend toward greater reliance on market forces and competition in telecommunications services; and
- a 1989 Supreme Court decision which confirmed federal jurisdiction over all of Canada's major telephone companies.

The *Telecommunications Act* established a new legislative framework for all federally-regulated common carriers. In so doing, it provided for an integrated Canadian market for telecommunications services. In addition, it allowed the federal regulator, the CRTC, to put in place a more flexible regulatory framework that fosters competition, innovation and the development of Canada's telecommunications service industry. This is becoming increasingly important as global markets continue to become more competitive.

### Scope of the Act

The Act provides for the regulation, where required, of Canadian telecommunications common carriers. These include, among others, the incumbent telephone companies, the new competitive local and long distance service providers, mobile and fixed wireless service providers, as well as satellite services providers.

"Resellers", who do not own or operate transmission facilities but rather lease them from Canadian carriers, are not subject to direct regulation under the Act. However, resellers contribute to a fund to support affordable local service and resellers of international services are subject to certain licencing requirements (see section 6.4 of this document).

## Canadian Telecommunications Policy

One of the significant features of the *Telecommunications Act* that distinguishes it from previous legislation is the inclusion in section 7 of a statement of Canadian telecommunications policy. Section 7 of the *Telecommunications Act* reads as follows:

“7. It is hereby affirmed that telecommunications performs an essential role in the maintenance of Canada's identity and sovereignty and that the Canadian telecommunications policy has as its objectives

- (a) to facilitate the orderly development throughout Canada of a telecommunications system that serves to safeguard, enrich and strengthen the social and economic fabric of Canada and its regions;
- (b) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada;
- (c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications;
- (d) to promote the ownership and control of Canadian carriers by Canadians;
- (e) to promote the use of Canadian transmission facilities for telecommunications within Canada and between Canada and points outside Canada;
- (f) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective;
- (g) to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of telecommunications services;
- (h) to respond to the economic and social requirements of users of telecommunications services; and
- (i) to contribute to the protection of the privacy of persons.”

## Powers of the Government and the CRTC

Under the *Telecommunications Act*, the Governor in Council has the authority to issue directions of general application on broad policy matters to the CRTC (s.8). The Governor in Council may also vary, rescind or refer back CRTC telecommunications decisions - either on petition in writing presented to the Governor in Council within 90 days after a decision, or of its own motion (s.12). The Minister of Industry has the authority to establish technical standards and to require the CRTC to enforce these standards (s.15). Both the public and the provinces must be informed and have an opportunity to comment before any of these powers are used. The Governor in Council may also require the Commission to make a report on any telecommunications matter within the Commission's jurisdiction (s.14). The Minister also has the authority to issue licences for international submarine cables that pass through, or land in Canada, and the Governor in Council may issue regulations in relation to those licences (s.17-22). In addition, the Governor in Council can make regulations to implement various aspects of the Canadian ownership requirements (s.22). The Governor in Council power to review CRTC telecommunications decisions has existed since 1976 and has been used sparingly (22 times in 24 years out of a total of over 26,000 CRTC decisions). The *Telecommunications Act* power to issue policy directions has never been used.

The *Telecommunications Act* gives the CRTC a broad range of powers, which must be exercised with a view to implementing the policy in section 7 of the Act and any directions issued by the Governor in Council. For example, the CRTC must ensure that rates are just and reasonable and that Canadian carriers do not discriminate unjustly or accord any undue preference with respect to the telecommunications services they offer (s.27). The CRTC may also settle disputes between Canadian carriers and municipalities or other public authorities regarding the use of rights-of-way (s.42-45).

An important and frequently used new power granted to the CRTC in the Act is the power to forbear (s.34). Section 34 (1) gives the CRTC the power to forbear from regulating a service or a class of services provided by a Canadian carrier where it finds that doing so would be consistent with the Act's telecommunications policy objectives. Under section 34 (2), the CRTC must forbear where it finds that a service or class of services is or will be subject to competition sufficient to protect the interests of users. The Commission can forbear from the exercise of only specific responsibilities and obligations under the Act. Moreover, it may do so in whole or in part, with or without conditions. In many of its forbearance determinations, the CRTC has eliminated the requirement for carriers to file tariffs and agreements for approval but has retained its powers to address instances of undue preference or anti-competitive behaviour, should they arise. The CRTC has forbore from regulation for most of the services of wireless carriers and new entrants and for a significant portion of services offered by the incumbent telephone companies. Table D-2 in Appendix D, provides a list of the CRTC's major forbearance determinations.

The *Telecommunications Act* was amended in May, 1998, by *An Act to Amend the Telecommunications Act* and the [Teleglobe Canada Reorganization and Divestiture Act](#). The Act repealed sections of the *Teleglobe Canada Reorganization and Divestiture Act* that were related to Teleglobe's special investment and regulatory regime. It also amended the *Telecommunications Act* to exempt international submarine cables and earth stations from the foreign ownership and control restrictions (s.16(5)).

The 1998 amendments also provided the CRTC with authority to introduce a licensing regime for international services (s.16.1 - 16.4) and gave it responsibility for numbering administration (s. 46.1). Finally, the amendments authorized the CRTC to require any telecommunications service provider to contribute to a fund to support continuing access by Canadians to basic telecommunications services and to designate a person to administer that fund (s.46.5).

### **Canadian Ownership Policy**

Section 16 of the Act establishes the Canadian ownership and control requirements applicable to the telecommunications industry. The fundamental objective of these rules is to ensure that the Canada's telecommunications infrastructure is owned and controlled by Canadians. Canadian carriers, that is companies owning telecommunications transmission facilities, used to offer service to the public, must have at least 80% of their voting shares owned by Canadians and not less than 80% of the members of their board of directors must be Canadians. In addition, these Canadian carriers must be controlled in fact by Canadians at all times. The Governor in Council has issued the [Canadian Telecommunications Common Carrier Ownership and Control Regulations](#) which establish that investor companies in such Canadian carriers will be treated as Canadian if at least 66 2/3% of their voting shares are held by Canadians. Resellers are not subject to these rules, nor do they apply to satellite earth stations or international submarine cables.

The [Radiocommunication Regulations](#), made pursuant to the *Radiocommunication Act*, establish the Canadian ownership and control requirements for radiocommunication carrier licensees. These requirements are the same as those of section 16 of the *Telecommunications Act*.

### 6.3 Major Government Policy and Other Initiatives Announced Since 1995

#### Personal Communications Services (PCS)

PCS is a family of advanced mobile wireless digital telecommunications services rich in features that offers voice, data, and image communications. In December 1995, Industry Canada licensed fourteen companies to provide PCS services on a competitive basis across Canada. Two national 30 MHz PCS licences were awarded to Clearnet PCS Inc. and Microcell Telecommunications Inc. One national 10 MHz PCS licence was awarded to Rogers Wireless Inc. and 11 regional 10 MHz PCS licences were awarded to the members of the Mobility Canada consortium. The Mobility Canada consortium dissolved in 1999 with three members, TELUS, BCTel Mobility, and Quebec Telephone, merging under TELUS and the remaining members forming the Bell Wireless Alliance. In October 2000, TELUS acquired Clearnet to form a national wireless company.

#### Convergence Policy

On August 6, 1996, the Government issued its Convergence Policy Statement, which established broad policy objectives for telecommunications and broadcasting in the context of the information highway. The Policy Statement was issued following an extensive public consultation process launched by the issuance of an Order in Council in October 1994. It covers three broad subject areas: network facilities, Canadian content, and competition. In summary, the Policy supports:

- interconnection, interoperability, unbundling and resale and sharing of network facilities that deliver telecommunications services to the public;
- continued measures to support the production and exhibition of Canadian content in broadcasting; and
- competition in facilities, products and services for the information highway.

Of particular interest, the Statement established a framework for competition between telecom carriers and cable TV companies in their core markets. Adopting a “no head starts” rule, the policy stated that telecom carriers may enter broadcasting distribution only after the CRTC has set the regulatory framework for competition in local telephone service and has approved related tariffs filed by the telephone companies. By January 1, 1998, barriers to entry into local telephony had been sufficiently addressed that the CRTC began permitting telephone companies to apply for broadcasting distribution licences.

The Convergence Policy statement also supports regulatory safeguards to ensure that competition is fair and that policy objectives are met. Consistent with the Statement, the [\*Bell Canada Act\*](#) was subsequently amended to remove the prohibition on Bell Canada from holding a broadcasting licence.

## Wireless Broadband

Canada has made spectrum available for wireless broadband in a number of frequency bands and has plans to open up additional spectrum in the near future.

The 2500 MHz band is currently licensed for Multipoint Distribution System (MDS) broadcasting and for wireless Internet Multipoint Communication System (MCS) services. In November 2001, the Minister of Industry announced that mobile and fixed allocations would be made throughout the band. Incumbent licensees were reassured that they would not be relocated and that they could continue to deploy their networks according to their business plans. A consultation process is to be initiated to consider any licensing considerations flowing from this change in allocations.

The Department initiated public consultation in 2001 on opening the 3500 MHz band for Fixed Wireless Access (FWA) and Wireless Communications Services (WCS) currently operating in the 2300 MHz range. The Department indicated that up to 200 MHz for FWA and 30 MHz for WCS could be opened in the 3500 MHz band. The Department hopes that assignment of this additional spectrum will encourage deployment of FWA and WCS networks in all areas of Canada.

Other wireless broadband spectrum suitable for high capacity point-to-multipoint has also been made available. For example, 1200 MHz of spectrum in the 24 GHz and 38 GHz bands was auctioned for this purpose in 1999. Also, 1000 MHz of spectrum designated for Local Multipoint Communications Systems (LMCS) in the 28 GHz band was licensed through a comparative licensing process in 1996. That licence was recently returned to the Department; however, plans to re-assign this spectrum have not yet been developed.

The Department is currently undertaking a comprehensive review of the use of spectrum in the 3 to 30 GHz range. As a result of this review, additional spectrum could be designated for wireless broadband access.

The Department has a strategic plan for releasing new spectrum. The plan can be found in Radio Systems Policy 020, [Guidelines on the Licensing Process and Spectrum Release Plan](http://strategis.ic.gc.ca/SSG/sf01853e.html) (RP-020), available at <http://strategis.ic.gc.ca/SSG/sf01853e.html> on the Spectrum Management and Telecommunications Web site.



## WTO Agreement on Basic Telecommunication services

WTO negotiations on basic telecommunication services were held under the framework established by the General Agreement on Trade in Services (GATS). The two primary objectives of the negotiations were to allow more competition in the provision of telecommunications services, and to establish a transparent and predictable framework for trade and investment in telecommunications services. Canada's goal in the negotiations was to help Canadian telecommunications companies gain secure access to foreign markets such as the United States, Europe, Japan and developing markets in Asia and Latin America, and to ensure that Canadians continue to benefit from world-class communication services at competitive prices provided by a strong domestic industry.

The WTO negotiations concluded on February 15, 1997 with an agreement which came into force February 5, 1998. The WTO Agreement on Basic Telecommunications Services established commitments on the part of signatory countries and created a dispute settlement process which provides the necessary safeguards to ensure that those commitments are respected.

The WTO Agreement on Basic Telecommunications Services followed the Information Technology Agreement signed December 13, 1996, which liberalized trade in information technology equipment. The combined effects of these agreements has been to spur on telecommunications investment around the world, increasing opportunities for Canadian telecommunications service providers and equipment manufacturers.

Industry Canada has adopted all necessary measures to implement, and in important areas, to exceed its obligations under the WTO Agreement. These measures include introducing amendments to the *Telecommunications Act* as described above in section 6.2 of this document.

In fulfilment of its obligations, Canada has removed foreign ownership restrictions in the areas of global mobile satellite services and in the ownership of submarine cables. Telesat Canada's monopoly on domestic and trans-border telecommunications carriage was ended on March 1, 2000, and Teleglobe's monopoly on October 1, 1998. Teleglobe's special ownership restrictions were also eliminated at the same time.

In March 1999, the government made amendments to the *Radiocommunication Regulations* in order to remove the requirement of Canadian ownership and control that applied to fixed and mobile satellite earth station licence holders.

## Application of Telecommunications Act to SaskTel

In October 1998, the federal government passed an Order in Council that established June 30, 2000 as the date on which SaskTel would be subject to CRTC regulation.

## Connecting Canadians Agenda

In a move to help Canadians reap the rewards made possible by the rapid expansion of the information highway, the Government of Canada announced the [Connecting Canadians](#) Agenda in the 1997 Speech from the Throne, with the goal of making Canada the most connected country in the world by the year 2000. The six pillars of the Agenda are entitled: Canada Online; Smart Communities; Canadian Content On-line; Electronic Commerce; Canadian Government On-line; Connecting Canada to the World.

Making Canada the most connected country in the world promotes a more innovative and competitive economy, puts Canadians in a better position to capitalize on economic and learning opportunities in the knowledge-based economy, and enhances Canada's ability to attract investment from home and abroad. Though the private sector will lead in building the information highway, the Government of Canada will continue to create the most suitable policy and legislative framework to support connecting Canadians to each other and the world in a way that is affordable and accessible.

Accomplishments to date under the Connecting Canadians Agenda include: all public schools and libraries have been connected to the Internet; close to 5000 community access sites have been established; over 210,000 computers have been delivered to schools; demonstration projects for smart communities have been announced; 2,500 young Canadians have been hired to digitize content for the Web; and, Canada's Digital Collections and almost 5,500 volunteer organizations are either connected or are about to be connected.

## Spectrum Auctions

In June of 1998, Industry Canada announced that it would be making available, across the country, new wireless broadband spectrum at 24 GHz and 38 GHz to accommodate the increased demand for high-speed local access infrastructure. This spectrum is aligned with that in the United States, thus enabling Canadian service providers to take advantage of the economies of scale that equipment manufacturers will gain from a combined North American marketplace.

In November of 1999, Industry Canada held an auction for the 1200 MHz of spectrum in the 24 GHz and 38 GHz frequency range. The auction, the first ever held in Canada, was conducted securely over the Internet employing Canadian public key infrastructure (PKI) encryption and digital signature technologies to ensure the confidentiality and authenticity of all bids. A total of 256 licences were awarded to 12 companies. The winning companies bid a total of more than \$171 million.

In January 2001, the Department held its second auction, this time for additional PCS spectrum in the 2 GHz range. Consistent with its policy of fostering competitive telecommunications markets, all were eligible to apply to participate in the PCS auction. This auction provided opportunities for existing companies to obtain additional spectrum and created opportunities for new entrants with viable business plans. The availability of this spectrum enables the enhancement of existing PCS systems, provides for the introduction of new third generation-like services and stimulates innovation in the dynamic wireless environment.

The PCS auction ended February 1, 2001 following 51 rounds of bidding over 14 days. Fifty two out of a total of 62 licenses were auctioned. The auction winners bid a total of \$1.5 billion (Table 6-1).

**Table 6-1**

<b>PCS Auction Winners (5)</b>	
<b>BIDDER</b>	<b>BIDS (\$millions)</b>
Bell Mobility Inc.	720.5
Rogers Wireless Inc.	393.5
TELUS Communications Inc.	356.0
W2N Inc.	11.4
Thunder Bay Telephone Ltd.	0.6
<i>Source: Industry Canada</i>	

## Undersea Cable Landings

There are currently six different cable landings in Canada, under licences issued by the Minister of Industry to 3 different companies. Teleglobe Inc. still dominates this component of international telecommunications infrastructure, but new entrants are beginning to build their infrastructure, (Table 6-2).

**Table 6-2**

<b>Undersea Cable Landings (Cable Station) By Company</b>	
<b>Cable Company</b>	<b>Landing (Cable Station)</b>
Cantat-3, Teleglobe Inc.	Pennant Point, Nova Scotia
Canus-1, Teleglobe Inc.	Pennant Point, Nova Scotia
Tat-9, Teleglobe Inc.	Crystal Crescent Beach, Pennant Point, Nova Scotia
Tpc-4, Teleglobe Inc.	Port Alberni, British Columbia
3477967 Canada Inc., Leducor Industries Limited, and American-1	Cordova Bay, and Fleming Bay British Columbia
360networks Inc., Hibernia	Hospital Point, Nova Scotia
<i>Source: Industry Canada</i>	

A description of the licensing conditions reads as follows:

**Table 6-3**

### **Regulatory Regime for the Construction and Operation of an International Submarine Cable**

Section 17 of the *Telecommunications Act*, requires a licence to construct and operate an international submarine cable. Subsection 19 (1) of the Act states that the Minister of Industry (the Minister) may issue an international submarine cable licence to a person that is eligible under the regulations to hold a licence. When exercising this authority the Minister is subject to the [International Submarine Cable Licences Regulations](#) (the regulations) made by the Governor in Council under Subsection 22 (2) of the Act.

These regulations provide for two types of licence; a ‘terminating licence’ for cables that interconnect with Canadian networks, and ‘through licence’ for cables which do not interconnect in Canada. For example, a cable passing through ocean under Canadian jurisdiction.

#### **Licensing Procedures**

Section 18 of the Act provides that an application for the issuance, renewal or amendment of a licence must be made in accordance with the prescribed regulations. The application for a terminating cable licence or through cable licence must be submitted in writing to the Minister of Industry, and must contain the following requested information set out in subsection 4 (1) of the Regulations:

- (a) the name of the applicant;
- (b) the address of the head office of the applicant or, in absence of a head office in Canada, the address in Canada where service of the applicant may be effected;
- (c) if the applicant is a corporation, the province, state or country where the applicant was incorporated and the date of incorporation;
- (d) the origin and intended route of the international submarine cable and, in the case of an application for a terminating cable licence, the points where the cable will connect to telecommunications facilities in Canada;
- (e) documentation indicating compliance with the requirements set out in the *Canadian Environmental Assessment Act* (CEAA);
- (f) the term being requested for the licence, which may not exceed 10 years; and,
- (g) information relating to the capital costs and technical capabilities of the international submarine cable and its associated works or facilities.

Any project to construct or operate international submarine cables must be screened under the CEAA, which has as its objective to ensure that any environmental impact is thoroughly assessed before a license is issued.

*Source: Industry Canada*

## CRTC Report on Status of Competition

In response to concerns that had been expressed about the status of competition in Canadian telecommunications markets, and about the availability of advanced telecommunications services at affordable prices, the Governor in Council, on the recommendation of the Minister of Industry, required the CRTC to submit annual reports for five years on the status of competition in Canadian telecommunications markets and on the deployment and accessibility of advanced telecommunications infrastructure and services in urban and rural areas in all regions of Canada<sup>1</sup>. On September 28, 2001, the CRTC released its inaugural report on the status of competition in the Canadian telecommunications industry. The [full report](#) can be obtained at <http://www.crtc.gc.ca/ENG/publications/reports/PolicyMonitoring/2001/gic2001-09.htm> or by contacting any CRTC office. The report offers information, facts and data on the telecommunications industry, including the following:

- an overview of the Canadian telecommunications industry and regulation;
- general data on Canadian telecommunications industry players;
- information on the status of telecommunications competition in Canada, by market;
- a description of the impact of competition on customers; and
- an overview of the current status of the roll-out of broadband infrastructure across the Canada.

## National Broadband Task Force

The National Broadband Task Force (NBTF) was established in January 2001 by the Minister of Industry. The principal mandate of the Task Force was to map out a strategy for achieving the Government of Canada's goal of ensuring that broadband services are available to businesses and residents in every Canadian community by 2004. The Task Force published its report, [The New National Dream: Networking the Nation for Broadband Access](#), in June 2001.

Major findings and recommendations of the Task Force include:

- All Canadians should have equitable and affordable access to broadband services;
- Focus should be on communities where the private sector is unlikely to deliver services;
- First Nation, Inuit, rural and remote communities should be a priority along with public institutions (learning institutions, libraries, health care centres and public access points);
- Investment estimates for deployment of broadband infrastructure vary widely depending on whether they include support for transport to communities or access within communities, as well as depending on the combination of technology solutions;
- Accessibility means more than infrastructure – it also means content, services and building community and individual capacity.

The full report can be found on [Industry Canada's Broadband Web site](#) at: <http://www.broadband.gc.ca>.

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<sup>1</sup> [Order in Council P.C. 2000-1053](#), June 26, 2000.

In the December 2001 budget, the federal government outlined a revised goal of making broadband access widely available to all communities by 2005. To this end, on September 5, 2002 the government launched the Broadband for Rural and Northern Development pilot program. The program has a federal funding commitment of \$105 million, over three years. The essential elements of the program are described in the document [Broadband for Rural and Northern Development Pilot Program: Guidelines for Applicants](#), available on Industry Canada's Broadband Web site at: <http://www.broadband.gc.ca>.

The pilot program is intended to allow deployment funding to go to a limited number of rural, remote, northern, Inuit and First Nation communities most in need and where market forces alone will not rapidly extend the benefits of broadband access. This approach allows the federal government to test costing and technology assumptions. It can also use these communities as examples to other communities where the market could act on its own, thereby increasing the chances of the private sector playing a stronger role in the deployment of broadband without more government incentive.

### **Review of Foreign Investment Restrictions**

On November 19, 2002, Industry Minister Allan Rock announced that he is seeking the views of Canadians on the foreign investment restrictions applicable to the telecommunications industry and that he has asked the Chair of the House of Commons Standing Committee on Industry, Science and technology to undertake a review. To support the review, Minister Rock has released a [discussion paper](#) outlining the key issues and identifying questions to be considered. Interested parties can read the discussion paper, which is posted on the Innovation Strategy Web site at: <http://www.innovationstrategy.gc.ca/cmb/innovation.nsf/MenuE/Invest00>.

## **6.4 Major CRTC Decisions**

### **Liberalization of Long Distance Market**

On June 12, 1992, the CRTC issued [Telecom Decision CRTC 92-12](#), which removed the federally-regulated telephone companies' monopoly in the provision of public long distance voice telecommunication services. This was consistent with the policy objectives of the *Telecommunications Act*, the draft form of which had been introduced by the government earlier that year.

Decision 92-12 mandated trunk-side access to local exchange carrier switches, enabling local telephone subscribers to pre-select their long distance carrier and avoid having to dial extra digits to make long distance calls. The decision also established a regime to maintain and make explicit the long standing subsidy from long distance revenues used to support the provision of basic local telephone service to residential subscribers. This subsidy, called “contribution”, was based on a fixed per-minute rate paid by all long-distance carriers (both the incumbents and their competitors). For the first five years after the decision, new entrants benefitted from contribution discounts designed to foster the introduction of long distance competition. Contribution rates were calculated based on the specific needs of each telephone company and thus varied from one telephone company’s territory to another.

### **Review of Regulatory Framework**

On September 16, 1994, the CRTC issued [Telecom Decision CRTC 94-19](#), *Review of Regulatory Framework*. This decision established a new regulatory policy framework that would enable the Commission to streamline or eliminate regulation, to place greater reliance on market forces, to establish safeguards to protect against abuses of market power, to encourage the provision of innovative new services and to establish an alternative to rate base/rate of return regulation. In so doing, it mapped out the regulatory transition from the monopoly provision of telecommunications services to full competition. The decision reflected the policy objectives included in the 1993 *Telecommunications Act* and the high priority that the government has placed on the development of a competitive telecommunications environment.

Since the issuance of Decision 94-19, the CRTC has initiated a number of proceedings in order to fully implement the numerous elements of the framework it established. Implementation of some of the key elements such as forbearance, local competition and price caps are described in separate sections in this document. Another significant reform announced in the decision was a program of rate rebalancing and restructuring designed to bring local telephone rates closer to the cost of providing the service. Basic local residential service rates for the major telephone companies were subsequently increased by \$2/per month in 1996 and 1997 and between \$2 and \$3 per month in 1998, co-incident with the implementation of price cap regulation.

Decision 94-19 also recognized that prior to the implementation of price caps, it would be necessary to make changes to the then existing rate base/rate of return regime; namely, splitting the telephone companies’ rate bases into two separate segments - utility (local monopoly or near monopoly) and competitive. Having so split the rate bases in a subsequent proceeding, only the utility segment remained subject to rate of return regulation.



## Local Competition

On May 1, 1997 the CRTC issued [Telecom Decision CRTC 97-8](#), *Local Competition*. In its decision, the CRTC expressed the view that efficient and effective local competition would be best achieved by facilities-based service providers, and that such providers should not be simply customers of the incumbents, but co-carriers, equal in status. The CRTC concluded that facilities-based entry would be the only sustainable basis for competition in the long run.

Decision 97-8 did not attempt to fully implement a local competition regime. Rather, it established the policy framework and many of the underlying rules but left a number of the technical, operating and other details to be established through subsequent proceedings and through meetings of a committee known as the CRTC Interconnection Steering Committee (CISC). CISC is an assembly of CRTC representatives, industry players, members of the public and public interest and consumer groups brought together to deal with telecommunications matters. CISC and its working groups have been successful in resolving many complex and controversial issues, including the development of administrative and operational systems needed to implement Decision 97-8. By bringing parties together to work on resolving issues in an open forum, results such as these have been accomplished on a timely basis, largely without recourse to formal CRTC proceedings.

Major issues dealt with in Decision 97-8, through subsequent proceedings or by CISC are described briefly below.

- **Unbundling:** The CRTC ordered the incumbent telephone companies to unbundle the components of their local networks which have the characteristics of “essential facilities” that competitors require but cannot technically or economically duplicate themselves. In [Telecom Decision CRTC 98-22](#), the CRTC established the rates that new entrants must pay incumbent local telephone companies for use of the unbundled components of their local networks, including local loops. The rates set by the CRTC are intended to allow telephone companies to recover their incremental costs, plus a 25% mark-up.
- **Interconnection:** In order to ensure that subscriber-to-subscriber access is maintained, the CRTC required that, within each incumbent telephone company exchange, all local telephone companies must be interconnected with each other and with all long distance and wireless carriers providing service in that exchange. The CRTC also required the costs of establishing such interconnection between local telephone companies to be shared equally. With respect to compensation for call termination among local telephone companies, the CRTC adopted a “bill and keep” approach whereby, within appropriate limits, originating carriers are not required to compensate terminating carriers for the costs of completing calls from the former to locations within the same incumbent carrier exchange.

- **Resale:** The CRTC found that resale competition can help promote the development of a competitive market. Accordingly, the Commission concluded that the incumbents must allow for unrestricted resale by competitors of unbundled components, and for the resale of residential service. However, the Commission did not mandate wholesale discounts for the incumbents' local retail services.
- **Contribution:** In order to facilitate the development of local competition in all regions of Canada, the CRTC instituted a "portable subsidy" mechanism that would assist new local telephone companies in offering service in rural and remote areas where residential telephone service is offered by the incumbents at below-cost rates. Under this "portable subsidy" system, the contribution payments required to be paid by long distance service providers are remitted to a central fund administered by a third party. The fund administrator redistributes the subsidy among local service providers pursuant to a formula approved by the CRTC.
- **Consumer Safeguards:** The Commission determined that new entrants to the local market must adhere to a set of consumer safeguards, including: complying with regulatory requirements to protect customer privacy; the provision of 9-1-1 emergency service and message relay service; and providing customers with detailed information (e.g. billing policies, local calling area boundaries, details of service options, etc.).
- **Co-location:** In order for new entrants to be able to interconnect their networks with those of the incumbents without being forced to lease transmission lines from the incumbents, they must be allowed to "co-locate" their own transmission facilities within the central offices of the incumbents. Having found it appropriate to mandate co-location, the CRTC subsequently determined the rates, terms and conditions under which co-location is to be provided by the incumbent telephone companies.
- **Local Number Portability:** The CRTC found that the establishment of a system to enable customers of incumbent local telephone companies to keep their existing telephone numbers when switching to a new entrant provider, was vital to facilitating a competitive market in local telecommunications. It approved a method of Local Number Portability (LNP) whereby the telephone numbers of customers located within an exchange can be transferred or "ported" to another location or to another telephone company within that exchange. Pursuant to CRTC rulings, a consortium of service providers has been established to administer a database of telephone numbers; costing issues have been resolved and appropriate rates, terms and conditions have been established. LNP is now available in most major centres in Canada and will continue to be rolled out to meet the demands of competitive local service providers.

## Price Cap Regulation

With a view to reducing the regulatory burden, creating incentives for efficiency, fostering competition and providing continued price protection for consumers, the CRTC adopted a form of regulation known as “price caps”.

The local services of the major incumbent telephone companies first came under price cap regulation on January 1, 1998. The plan was put in place by *Price Cap Regulation and Related Issues*, [Telecom Decision CRTC 97-9](#).

Price cap regulation is less intrusive than the traditional “rate base/rate of return” regulation which sets prices by establishing a revenue requirement for a company (or a segment of a company) based on the difference between total forecast revenues and total forecast allowable expenses, including an allowable rate of return on investment. By contrast, price cap regulation ignores revenues and expenses during the multi-year price cap period and focuses instead on capping consumer price increases. It requires the company to flow through to customers specified productivity gains within a formula that also takes into account the rate of inflation.

Under the CRTC’s initial price cap regime, all capped services form a single “basket” and are subject to a price cap index (PCI). The PCI constrained prices of capped services to the annual rate of inflation minus an adjustment for productivity gains of 4.5% and exogenous factors arising from certain events which are beyond the telephone companies’ control. Residential rate increases were limited to the annual rate of inflation on average and increases for any individual rate were limited to 10% per year. The initial plan was in effect for a fixed four-year period.

Following an extensive year-long review of the initial 4 year price cap period, the CRTC released its second four-year price cap plan under *Regulatory Framework for the Second Price Cap Period*, [Telecom Decision CRTC 2002-34](#).

Given its views that the ability of competition in the local market to discipline prices would be minimal, the CRTC tightened controls on the pricing of local residential telephone service and established measures to ensure customers continue to receive high quality service. The index of prices for basic residential services are constrained to the annual rate of inflation less a productivity flow-through of 3.5%. As well, in all areas except rural and remote high-cost serving areas, optional residential services are similarly constrained. Rates for basic residential service are permitted to increase on average only if inflation exceeds 3.5%. Consumers also benefitted from CRTC determinations to implement measures that would ensure stringent service quality and a consumer bill of rights.

Pursuant to the Commission’s decision on the provision of telephone service to high-cost serving areas described below, the major incumbent telephone companies were required to file service improvement plans detailing measures to provide and upgrade service in unserved and underserved areas. With the exception of the plan filed by SaskTel, all plans were approved subject to certain adjustments.

The decision also addressed the pricing of carrier services provided by incumbent telephone companies to competitive service providers. Competitors' obligations to fund the overhead costs of the incumbents were reduced with the Commission's determination to reduce the mark-up over costs for essential and near-essential services from 25% to 15%. Furthermore, individual rates for these services are to be adjusted annually by the inflation rate less a productivity offset of 3.5%. As well, the CRTC initiated follow-up proceedings to implement cost-based rates for a number of services employed by competitors that were previously available to them at retail or other non cost-based rates.

### **Regulatory Regime for the Provision of International Telecommunication Services**

On October 1, 1998, the CRTC issued [Telecom Decision CRTC 98-17](#), *Regulatory Regime for the Provision of International Telecommunications services*. Implementation of the regime established in this decision allowed Canada to meet many of the commitments it made in the WTO Agreement on Basic Telecommunications Services. The regime includes a licensing system for providers of basic international services intended to ensure that foreign monopolies cannot use their dominance in their home markets to gain an unfair competitive advantage in the Canadian market, and to minimize barriers to entry for new service providers by enforcing provisions against anti-competitive practices. Two classes of licences were created: Class A licences, which are issued to firms that own or operate telecommunications facilities used in transporting basic telecommunications service traffic to or from Canada and thus can control the routing of that traffic; and Class B licences, which are issued to firms that provide basic telecommunications service to or from Canada but do not own or operate the associated telecommunications facilities.

The Commission also eliminated international traffic routing rules. Under Canada's previous rules, calls to overseas destinations were required to be routed through Teleglobe's facilities. The elimination of this rule allows service providers to route international calls through competing networks, including those serving the U.S. The Commission also eliminated restrictions that prevented Canada-to-Canada calls from being routed via U.S. facilities.

In [Telecom Decision CRTC 99-14](#), the Commission forbore from regulating the Teleglobe service that allows domestic carriers to connect with Teleglobe's international network for purposes of providing outgoing direct dial telephone service. The Commission also forbore from regulating Teleglobe's international interconnection agreements.

In [Order CRTC 2001-689](#), the Commission refrained from regulating Teleglobe's remaining tariffed services. However, the Commission will retain sufficient powers to protect the confidentiality of customer information and to impose conditions on the delivery of Teleglobe's services as may be warranted in the future.

### **Local Pay Telephone Service**

In [Telecom Decision CRTC 98-8](#), June 30, 1998, the CRTC announced the introduction of competition in the local pay phone service market. While the CRTC will not regulate the rates charged by new entrants, it will continue to regulate the rates of existing pay telephone providers.

### **Access to Cable TV Network Facilities by Third Parties**

In [Telecom Decision CRTC 98-9](#) (July 9, 1998), the Commission determined that it will not regulate the rates that broadcast carriers charge their customers for retail level Internet services and certain other telecommunications services (e.g. security services, telemetry, video-conferencing, Local Area Network and Wide Area Network). However, the Commission decided to mandate access to the facilities of the major incumbent cable companies to enable third party Internet Service Providers (ISPs) to offer competitive high speed Internet cable modem services.

As an interim measure, in [Telecom Decision CRTC 99-11](#), the Commission required incumbent cable companies offering Internet cable modem services to resell those services to ISPs. The CRTC mandated resale at a discount of 25% from the lowest retail Internet service rate charged by the cable carrier to a cable customer in its service area during any one month period. The Commission stipulated that this resale would cease to be mandated once facilities-based access was available to ISPs.

In [Order CRTC 2000-789](#), issued on August 21, 2000, the Commission approved the terms and per end-user rates to be charged to ISPs for access to cable company facilities used to provide cable modem Internet services. Service charges and conditions for co-location and interconnection of ISP facilities at specific cable company hub-sites are being determined in a separate follow-up proceeding. Unresolved technical, operational and business issues relating to the implementation of access service are being addressed within the CRTC Interconnection Steering Committee (CISC) framework.

### **Telephone Service to High-Cost Serving Areas**

On October 19, 1999, the Commission issued [Telecom Decision CRTC 99-16](#) regarding the provision of telephone service to high-cost serving areas (HCSAs). Decision 99-16 set three goals to be achieved over time: extend service to unserved areas; upgrade service levels in underserved areas; ensure that existing levels of service do not erode under competition. Recognizing that level of telephone service throughout Canada is very high, the Commission identified a basic level of service that all Canadians should have access to and took steps to ensure that, over time, this basic level of service would be made available to currently unserved and underserved areas. The Commission's basic service objective includes: single line touch-tone access; the capability to access the Internet at low speed without paying long distance charges; access to 9-1-1; voice relay services for the hearing impaired; directory assistance services; long distance services; and a copy of the local telephone directory.

The Commission noted in its decision that telephone service improvement plans currently being implemented by the incumbent telephone companies are improving service for approximately 90,000 Canadians. Decision 99-16 aimed to upgrade service for those not targeted by the existing plans - the roughly 13,000 residences and/or businesses that have been identified in over 700 localities that, still, do not have any access to telephone service, and the close to 7,700 customers that do not have single line service. To address the remaining unserved and underserved population in HCSAs, the incumbent telephone companies were directed to file service improvement plans. These service improvement plans have been assessed and are currently being implemented through separate decisions related to specific incumbents or groups of incumbents (principally, *Regulatory Framework for the Second Price Cap Period*, Telecom Decision CRTC 2002-34, previously described).

### **Access to Support Structures of Provincially Regulated Electric Utilities**

Cable companies and competitive telecommunications carriers often rent space on poles and in underground conduit owned by telephone companies and power utilities to carry the transmission lines that they use to provide service to their customers. This allows them to provide service without installing their own poles and conduit, often called support structures.

In 1996, Barrie Public Utilities and a number of other Municipal Electrical Utility Companies (MEUs) in Ontario decided to considerably increase their support structure rates. The Canadian Cable Television Association (CCTA) applied to the CRTC seeking a ruling that the MEUs in question must provide access to their poles at the same rates prescribed by the Commission in a previous decision for access to the poles of major telephone companies. In [Telecom Decision CRTC 99-13](#), September 28, 1999, the CRTC ruled that it had the constitutional and statutory jurisdiction under the *Telecommunications Act* to deal with the matters raised, and established an annual per-pole rental rate higher than requested by the CCTA, but considerably lower than that sought to be charged by the MEUs.

In response to an appeal filed by the MEUs, the Federal Court of Appeal issued a decision on July 13, 2001 in which it ruled that the CRTC's decision exceeded its jurisdiction under the *Telecommunications Act*. The Court concluded that the language of the relevant section of the Act was meant to grant access to support structures of the transmission lines of Canadian carriers and distribution undertakings by each other and by other persons who provide services to the public, but not access to the support structures of MEUs.

The CCTA has been granted leave to appeal the Federal Court of Appeal's decision to the Supreme Court of Canada.

## **DSL Access for Resellers**

Digital subscriber line (DSL) service provides high-speed access to digital networks using the same copper telephone lines as are used for basic voice telephone service. In a letter decision dated September 21, 2000, the CRTC ruled that incumbent telephone companies are to provide resellers wishing to offer DSL service with co-location and unbundled loop access at the same rates and on the same terms and conditions as are required for competitive local telephone companies. DSL resellers are precluded from using these facilities to provide switched local voice services. Reasons for the CRTC's decision were provided in [Order CRTC 2000-983](#).

### **Contribution Collection Mechanism**

On November 30, 2000, the CRTC issued [Decision CRTC 2000-745](#) in which it changed the way it collects the subsidy provided to maintain basic residential telephone service in high-cost serving areas at affordable rates. Effective January 1, 2001, the CRTC adopted a revenue-based mechanism, under which Canadian telecommunications service providers must pay a percentage of their gross telecommunications revenues into a national fund. This new mechanism replaces the previous regime, under which long distance service providers alone paid into regional subsidy funds. The new levy, initially set at 4.5 percent for 2001, was reduced to 1.4% on an interim basis in 2002. It will be adjusted annually thereafter. The Commission exempted providers with \$10 million or less in revenues from paying contribution and ruled that revenues from retail Internet services, retail paging, and terminal equipment are not contribution-eligible.

## **Implementation of Long Distance Competition in Northwestel's Territory and Review of its Regulatory Framework**

In [Decision CRTC 2000-746](#), November 30, 2000, the CRTC established the terms and conditions necessary to provide northern residents with a choice in long-distance suppliers as well as long-distance rates comparable to the rest of the country. Effective January 1, 2001 the long-distance market was opened to competition in the northern portion of the country served by Northwestel (NWTel), which includes the Northwest Territories, Yukon, Nunavut and northern British Columbia.

Consistent with its previous decisions on high-cost serving areas, the CRTC approved:

1. extending single-line service to over 500 homes currently unserved;
2. upgrading service to over 2,600 customers and eliminating mileage charges; and
3. NWTel's plan to upgrade its long-distance network to digital technology to improve the quality of both local and long-distance service.

In order to fund these service improvements and reduce long-distance rates, the Commission concluded that revenues were required from three sources:

1. a \$3 increase in the monthly telephone rates of NWTel residential customers, with a \$5 increase for business customers;
2. the introduction of a carrier access fee of 7 cents per minute on originating and terminating calls for long-distance competitors entering NWTel's territory; and
3. for the year 2001, the first year of the four-year service improvement program, a subsidy of approximately \$15 million from the contribution charges levied against telecommunications service providers in southern Canada. In subsequent years, the amount of the subsidy is to be reviewed and adjusted annually.

### **Access to Municipal Rights-of-Way**

In [Decision CRTC 2001-23](#), January 25, 2001, the CRTC ruled on a dispute between the City of Vancouver and Leducor Industries Limited involving access to municipal rights-of-way in that city. The CRTC determined that it has full jurisdiction under the *Telecommunications Act* to deal with rights-of-way issues in the context of resolving disputes brought before it, subject only to the requirement that it give due regard to the use and enjoyment of those rights-of-way by others.

Under the terms and conditions established by the Commission, the City of Vancouver is entitled to recover all of the causal costs it incurs as a result of the construction, maintenance and operation of carrier transmission lines in its municipal rights-of-way. It is not, however, entitled to any compensation in the form of "market-based" or other fees charged for the use of space in rights-of-way. Among other things, the CRTC also found it inappropriate for municipalities to require carriers to construct spare capacity, or to require other carriers to use this capacity rather than construct their own. It stated, however, that it expects carriers to participate with municipalities in joint planning and co-ordination committees, and that it considers it reasonable for carriers to contribute to the costs of any such committees.

On May 14, 2001, the Federation of Canadian Municipalities and the cities of Vancouver, Calgary, Toronto, Halifax and Ottawa were granted leave to appeal the CRTC's decision to the Federal Court of Appeal. The appeal argues primarily that the CRTC lacks the jurisdiction to make the type of findings regarding municipalities such as those made in Decision 2001-23.

### **Restructured Rate Bands and Revised Loop Rates**

In [Decision CRTC 2001-238](#), April 27 2001, the Commission approved revised unbundled local loop rates that competitive local exchange carriers will pay for the use of the incumbent local exchange carriers (ILECs) unbundled loops. It also addressed the costs to be used as the basis for establishing the subsidy paid by the national contribution fund. This includes the adoption of a uniform approach to identifying high-cost serving areas in the territories of the major ILECs and a more consistent set of costing methodologies by which the ILECs are to determine the costs for local loop and residential primary exchange services.



## **Independent's Regulatory Regime**

In [Decision CRTC 2001-756](#), December 14, 2001, the CRTC released its decision finalizing the application of the new revenue based contribution mechanism for the small independent telephone companies and implementing a price cap form of regulation. This decision affects 39 companies primarily in Ontario and Quebec, serving less than 2% of the Canadian population.

The CRTC found it necessary to adopt a proxy approach to calculating the independents' subsidy requirement, in part, given their difficulties in generating the necessary cost data. Therefore, for the purposes of calculating the subsidy, the CRTC decided to employ an adjusted average of the large incumbents' costs and assume the national average local rate of \$22.75. The CRTC also approved a 4 year transition period in which the subsidy would be scaled back gradually while at the same time the independents could increase rates up to the \$22.75 proxy. Over the 4 years, the contribution received by small telephone companies will drop from \$37.9 million to \$25.8 million. Under the new contribution regime, telecommunications service providers with more than \$10 million in eligible revenues are required to pay into the fund based on a pre-determined revenue percentage. All but 5 of the independents are expected to be exempted from contributing.

Effective 1 January 2002, the new framework allows for annual price increases based, primarily, on inflation. However, because some of the independent companies' local rates are much lower than the national average of \$22.75, those companies will be permitted to increase rates at a maximum of \$4 per year (in addition to inflationary increases) to reach the \$22.75 mark, starting January 1, 2002.

## **Local competition in Télébec and TELUS Québec Territory**

In [Order CRTC 2001-761](#), October 3, 2001, the Commission found that competition in the local exchange and local payphone markets should be permitted in Télébec's and TELUS Québec's operating territories beginning in September 2002. The regime adopted largely parallels that were already established for local exchange and payphone competition in the territories of the other large incumbent telephone companies, previously described.

## **Price Regulation for Télébec and TELUS Québec**

In [Telecom Decision CRTC 2002-43](#), July 31, 2002, the CRTC established a four-year price cap regime for Télébec and TELUS Québec. The regime adopted is similar in most respects to that implemented for the second price cap period of the other large incumbent telephone companies, previously described.

## 6.5 Major Ongoing Regulatory Proceedings

### Access to Multi-dwelling Units, In-building Wiring and Riser Space

On August 25, 2000, the CRTC initiated a proceeding under [Public Notice CRTC 2000-124](#) for the development of a fair regulatory approach to providing telephone and cable companies with access to multi-dwelling units. The Commission noted in the public notice that government policy supports end-user choice among broadcasting and telecommunications service providers, including for apartment buildings and office complexes. The Commission is seeking comments on, among other things, the regulatory approach (including possible fees, charges or other terms and conditions) that should be used to facilitate non-discriminatory access and customer choice in multi-dwelling units.