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17 August 2005

Mr. Allan MacGillivray
Executive Director
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Ottawa, Ontario
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Dear Mr. MacGillivray:

Please find attached a revised version of the Commission's Discussion Paper prepared for the Telecommunications Policy Review Panel, amending paragraphs 173 and 193. This version replaces the original version sent on 15 August 2005.

Sincerely,

Diane Rhéaume
Secretary General

Encl.

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Canada

CANADIAN TELECOMMUNICATIONS POLICY REVIEW

Discussion paper

Canadian Radio-television and Telecommunications Commission

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15 August 2005

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Executive Director
Telecommunications Policy Review Panel Secretariat
280 Albert Street
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Dear Mr. MacGillivray:

The Canadian Radio-television and Telecommunications Commission is pleased to present the attached Discussion Paper prepared for the consideration of the Telecommunications Policy Review Panel.

The Commission hopes that its Discussion Paper will assist the Panel in its deliberations.

Sincerely,

Diane Rhéaume
Secretary General

Encl.

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Canadian Radio-television and Telecommunications Commission

Introduction

1. The Telecommunications Policy Review provides an important opportunity for Canadians to take stock of where we stand in the global information society, to assess the adequacy of our telecommunications infrastructure to meet the future needs of both individuals and businesses throughout Canada, and to consider whether our current policy and regulatory framework could be improved to better satisfy these requirements.

2. The Canadian Radio-television and Telecommunications Commission (the Commission; the CRTC) welcomes this initiative by the Government of Canada and hopes that it will generate an informed and stimulating discussion of these important issues.

3. Telecommunications, like transportation, has always been of vital importance to Canadians.[1] Due to our vast geography and relatively dispersed population, it has provided an important link, both socially and economically, in the life of our nation. Now, more than ever, it provides the foundation for Canada's participation in the global information market, and is providing new opportunities for Canadians in all regions of the country to participate in the "new economy", regardless of their location.

4. Despite the complexity of the issues before the Telecom Review Panel, and the numerous important questions raised in its Consultation Paper, there is likely broad-based support for some very high-level objectives: Canadians want access to high quality telecommunications services at reasonable prices; Canada wants to be at the forefront of technology development; and we want to participate fully in the new economy.

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[1] In its 2002 Review of Regulatory Reform in Canada, the Organisation for Economic Co-operation and Development (OECD) noted that: "In contrast to other OECD countries, Canada views telecommunications as playing an "essential role in the maintenance of Canada's identity and sovereignty…"".

5. The big question for the Telecom Review Panel is - how best to achieve these important social and economic objectives.

6. As the independent regulatory agency created to interpret and apply Canadian telecommunications legislation over the past three decades, the Commission is in a good position to shed some light on the regulatory implications of possible legislative reforms.

7. With this objective in mind, this paper discusses the evolution of telecommunications legislation in Canada and the manner in which it has influenced the regulatory framework. It examines what has worked and what has not. It looks at where we stood in 1993 when the last major rewriting of the telecommunications legislation took place, at where we stand now, at what has been accomplished and at what remains to be done. Are the time-honoured principles of universal service at just and reasonable rates still relevant in 2005, or can they be dispensed with? Should incumbent telephone companies be released from their obligations to serve, or from the statutory restrictions on discriminatory or preferential rates or terms of service? Do consumers need additional protection from carriers' commercial practices - or will the laws of general application suffice? Should carriers and service providers who are denied access to other carriers' networks be able to seek relief from an industry-specific regulator - such as the CRTC - or will the courts or the Competition Tribunal better serve the public interest?

8. The Commission hopes to advance the debate on these and other issues by identifying some of the alternatives available and the possible implications of pursuing them.

Where have we come from and where are we headed?

9. Before looking to the future, it is useful to look to the past to see how our approach to telecommunications regulation has evolved over the years. This exercise has merit because it helps to explain certain attributes of our current legislative framework. It assists in the process of matching historical policy objectives with statutory provisions and provides an intellectual framework for considering whether the policy objectives in question remain valid in today's environment. It is useful to look back to see whether the relevant statutory provisions

have worked as originally intended. Within this framework it is also possible to consider whether alternative legislative provisions, or the laws of general application, would better fulfill the relevant policy objectives.

10. In carrying out this exercise, it is important to understand that a statute is the formal expression of a legislative policy, and that before a statute can be drafted, the policy sought to be implemented by it must be determined.[2] It is then up to legislative drafters to ensure that the legislation accurately reflects legislative policy and it is up to the courts, or designated regulatory agencies, to interpret and apply the legislation.

11. One must therefore be careful not to put the cart before the horse in deciding what needs to be changed in any given instance. Is it the legislative policy that is no longer relevant? Is it the legislation itself which fails to give effect to a relevant legislative policy? Or have the CRTC, or the courts, misinterpreted the legislation in a manner that thwarts or fails to achieve the legislative intent?

12. These are questions that need to be asked when addressing the adequacy of our existing telecommunications legislative and regulatory framework to meet Canadian requirements in the next decade. Before altering the wording of specific sections of the *Telecommunications Act*, or before dropping long-standing provisions from the *Act*, one needs to be sure of the underlying policy objective that is being advanced and one needs to assess whether it remains valid today. Only then can intelligent debate take place as to the various options available to best give effect to that policy.

13. The Commission itself is a creature of statute. It deals with the legislation as drafted and tries to give effect to the policies expressed in it. The breadth of discretion afforded the Commission in its administration of the *Telecommunications Act* varies significantly in different sections of the *Act* from a very broad discretion to determine whether carriers' rates are "just and reasonable", to virtually no discretion in respect of foreign ownership restrictions. When parties affected by Commission decisions believe that the regulator has exceeded its statutory powers, or has misinterpreted the governing legislation, the courts act as a check on its compliance.

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[2] Driedger, *The Composition of legislation: legislative forms and precedents*, Department of Justice 1976, 2nd Edition.

When parties believe that the Commission has misinterpreted the telecommunications policy objectives underlying the *Act*, they have the option of petitioning the Governor in Council to vary, rescind, or refer back for reconsideration the Commission's decision. The Governor in Council may also do this on its own motion and has the additional power to issue directions to the Commission in respect of broad policy issues. While never utilized in respect of telecommunications, this latter power provides the government with an opportunity to clarify government policy on issues not clearly delineated in the legislation itself.

14. The governing legislation is therefore central to the Commission's role as the principal regulator of Canadian carriers, and to a lesser extent, of telecommunications service providers. It defines both the extent of the Commission's jurisdiction and the extent of the regulatory or legal powers available to the Commission. It provides guidance on policy through the specific objects in section 7 of the *Act*, as well as through the wording of specific sections.

The Evolution of Canadian Telecommunications Policy and Legislation

15. At a high level, the Canadian telecommunications sector can be characterized as having evolved over the past century from a monopoly towards a more competitive structure. The applicable telecommunications legislation can be viewed as having embodied the rules necessary to pursue certain government policy objectives and to balance the interests of telecommunications providers and users in the public interest during the various phases of this evolution.

16. Following an initial period of approximately twenty-six years, from 1880 until 1906, in which there was a relatively unstructured environment for the provision of telephone service in Canada, we entered the first phase of comprehensive regulation. This first phase was characterized by the monopoly provision of telephone services and the independent regulation of telephone companies pursuant to the *Railway Act*. This phase lasted for eighty-seven years from 1906 until 1993. While some competition was permitted during the latter stages of

this phase in the provision of non-basic telecommunications services, particularly following the extension of the Commission's jurisdiction to include telecommunications in 1976, the telephone companies' monopoly over the provision of basic telephone services remained virtually intact.[3]

17. The second phase of this evolutionary process involved the transition of the telecommunications sector from a primarily monopoly structure to a competitive one. Although this process started in the late 1970s on an *ad hoc* basis in respect of non-basic telecommunications services, it was not until the passage of the *Telecommunications Act* in 1993, that the statutory framework was amended in a manner that endorsed, and indeed required, the pursuit of a more competitive structure for the provision of telecommunications services in Canada.

18. This second phase has been characterized by a mixture of competition and regulation. It was recognized at the outset that there would be no flash cut from a decades-old monopoly structure to a fully competitive industry and that regulation would still be required to protect the interests of users in this hybrid environment. Due to the highly interdependent nature of telecommunications networks, it was also recognized that there would need to be regulatory oversight both to manage the transition and to ensure, on an on-going basis, that connectivity between networks and other public policy objectives continued to be met. As discussed further below, the *Telecommunications Act* was framed in a manner designed to equip the Commission with the same powers that it had always had to regulate the provision of telecommunications services, plus some new powers to better enable the Commission to manage the hybrid environment that was anticipated to evolve.

The Monopoly Phase

19. For most of the last century, telecommunications policy in Canada focussed on the objective of extending high quality, reliable telephone service to Canadians in all parts of the country at reasonable rates. By and large, the mechanism used to accomplish this objective was the

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[3] The long distance market was opened to facilities-based competition in 1992 just prior to the passage of the *Telecommunications Act* in 1993. However, the monopoly provision of basic local telephone service remained until 1997.

government-regulated monopoly. It was thought that a monopoly structure could best achieve this goal by exploiting economies of scale and by avoiding expensive duplication of facilities in what was considered to be a "natural monopoly" environment.

20. In the United States, Theodore Vail is widely credited with convincing State regulators to enter into a "regulatory bargain" with his company, AT&T Long Lines, designed to combine a myriad of non-interconnected local telephone companies into integrated regional monopolies connected by his Long Lines company. In return for this monopoly franchise, Vail agreed to extend telephone service to the population resident within these regional operating territories and submit to government imposed regulation. From 1915 to 1925, competing local exchanges, which had been the norm in larger American urban centres, were merged into territorial monopolies and linked into a nationwide system. Regulation was used to protect the monopoly as well as to provide a substitute for the price and service incentives of competition.[4]

21. In Canada, our regional monopolies developed in a somewhat different manner - but with a similar result. Although Bell Canada initially established networks in various regions of the country, its perceived lack of attention to the West led governments in Alberta, Saskatchewan and Manitoba to purchase Bell's assets in those provinces and set up their own regional telephone companies in 1907 and 1908. Bell had also sold its interests in the Atlantic Provinces to private investors. Scores of independent local telephone companies also emerged in parts of Canada that were either underserved or not served at all by Bell Canada or the other telephone companies. Approximately 850 of these independents were still in operation when the CRTC's jurisdiction was extended to include the regulation of telecommunications in 1976. The consolidation of these independents into the larger regional operating companies has continued to this day, with only 38 independent telephone companies remaining in Quebec and Ontario and one in British Columbia.

22. Contrary to popular wisdom, we did not start out with the monopoly provision of telecommunications services in Canada. In addition to competing telegraph lines following the rights of way of competing railways, there was vigorous competition in the provision of

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[4] Milton Mueller, *Telecommunications Access in the Age of Electronic Commerce: Toward a Third-Generation Universal Service Policy*.

local exchange services in many urban areas. The problem was that the competing networks were not usually interconnected with the result that customers of competing systems could not talk to each other. Despite the fact that Bell Canada had a national charter to provide telephone service across the country, in many regions, alternative suppliers popped up. In some cases, this was the result of inattention by Bell Canada, and in others, the response was purely entrepreneurial - the desire to offer a competing service that was either better or lower-priced.

23. In his book entitled "*A Voice from afar: the history of telecommunications in Canada*", Robert Collins described the state of telephone competition in 1902:

> The same year, 1902, Fort William and Port Arthur started cooperative municipal telephone systems in competition with the Bell. A civic committee in Saint John, N.B. recommended the same. Peterborough granted a franchise to an independent company. Ottawa and London renewed the Bell franchise only after bitter controversy. Even immortal Brantford refused to renew the exclusive franchise, after all that Alec Bell had done to put it on the map. Competition was so vicious in some areas that rival linemen actually sawed down the opposition's poles. By 1905 the Dominion Grange, a farm organization, and the Union of Canadian Municipalities had both called for federal operation of long distance telephone lines. All three prairie provinces were fretting under the Bell's yoke.[5]

24. Prior to the passage of the *Telecommunications Act* in 1993, the *Railway Act* contained the principal substantive provisions applicable to the regulation of telecommunications at the federal level in Canada.[6] The *Railway Act* was first amended to apply to telephone service in 1906, but even as early as the 1880's, the federal government had asserted limited jurisdiction in the telephone market, first by incorporating Bell Canada pursuant to an Act of Parliament in 1880,[7] and then in 1892, by prohibiting the company from raising its rates without the approval of the Governor in Council. This resulted in a "price cap" that lasted for ten years. In 1902, the *Bell Canada Special Act* was also amended to impose an "obligation to serve" on the company. Interestingly, this statutory obligation, which was a forerunner of our universal service policy, also contained a quality of service component:

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5 At page 181.

6 Legislation also existed in each of the Provinces regulating the activities of telecommunications carriers subject to their jurisdiction. This situation persisted until the Supreme Court of Canada's landmark decision in *Alberta Government Telephones v. CRTC* in 1989 precipitated unified federal jurisdiction over interconnected telephone companies. [1989] 2 SCR 225.

7 Bell Canada Special Act, S.C. 1880, c. 67, as amended.

> Upon the application of any person, firm or corporation within the city, town or village or other territory within which a general service is given and where a telephone is required for any lawful purpose, the Company shall, with all reasonable dispatch, furnish telephones, of the latest improved design then in use by the Company in the locality, and telephone service for premises fronting upon any highway, street, lane, or other place along, over, under or upon which the Company has constructed, or may hereafter construct, a main or branch telephone service or system, upon tender or payment of the lawful rates semi-annually in advance, provided that the instrument be not situate further than two hundred feet from such highway, street, lane or other place.[8]

25. Following a number of rather tumultuous years of direct regulation by the Governor in Council, Parliament passed a bill in 1906 bringing Bell Canada and all other federally-chartered telephone companies under the jurisdiction of the Board of Railway Commissioners for Canada and empowering that Commission to regulate all telephone tolls, contracts and agreements of those companies.

26. The *Railway Act* was overhauled in 1919 and then remained largely intact for the next seventy-five years until the *Telecommunications Act* was passed in 1993. Under the *Railway Act* there were only six substantive sections and two interpretative sections (sections 335 to 341) that applied exclusively to telephone companies. The remaining applicable sections were railway provisions adapted to apply to telecommunications by virtue of section 339 of the *Railway Act*. Amazingly enough, with the benefit of only six substantive provisions that applied specifically to telephone service, the Board of Railway Commissioners, the Canadian Transportation Commission and the CRTC (to be referred to collectively in the balance of this paper as "the Commission") successively regulated the telecommunications carriers that were subject to federal jurisdiction, including Canada's two largest telephone companies, for a period of eighty-seven years.

27. These core provisions did not contain any express policy objectives in the way that section 7 of the *Telecommunications Act* now does. However, it is possible to discern three distinct policy objectives rising out of the substantive provisions.

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[8] S.C. 1902, c.41, s.2.

28. The first principle was the universal service principle. That principle, which embodies the "regulatory bargain" between the government and the telephone company, requires the telephone company to provide a high quality telephone service to users in its operating territory at affordable rates. The *quid pro quo* for this service was the promise of a just return on the capital expended by the telephone company in delivering on its part of the bargain. This principle, which was developed by regulators and the courts, was derived from the requirement in the *Railway Act* for all tolls to be "just and reasonable". It was implemented by provisions requiring all tariffs of tolls to be filed with the Commission for prior approval and conferring on the Commission broad powers to approve, disallow, amend, substitute or postpone any such tariffs of tolls.

29. The second principle required the telephone companies to treat their customers in a fair and non-discriminatory manner. This principle was an important one since, without it, customers would not have enjoyed any countervailing power to deal with the monopoly supplier. It was embodied in a statutory prohibition requiring that a telephone company shall not in respect of tolls or any services or facilities provided by it, unjustly discriminate against any person or company, or make or give any undue or unreasonable preference or advantage in favour of any particular person or company or any particular traffic, or subject any such person, company or traffic to any undue or unreasonable prejudice or disadvantage. This statutory prohibition was buttressed by a reverse onus on telecommunications carriers to demonstrate that any discrimination, preference or advantage was not unjust, undue or unreasonable, as the case might be, and by conferring on the Commission the same broad powers to make determinations and enforce these requirements, as it enjoyed with respect to tariffs and tolls. The fairness principle was further embodied in a consumer protection measure that required prior Commission approval for any limitation of liability provision included in a telecommunications contract.

30. The third principle embodied in the *Railway Act* was one of network connectivity. It was recognized at an early stage in the evolution of the telephone system that its utility would be greatly enhanced if customers of different networks could communicate with each other. This was important even in a monopoly environment because of the presence of regional monopolies and hundreds of independent telephone companies. It was also important for

the provision of international telecommunications. This principle found expression in a statutory provision that allowed any provincially, municipally or federally-regulated telephone company that wished to interconnect with a federally-regulated telephone company, and could not reach agreement on interconnection or terms, to apply to the Commission for relief. The Commission was granted broad powers to grant interconnection and to establish terms and conditions, compensation and standards for interconnection in such cases. It was also granted the power to review and approve or disapprove of all interconnection agreements between telecommunications carriers.

31. The *Railway Act* was also important for establishing a model for regulation by an independent regulatory agency. While the identity of this agency has changed three times since 1906, the model has survived. It has been left to this agency to interpret the legislation and to balance the interests of telecommunications users and service providers for almost one hundred years. This model conferred considerable discretion on the regulator to carry out its mandate, with appeals to the Governor in Council, and to the courts on questions of law and jurisdiction.

32. It was pursuant to the universal service principle, and through the tariff approval process and the requirement for all rates to be just and reasonable, that regulators and the courts developed the principles of rate of return regulation that applied to telecommunications carriers until relatively recently. Service consisted of network access and usage, as well as the telephone terminal itself.[9] Rates were set both with regard to their affordability for consumers and businesses and with regard to generating a sufficient return for the monopoly to enable it to continue investing in the plant and equipment necessary to provide a ubiquitous and high quality service. Prices were set in a manner designed to make access to basic local telephone service affordable to the broadest possible customer base. Higher prices were sanctioned for long distance and other "discretionary" services to offset any shortfall in revenues resulting from the provision of low priced local telephone services in higher cost areas. This spawned a rather complex rate structure which embodied a system of internal cross-subsidies by both

[9] This was the case until 1982 when the Commission unbundled the telephone and line and permitted the competitive provision of terminals. Telecom Decision CRTC 82-14, *Attachment of Subscriber-Provided Terminal Equipment*, 23 November 1982.

service and region. It also resulted in a regulatory framework in which the regulator necessarily became involved in rate structure, overview of construction and upgrades to the network, and review of the carrier's expense and revenue projections.

33. This model of regulated monopoly was hugely successful in achieving the universal service objective. It resulted in one of the highest national penetrations of telephone service in the world, at amongst the lowest prices. It also produced a very high standard of telephone service. These results, which put Canada among world leaders in the provision of telecommunications services, were even more remarkable considering the vast size, low population density, challenging topography and harsh climate of our country.

34. However, despite this success, by the 1970's pressure began to build for a change in the structure of our telecommunications system. Technological advances began to give rise to a greater variety of potential service offerings and also began to bring into question the legitimacy of the "natural monopoly" theory. The introduction of competitive services and equipment options in the United States brought an increased awareness among Canadian consumers and businesses, of the potential for increased choice of services and equipment and lower prices that an increasingly competitive model was providing south of the border. Lower prices for long distance services and for business telecommunications equipment in the United States also brought calls from the Canadian business community for change. These calls strengthened with a growing realization of the importance of telecommunications to the economy and our comparative cost structure relative to competing businesses in the United States. The system of cross-subsidies that had provided the underpinnings of Canada's successful pursuit of universal telephone service now provided additional ammunition to those who were arguing for the introduction of competition. They could point to higher Canadian long distance rates and business telecommunications costs (embodying implicit subsidies to rural and residential local service) as justification for a change in industry structure and our manner of regulation.

35. From the late 1970's until the passage of the *Telecommunications Act* in 1993, the Commission began to receive applications for the introduction of competition in various sectors of the telecommunications market. These applications were dealt with on their merits, on an *ad hoc* basis, by weighing up the advantages and disadvantages of introducing competition in the particular sector involved.

36. The fairness principle played an important role in this process. Although the non-discrimination provisions of the *Railway Act* had their origins in the laws of common carriage applicable to the transportation industry, they were adapted by the Commission during the 1970's and 80's to become an important mechanism for implementing some measure of competition in the telecommunications market.

37. Starting with the *Challenge Communications* case in 1977, the Commission interpreted the non-discrimination provision in the *Railway Act* as prohibiting a regulated telephone company from conferring an undue or unreasonable advantage on itself (as opposed to being restricted to preferences conferred on third parties).[10] In *Challenge*, Bell Canada was found to be in breach of this provision when it refused to allow a competing supplier of radio-telephone services to interconnect its service with the public switched telephone network in order to provide customers with a new dial through capability. The fact that Bell Canada was permitting its own radio-telephone service to operate in this manner, while refusing a competitor's request to do so, precipitated a finding of undue preference or advantage and led to a requirement for Bell to produce interconnection standards and an interconnection tariff for the first time. This interpretation of the provision was upheld by the Federal Court of Appeal.[11]

38. This important application of the provision soon led to other competitive inroads in radio paging,[12] private line interconnection,[13] terminal attachment[14] and enhanced services.[15]

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10 *Challenge Communications Ltd. v. Bell Canada*, Telecom Decision CRTC 77-11, 7 October 1977.
11 *Re Bell Canada v. Challenge Communications Ltd.* (1978), 86 DLR (3d) 351.
12 Telecom Decision CRTC 79-14, *Collins Inc. v. Bell Canada*, 26 July 1979.
13 Telecom Decision CRTC 79-11, *CNCP Telecommunications, Interconnection with Bell Canada*, 17 May 1979.
14 Telecom Decision CRTC 82-14, *Attachment of Subscriber-Provided Terminal Equipment*, 23 November 1982.
15 Telecom Decision CRTC 84-18, *Enhanced Services*, 12 July 1984.

39. The connectivity principle and the CRTC's jurisdiction to order telecommunications carriers to interconnect their networks or lines with those of other carriers, to set terms for interconnection and to approve interconnection arrangements, has also been extremely important to the evolution of Canada's telecommunications industry.

40. Initially, these powers were used to ensure connectivity between the various regional monopolies and the independent telephone companies operating within the regions they served. The power to review interconnection agreements enabled the regulator to monitor settlement arrangements between the larger and smaller telephone companies and to review the arrangements that came into effect between the members of the Trans-Canada Telephone System (later re-named Telecom Canada and then Stentor) that first came into effect in 1932.

41. Because the telephone companies enjoyed *de facto* monopolies over local exchange networks and because many competing service applications required access to those networks to facilitate communications among all telecommunications users, the power to order interconnection was a two-edged sword that could be used to preserve the monopoly, or permit competition to develop. Until 1979, when the Commission first ordered Bell Canada to permit CNCP Telecommunications to interconnect its private line voice and data network to Bell Canada's local loops so that customers no longer needed two phones on their desks,[16] this power had generally been used to exclude competition. However, from 1979 on, the Commission has used it, in conjunction with the non-discrimination provision, to gradually transform the industry from a monopoly to a competition structure. These powers have been interpreted to provide the Commission with jurisdiction to do more than just issue orders for interconnection; they have also enabled it to establish rates and terms and conditions for interconnection that new entrants would not have been able to negotiate with the monopoly due to their lack of bargaining power. With the development of increasingly complex telecommunications networks, these provisions have enabled the Commission to establish arrangements for the interconnection of signalling systems, interconnection standards, and access to databases that are required in order to provide seamless communication paths between competing networks. In later years, these provisions have also formed the basis for

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16 Telecom Decision CRTC 79-11, *CNCP Telecommunications, Interconnection with Bell Canada*, 17 May 1979.

developing mechanisms to address local number portability and "equal access" for competing long distance service providers. Since most of these initiatives were opposed by the telephone companies, there is little doubt that competition could not have developed on a commercial basis had these powers not resided with the Commission.

42. Despite these competitive inroads, and the adaptability of some of the old *Railway Act* provisions to new roles, most of the new competitive services were ancillary to basic local telephone service and did not involve a fundamental change in industry structure. The old *Railway Act* was proving to be deficient in certain respects. For example, the Commission's attempt to forbear from regulating the rates charged by certain wireless carriers and by CNCP Telecommunications had been struck down by the Federal Court of Appeal on the basis that the *Act* did not endow the Commission with this discretion.[17] There were also calls for a clearer statement of legislative intent on industry structure.

43. In 1987, the Minister of Communications issued a policy statement that pointed to a new environment of facilities-based competition by regulated networks and service-based competition by resellers.[18] This policy statement also enunciated a new Canadian ownership policy, and indicated that the Government would introduce legislation to give effect to the policy. There was a growing realization that legislative changes would be required to give direction on industry structure and to provide the Commission with new powers to manage the new environment which was anticipated to be hybrid in nature, involving a mixture of competitive and regulated services provided by a variety of carriers and resellers. It was in this environment that the *Telecommunications Act* was enacted in 1993.

The Telecommunications Act

44. The *Telecommunications Act* established a framework for the orderly transition of the Canadian telecommunications industry from a predominantly monopoly structure characterized

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17 Telecommunications Workers' Union v. Canada (Canadian Radio-television and Telecommunications Commission), (1989) 2 F.C. 280, (F.C.A.).

18 A Policy Framework for Telecommunications in Canada, Department of Communications, 22 July 1987.

by a system of interconnected telephone companies to a more competitive hybrid structure characterized by a broader network of competing facilities-based carriers, resellers and other telecommunications service providers.

45. In examining the legislative changes brought about by the *Telecommunications Act*, it is important to note that the new legislation did not replace the existing regulatory framework. Indeed, quite the opposite is true. The new legislation retained all of the core provisions of the *Railway Act* discussed above, with only minor amendments. It then supplemented these core provisions by the addition of a set of explicit policy objectives and new powers designed to assist the Commission in regulating the new hybrid industry structure and managing the transition from rate of return monopoly regulation to a more flexible form of regulation.

46. The policy objectives included in section 7 of the *Telecommunications Act* are discussed further below. However, at this juncture, it is important to note that they contain a strong endorsement of the principle of universal service, while at the same time fostering increased reliance on market forces for the provision of telecommunications services and enhancing the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications.

47. The *Telecommunications Act* gave the Commission a new discretion to forbear from regulating services pursuant to certain sections of the *Act*, where it finds as a question of fact that to refrain would be consistent with the Canadian telecommunications policy objectives, and it imposed a requirement to forbear where the Commission finds that a telecommunications service or class of services is or will be subject to competition sufficient to protect the interests of users. The *Act* also expressly confirmed that the Commission was not bound to use rate of return regulation to determine whether rates charged by Canadian carriers were just and reasonable, thereby opening the door to price caps or other incentive-based forms of regulation. It also supplemented the Commission's powers to regulate tariffs of tolls by adding a new provision that empowered the Commission to impose conditions on the offering and provision of any telecommunications service by a Canadian carrier.

48. A significant change in the *Telecommunications Act* was the imposition of restrictions on foreign ownership of Canadian carriers, which had become part of the Government's telecommunications policy in 1987.

49. Reflecting the 1987 Policy Statement, the new legislation focussed primarily on the regulation of Canadian carriers - which were characterized by their ownership or operation of "transmission facilities" used either by them or by third parties to provide telecommunications to the public for compensation. Resellers and other service providers who utilized those facilities were largely excluded from the Commission's regulatory jurisdiction. At the same time, according to the 1987 Policy Statement, they were to be given access to the carriers' networks on just and reasonable terms. By focussing regulation on services provided by Canadian carriers, and by broadly defining telecommunications facilities to include all manner of delivery systems, the *Act* implicitly endorsed a technology-neutral approach to telecommunications regulation.

50. Other innovations in the *Telecommunications Act* included: the power of the Governor in Council to issue binding policy directions to the Commission; the Commission's power to exempt any class of Canadian carriers from the application of the *Act*; the power to order a regulated carrier to bring certain types of services (generally monopoly services) offered by an affiliate into its regulated operations, or to order a regulated carrier to cease offering competitive services; clarification of the division of jurisdiction under the *Telecommunications* and *Broadcasting Acts*; the power to prohibit unsolicited communications; and the power to relieve carriers from the statutory prohibition on their control or influence over the content of messages transmitted.

51. In a very real sense, the 1993 *Telecommunications Act* may be viewed as maintaining the continuity of the core *Railway Act* provisions, while providing the Commission with more flexibility to forbear from regulation in certain defined respects as competitive markets develop. However, the *Act* did not contemplate general deregulation of the telecommunications industry. The forbearance powers in section 34 relate to only five sections of the *Act*. No discretion was accorded to forbear from regulation pursuant to other sections, such as section 40 respecting interconnection of facilities, and the *Act* clearly contemplated an on-going role for regulation of the industry in the new hybrid environment.

Managing the Transition to Competitive Markets Under the *Telecommunications Act*

52. The 1993 *Act* provided a regulatory framework to manage the transition of the Canadian telecommunications industry from a regulated monopoly to a new hybrid competitive market. As indicated previously, it set as one of its policy objectives increased reliance on market forces for the provision of telecommunications services, and it provided a set of regulatory tools to lighten and ultimately forbear from regulation pursuant to certain of the Commission's powers when market forces are adequate to replace regulation as the means to protect the interests of users.

53. We have seen a great deal of change in the regulatory framework over the past twelve years. Some of the highlights are discussed below.

Review of Regulatory Framework

54. On 16 December 1992, prior to coming into force of the *Telecommunications Act*, the Commission initiated a public proceeding to examine whether the existing regulatory framework should be modified in light of developments in the industry.[19] In that proceeding, the Commission noted that, in an information-based economy, a modern and efficient telecommunications infrastructure is a fundamental component of, and vehicle for, the production and consumption of goods and services. The Commission noted further that, in recent years, technological change and increasing competition had significantly altered the nature of the telecommunications industry, so that, in addition to fulfilling the basic communications requirements of all subscribers, telecommunications had evolved into a tool for information management and a productivity enhancer for business. These changes had allowed the telephone companies to develop a wide range of new audio, video and high-speed data services to satisfy the demands of both business and residence consumers in the local and long distance markets.

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[19] Telecom Public Notice CRTC 92-78, *Review of Regulatory Framework*, 16 December 1992.

55. In response to the changing environment, the Commission had, as indicated earlier, issued a number of decisions allowing more competition in a number of market segments. While, as a result of increased competition, the telephone companies were subject to a greater degree of market discipline, in 1992 they continued to maintain effective control of the provision of network access and local services and to dominate the public long distance market.

56. This changing telecommunications environment prompted the Commission to seek public input as to whether the then current regulatory framework was the most appropriate or effective way to serve the public interest. In its public notice, the Commission posed the following questions, which are not dissimilar to some of the questions posed by the Telecom Policy Review Panel in the current review process:

    (1) Is the Commission's historical form of monopoly regulation still the most appropriate?

    (2) Are there alternatives to traditional rate-base rate of return regulation that would permit telephone companies greater flexibility to innovate and compete while maintaining a balance among the interests of subscribers, shareholders and competitors?

    (3) Should there be increased regulatory flexibility for the telephone companies in competitive markets?[20]

57. In its 1994 decision on *Review of Regulatory Framework*,[21] the Commission established a blueprint for addressing the cross-subsidy issue, for eliminating barriers to entry into the local exchange market, for opening all remaining segments of the telecommunications market to competition including the local exchange market, for encouraging open and reciprocal access among telecommunications service providers including a requirement for the telephone companies to unbundle tariffs to facilitate interconnection, for splitting the telephone companies' rate bases into "utility" and "competitive" segments, for removing competitive services from the regulated rate base and introducing incentive-based regulation of the

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[20] Telecom Public Notice CRTC 92-78, 16 December 1992, at pp. 2-3.

[21] Telecom Decision CRTC 94-19, 16 September 1994.

local "utility" rates in lieu of traditional rate of return regulation, for establishing criteria to forbear from regulation in markets that were found to be sufficiently competitive, and increased safeguards to prevent opportunities for anti-competitive practices by the telephone companies.[22]

58. While the Regulatory Framework decision did not directly address broadcasting issues, the Commission indicated in a related press release that its decision did address convergence-related issues:

- cable-television undertakings will be permitted to compete in the local telephone market on the same terms as other suppliers;
- cable and telephone companies are expected to compete in the provision of a wide range of information services, including in the development and delivery of interactive and content-based services;
- telephone companies may deliver broadcast programming to the home as carriers on behalf of licensed broadcasters (video dial tone);
- while this decision does not deal with the entry of telephone companies into licensed broadcasting activities, in a related public notice the Commission has announced that telephone companies can now engage in technology trials of broadcast video-on-demand services;
- where a service is defined as broadcasting under the *Broadcasting Act*, telephone companies or their affiliates, like any other party, must apply for a licence or qualify for an exemption if they wish to provide such a service.[23]

59. This was an ambitious plan by any measure. As discussed further below, it was simply not possible to effect a flash cut to a competitive market without first addressing the effects of operating for decades under a monopoly structure. Some aspects of the plan, such as the deregulation of the terminal equipment industry, could be implemented quickly on a stand-alone basis, while other aspects of the plan required a sequence of reforms to be implemented over a multi-year period.

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22 There were numerous other elements to this plan including the development of co-location arrangements between carriers and a review of the affordability of telephone services in Canada.

23 CRTC Fact Sheet: *Convergence*, 16 September 1994.

60. This was particularly true of the introduction of local competition, which required significant work to be done in order to isolate and quantify the telephone companies' costs of providing local service, to identify and reduce subsidy levels, to adjust rates without subjecting consumers to sudden economic impact, and to identify and isolate the cost of network components that needed to be unbundled in order to facilitate interconnection with new entrants. In some cases, such as the three-year plan to "rebalance" the telephone companies local and long distance rates, the timing was planned by the Commission. In other cases, such as establishing cost-based rates for network unbundling and co-location, the tasks proved to be considerably more difficult than expected to implement and numerous proceedings were required to get it right. The implementation of incentive-based price cap regulation also had to wait for the rate rebalancing process to be concluded so that initial rates could be set in line with costs. Other aspects of the plan, such as the contribution mechanism, have undergone a number of reforms over the intervening period, as other reforms have resulted in local rates moving closer to costs. Due to the dynamic nature of this technology-driven industry, interconnection arrangements have also evolved during this period and inter-carrier arrangements have had to be modified from time to time to keep pace with technology.

61. The OECD commented on this multi-year process in its 2002 report on *Regulatory Reform in the Telecommunications Industry*:

> At first sight the pace of change in the regulatory framework has appeared somewhat slow in Canada. For example, the framework for competition in local services was put forward four years after the 1993 Telecommunications Act, but this framework itself only provided the broad outline and not the details necessary to implement competition for local services. But, each of the key issues were tackled in a methodical way, such as eliminating to a large extent local loop subsidies before opening up local loop competition. Furthermore, the technical and operational details of the local competition framework were left to the CRTC Interconnection Steering Committee (CISC) to resolve. CISC includes representatives of industry, consumer groups and public interest groups and the CRTC. The slower and consensual process has probably been more successful than in many countries where rapid implementation of regulations meant that a number of necessary regulatory safeguards were incomplete resulting in much

> frustration by new entrants. Relative to a number of OECD countries, Canada has had a much smoother and less problematic implementation of its telecommunication regulatory safeguards. However, now that the basics are in place it can probably afford to accelerate change where it is needed.[24]

Moving Rates Towards Costs and Rationalizing Subsidies

62. One of the biggest obstacles to the development of competitive markets in Canada was the complex system of internal cross-subsidies that had been built into the telephone companies' rate structures during eighty-five years of rate of return regulation and value of service pricing. This regime had created below-cost pricing in many local service markets, making competitive entry unlikely, and well above-cost pricing in the long distance market, making competitive entry attractive - but not necessarily on an economically efficient basis or on terms that were equitable to the incumbent telephone companies, whose long distance rates embodied these implicit subsidies to local service.

63. The Commission began a process of regulatory reform to tackle this very complex problem in 1992, prior to the new *Act* coming into force. Earlier that same year, it had opened the long distance market to competition and had put mechanisms in place to ensure that new entrants would also contribute to the cost of universal local telephone service through the payment of "contribution" charges. At that point in time, the total level of contribution required, excluding the Prairie Provinces and independent telephone companies which had not yet come under CRTC jurisdiction, stood at over $2.8 billion. This translated into a combined "contribution" or subsidy of between 14 and 19 cents per minute for two ends of a long distance call, depending on the province(s) involved in origination and termination of the call.[25]

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[24] *Regulatory Reform in the Telecommunications Industry*, OECD, 2002, at p. 8.

[25] Telecom Decision CRTC 92-12, *Competition in the Provision of Public Long Distance Voice Telephone Services and Related Resale and Sharing Issues*, 12 June 1992, Attachment.

64. In its decision, the Commission had to address the appropriate balance to strike between the principles of universal service and the need to promote economic efficiency in the telecommunications market. The Commission found that the subsidy from long distance to local service was substantially larger than was necessary to maintain affordable access and that it imposed an inequitable and unnecessary burden on many long distance users. The Commission also noted the adverse impact that this situation could have on "information-intensive enterprises". The rate rebalancing plan adopted by the Commission in 1994 called for a local rate increase of $2.00 per month in 1995, 1996 and 1997 for both residential and business subscribers.[26]

65. During this time frame, the Commission pursued several other related initiatives designed to sever the long-standing link between the telephone companies' local and long distance rates and to identify, more precisely, the cost of providing local exchange services in urban and rural areas of the country. This included a comprehensive review of the telephone companies' cost separations and costing techniques for broad categories of services (Phase III Cost Inquiry) and the subsequent "splitting" of the telephone companies' rate base into a Utility Segment, which included monopoly provided services still subject to rate regulation, and a Competitive Segment, which contained long distance voice and data services and other competitively provided telecommunications services. The implicit subsidies between local and long distance services were then quantified on a per minute basis and made explicit in a utility segment carrier access tariff, which applied to both the telephone companies' long distance services and those of their competitors. Although the telephone companies' competitive services were not required to be structurally separated from the Utility Segment, they were required to impute the carrier access costs, including contribution payments, into their long distance pricing and account for these imputed revenues in the Utility Segment.

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[26] Telecom Decision CRTC 94-19, *Review of Regulatory Framework*, 16 September 1994.

66. With the eventual introduction of local competition in 1997, this regime was further developed to enable competing carriers to gain access to contribution funds when they served high cost service areas. This was done in recognition of the fact that competition would not develop in these regions if only the telephone companies' services were subsidized. This reform required a further extensive costing exercise designed to establish the telephone companies' cost of providing local exchange services in different regions of their operating territories characterized by similar cost structures. The costs of provisioning service in each of these "rate bands" was then established and compared with the rate charged, in order to determine the amount of contribution received by the telephone companies and that therefore would be made available to competitors. The *Telecommunications Act* was amended in 1998 to permit the appointment of an independent contribution fund administrator to administer the collection of contribution funds from competing carriers and to make the appropriate payments to eligible recipients providing local service in high cost areas.[27] The contribution subsidy is tied to access lines in high cost regions and goes to the customer's carrier of choice. When a decision is made by a customer to change carriers, the contribution payment goes to the new carrier.

67. The scope of contribution paying services was also expanded in 1997 to include a broader range of long distance services, including wireless long distance services, in the list of contribution paying services.[28] This broadening of the base served to reduce the contribution burden on wireline long distance services and led to further long distance price reductions.

68. Finally, in 2000, the link between local and long distance services was completely severed by changing contribution from a system based on long distance minutes to one based on the telecommunications revenues of all telecommunications service providers (excluding equipment, retail Internet and radio paging services).[29] This significant expansion of the base of contribution paying services reduced contribution rates still further to a point where they no longer have a significant impact on the price of long distance or any other telecommunication services.

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27 S.C. 1998, c.8, s.6.

28 Telecom Order CRTC 97-590, 1 May 1997.

29 Decision CRTC 2000-745, *Changes to the contribution regime*, 30 November 2000.

69. The results of this rather arduous process have been dramatic. Local exchange services are now provided to most Canadians at cost-based rates, which require no contribution. In areas of Canada that still qualify as high cost areas, subsidies have been quantified and made portable. However, even in these regions, rates have been brought significantly closer to cost in all but the very high cost bands. In gross terms, the amount of contribution required Canada-wide has shrunk from approximately $3.5 billion in 1993 to approximately $240 million in 2004 - a reduction of over 93%. The largest telephone company in Canada, Bell Canada, has seen its contribution requirement drop from over $2 billion in 1993 to $46 million in 2004 - a decrease of over 97%. Since being converted from a system based on long distance minutes to one based on telecommunications revenues, contribution as a percentage of revenues from contribution-eligible telecommunications services has steadily declined each year from 4.5% in 2001 to 1.1% in 2004.[30] Importantly, this multi-year, multi-staged, process has been accomplished without any significant decline in accessibility to telecommunications services in Canada.

Opening Remaining Markets to Competition

70. Since 1993, all of the remaining segments of the telecommunications market have been opened to competition. This includes the largest segment of the industry, the local exchange market in 1997,[31] the overseas long distance market in 1998,[32] the operator services market in 1995,[33] and the pay telephone market in 1998.[34] In most instances, new access arrangements and consumer safeguards were required in order to facilitate seamless communications between networks and service providers and in order to protect consumers from "slamming" and other abuses of the new arrangements.

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30 Telecom Decision CRTC 2004-81, *Final 2004 revenue-percent charge and related matters*, 9 December 2004.

31 Telecom Decision CRTC 97-8, *Local Competition*, 1 May 1997.

32 Telecom Decision CRTC 98-17, *Regulatory Regime for the Provision of International Telecommunications Services*, 1 October 1998.

33 Telecom Order CRTC 95-316, *Consumer Safeguards for Operator Services*, 15 March 1995.

34 Telecom Decision CRTC 98-8, *Local Pay Telephone Competition*, 30 June 1998.

71. By far the most complex of these new initiatives related to the local exchange market, where new, ground-breaking measures were required in order to ensure the seamless inter-operation and the smooth transfer of customers between competing networks. These measures included the introduction of local number portability (in addition to portable contribution discussed above) to enable customers to change carriers without changing their local telephone number, the introduction of new network interconnection and compensation arrangements designed to recognize the co-carrier status of competitive local exchange carriers (CLECs), as opposed to treating them as customers of the incumbent local exchange carriers (ILECs), and the introduction of increased access to certain essential and near essential network elements that were required by new entrants to facilitate entry into what was still a *de facto* monopoly with high entry barriers.

72. Although the Commission established this framework in its 1997 decision on *Local Competition*, like other aspects of the 1994 *Review of Regulatory Framework*, there were aspects of this decision which took considerably longer to complete. These included finding a technical solution to the issues posed by local number portability, establishing cost-based rates for unbundled network components made available to CLECs, establishing operational agreements for interconnection between CLECs, ILECs, long distance carriers, wireless carriers and resellers, and establishing mechanisms for the smooth cut-over of customers who decide to switch their local service provider. In order to assist in the process of establishing all of these arrangements and resolving the technical issues, the Commission made extensive use of its CRTC Interconnection Steering Committee (CISC) structure which involves industry participation in developing consensual interconnection arrangements under Commission supervision.

73. While all of these mechanisms are now in place and fully operational, it is fair to say in retrospect that some aspects of the implementation plan took significantly longer to finalize than had been originally anticipated. This was particularly true of the network unbundling process, which involved the establishment of cost-based rates for certain network elements

required by CLECs. The rates were highly contentious due to their potential impact on ILECs and CLECs alike, and the concept of access to essential and near essential facilities was opposed by the ILECs. It took a number of proceedings over several years to set final rates.

74. Despite the ILECs' predictions of significant market share loss at the time of the public hearing leading to the 1997 decision, the Commission had concluded that competition would be slower to develop in the local market than in the long distance market due in large measure to the capital intensive nature of the local market and other significant barriers to entry. However, the pace of development of local competition has been slower than expected. This was in part due to the fact that it took a significant amount of time to put the various elements of the 1997 decision in place and it took several years to bring the rates for unbundled local loops and other unbundled network elements required by CLECs down to cost. In addition, the burst of the technology "bubble" clearly hurt the ability of the fledgling CLEC industry to obtain additional financing for their network builds and resulted in many of them failing financially.

75. Finally, competition did not materialize from some of the anticipated sources. For example, the largest Canadian cable companies are only entering the local market this year. Not unexpectedly, the ILECs also resisted loss of any market share with all of the tools at their disposal, including "win-back" campaigns targeted at individual customers who decided to switch carriers, as well as various promotions and targeted price reductions designed to recapture any lost customers. While new entrants had to penetrate a market already one hundred percent served by the ILECs, the ILECs could target their marketing efforts in respect of individual customers that chose to leave them, thereby often reversing a customer's decision to switch by offering them a new deal. This conduct, which was impeding the development of a competitive market, prompted the Commission to implement a number of regulatory safeguards designed to restrict the ILECs' retaliatory marketing efforts until competitors managed to get a foothold in the market. Floor prices were also established to prevent the ILECs from dropping rates below cost to undermine new entry.

Incentive-based Regulation of Local Services

76. In 1998, following the conclusion of the explicit rate rebalancing process initiated in *Review of Regulatory Framework* as discussed above, the Commission replaced rate of return regulation of the ILECs' local exchange services with incentive-based price cap regulation. Under this new regime, the Commission extracted itself from the process of reviewing the reasonableness of the ILECs' projected expenses and revenues, and from establishing an appropriate return on capital invested. Instead, it put in place an incentive-based system that capped overall rate levels at inflation minus a productivity factor, and incented the ILECs to improve productivity beyond the approved productivity factor and keep any extra profits realized through their efforts. This mechanism, which went into effect on 1 May 1998 for an initial four-year period,[35] was subsequently reviewed and revised effective 31 May 2002 for another four years.[36] The price cap regime has resulted in streamlined tariff approval of rate changes that fall within the prescribed cap and the other pricing restrictions placed on certain prescribed service baskets, such as local residential service. These restrictions have been designed to share the benefits of rate reductions among subscriber groups, rather than permitting the ILECs *carte blanche* to target them at specific customer segments.

77. The conversion to price cap regulation in respect of Utility Segment local exchange services has done away with a considerable amount of regulatory burden that had become associated with general rate cases, construction review programs and detailed review of rate changes under a rate of return environment. The Commission's price cap plans have placed technology and investment decisions squarely in the hands of the ILECs, with no review by the Commission, and have focussed regulation on retail prices using the price cap index.

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35 Telecom Decision CRTC 97-9, *Price Cap Regulation and Related Issues*, 1 May 1997.

36 Telecom Decision CRTC 2002-34, *Regulatory framework for second price cap period*, 30 May 2002.

Forbearance from Regulation

78. As discussed above, although the Commission had attempted to forbear from regulating the rates charged by CNCP Telecommunications and a number of wireless telecommunications carriers in the mid-1980's,[37] its attempts to do so were struck down by the Federal Court of Appeal as being beyond the Commission's jurisdiction under the *Railway Act*.[38] It was therefore not until the passage of the *Telecommunications Act* in 1993 that the Commission was empowered to forbear from rate regulation.

79. Following enactment of the new legislation, the Commission took immediate steps to forbear from regulation of wireless[39] and terminal equipment prices, as well as most services offered by the ILECs' non-dominant competitors.[40] Forbearance of the ILECs' message toll services came in 1997 when competitive forces had become strong enough to protect consumers from the ILECs' market power,[41] as well as in the private line voice and data markets on routes that were competitively served.[42]

80. When competition was introduced in the local exchange market in 1997, the CLECs were forborne from retail price regulation, while the ILECs remained subject to price regulation due to their dominance in that market. In all other segments of the market, non-dominant carriers have been forborne from rate regulation - although the Commission has retained the power under subsection 27(2) of the *Act* to address interconnection and access issues between carriers or between service providers and carriers.

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37 See, for example, Telecom Public Notice CRTC 1984-55, *Cellular Radio Service*, 25 October 1984.

38 The Court held that the Commission did not have the discretion to relieve CNCP Telecommunications from the statutory requirement to file all tariffs of tolls for Commission approval.

39 Telecom Decision CRTC 94-15, *Regulation of Wireless Services*, 12 August 1994.

40 Telecom Decision CRTC 95-19, *Forbearance - Services Provided by Non-Dominant Canadian Carriers*, 8 September 1995.

41 Telecom Decision CRTC 97-19, *Forbearance - Regulation of Toll Services Provided by Incumbent Telephone Companies*, 18 December 1997.

42 Telecom Decision CRTC 97-20, *Stentor Resource Centre Inc.- Forbearance from Regulation of Interexchange Private Line Services*, 18 December 1997.

81. In 1999 the Commission also decided that it would refrain from regulating Internet content pursuant to the *Broadcasting Act*,[43] and it approved applications by the ILECs for permission to alter the content of information carried on their networks pursuant to section 36 of the Act.[44] This opened the door to full participation by the ILECs in the Internet service industry.

82. To date, approximately 70% of the Canadian telecommunications market (by revenues) has been forborne from rate regulation - with primarily the ILECs' local exchange rates and rates for competitive access services remaining regulated.[45] Even in the local market, the Commission is currently examining an application for forbearance brought by Aliant Telecom and has convened a public proceeding to establish criteria for determining when local markets may be forborne from rate regulation pursuant to section 34 of the *Telecommunications Act*.[46]

Regulatory Efficiency

83. As discussed above, much of the regulatory agenda over the past twelve years since the enactment of the *Telecommunications Act* has been directed at dismantling the system of monopoly, rate of return, regulation that had developed over the previous 85 years, opening markets to competition, breaking down barriers to entry, arbitrating competitive disputes and providing for an orderly transition from a monopoly industry structure to a competitive one that still has regard to the objectives of Canadian telecommunications policy set forth in section 7 of the *Act*. The ambitious nature of the process started in 1994, and the many steps involved in seeing it through may have created a perception that regulation has increased. In fact, quite the opposite has occurred. What has consumed so much time and effort, and engaged the regulatory process to such a degree over the intervening years, has been the painstaking transition from a regime of pervasive regulation to one with less direct intervention, fewer approval mechanisms and more streamlined dispute resolution procedures.

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43 *New Media*, Broadcasting Public Notice CRTC 1999-84, Telecom Public Notice CRTC 99-14, 17 May 1999.

44 Telecom Decision CRTC 99-4, *Stentor - Request for Approval Under Section 36 of the Telecommunications Act*, 31 March 1999.

45 This number cannot be established with precision due to the fact that the Commission collects revenue data by broad service categories and not by whether the service has been forborne from regulation. Since some service categories have only been partly forborne, an estimation has been made.

46 Telecom Public Notice CRTC 2005-2, *Forbearance from regulation of local exchange services*, 28 April 2005.

84. In addition to the elimination of rate regulation in approximately 70% of the telecommunications market and its reduction in the other 30% through the introduction of price caps, the Commission has recently taken steps to further streamline the tariff approval process to enable the ILECs to better respond to competitive market conditions.[47] Price changes meeting the price cap criteria can be made through an *ex parte* interim approval process, thereby enabling the ILECs to effect price changes without first alerting their competitors to prospective changes. Seventeen months ago, the Commission also instituted an expedited competitive dispute resolution process which enables bipartite disputes to be resolved expeditiously through a combination of staff mediation and mini-hearings conducted by a special team of staff and Commissioners tasked with resolving disputes quickly.[48] Since this new procedure was implemented, it has been credited with an increased rate of settlement of competitive disputes that far exceeds the number of actual hearings that have had to be held. This mechanism compliments other forms of alternative dispute resolution that have been made available by the Commission since 1994.[49]

Review of Telecom Policy Objectives

85. As discussed above, one of the innovations in the *Telecommunications Act* was the inclusion in section 7 of a set of policy objectives. Coupled with subsection 47(a) of the *Act*, which requires the Commission to exercise its powers and perform its duties under the *Act* with a view to implementing those policy objectives, and any policy directions issued by the Governor in Council pursuant to section 8 of the *Act*, the legislation was clearly designed to give direction to the Commission on broad policy issues.

86. While it is relatively rare in Canadian legislation to include an express policy statement, this has been a feature of the *Broadcasting Act* since 1968. The European Community's (EC) "*Framework Directive*", discussed further below, also contains a statement of policy objectives that are intended to guide National Regulatory Authorities in the EC.

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47 Telecom Circular CRTC 2005-6, *Introduction of a streamlined process for retail tariff filings*, 23 April 2005.

48 Telecom Circular CRTC 2004-2, *Expedited procedure for resolving competitive issues*, 10 February 2004.

49 See, for example, Telecom Public Notice CRTC 95-51, *New Procedures Regarding Competitive Issues*, 8 December 1995; and Public Notice CRTC 2000-65, *Practices and procedures for resolving competitive and access disputes*, 12 May 2000.

87. Some commentators have criticized the policy objectives in section 7 claiming that there are too many of them to give clear guidance to the Commission and asserting that their lack of prioritization gives the Commission too much discretion. We do not share that view.

88. What Parliament has expressed in section 7 are a number of broad policy objectives that it considers should be pursued by and for the Canadian telecommunications sector. It is explicit in the legislation that the Commission is required to take these objectives into account when deciding issues before it. Since the different objectives may collide in particular cases, it is implicit that the Commission, as the independent regulatory authority, will exercise its judgment in weighing up and balancing these objectives. This is the essence of the Commission's role in the regulatory process.

89. When the Governor in Council disagrees with the manner in which the Commission has exercised its judgment, it has the power to review and vary the Commission's determination. Judging from the very few Orders in Council varying the Commission's decisions over the years, this process seems generally to be working.

90. One of the most important balances that the Commission seeks to strike on an on-going basis is that between the objectives set out in paragraphs (b) and (f) of section 7. Paragraph (b) articulates the universal service principle, calling for the rendering of reliable and affordable telecommunications services of high quality accessible to Canadians in all regions of the country. Paragraph (f) calls for increased reliance on market forces for the provision of telecommunications services. While, at a theoretical level, the subsidization of telephone service in high cost areas is inconsistent with increased reliance on market forces (which would result in higher prices in higher cost regions), it is possible to balance these objectives by limiting subsidies to the level required to keep prices affordable, while making the subsidy competitively neutral and making it portable and transferable to whichever carrier wins the customer's business. This is the type of exercise, frequently involving a balancing of social and economic objectives, that the Commission is charged with performing under the *Telecommunications Act*.

91. Having said that, some twelve years have now passed since the enactment of the *Telecommunications Act* and it may be possible to identify some policy objectives that may not be as relevant in 2005 as they were in 1993. An example is the promotion of the use of Canadian transmission facilities, as called for in paragraph (e) of section 7.

92. Subsection 7(e) provides as follows:

> (e) to promote the use of Canadian transmission facilities for telecommunications within Canada and between Canada and points outside Canada;

93. While it was an objective of the Government of Canada in 1993 to require Canadian facilities to be used to route telecommunications services between Canada and overseas points and between points within Canada, and while this was also reflected in the policies of the Commission, it no longer applies internationally. With Canada's signing of the WTO Agreement on Basic Telecommunications Services, and with the subsequent amendment of the *Telecommunications Act* to permit competition in the provision of overseas communications services, all routing restrictions were eliminated.[50] Now, even Canada-Canada calls may be routed through other countries using foreign-owned facilities located in those countries.

Preparing for the Future

94. While no statute is perfect, the *Telecommunications Act* has provided a significant amount of guidance in charting a course from pervasive monopoly regulation to a more competitive market, and has provided a flexible set of regulatory rules to manage the difficult transition. Now, as we look forward, it is appropriate to consider whether the legislation provides an appropriate model for the next decade.

95. As indicated earlier, this discussion paper focusses its attention on the legislation and broad policy issues raised by the Telecom Policy Review Panel in its Consultation Paper. Rather than attempt to answer the specific questions raised, it seeks to place some of the major issues raised

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[50] Telecom Decision CRTC 98-17, *Regulatory Regime for the Provision of International Telecommunications Services*, 1 October 1998.

in the context of the statutory framework - to explore how changes to the legislation would affect policy outcomes and what might be the effects of such change. Its goal is to contribute to the debate by exploring the outcomes of possible changes.

The Future of Universal Service

96. As discussed above, universal service has been an important element of Canadian telecommunications policy for many decades both under the *Railway Act* and the *Telecommunications Act*. This policy has generally addressed three aspects of telecommunications service: availability, price and quality - the goal being for all Canadians in all regions of the country to have access to high quality telephone services at reasonable prices. While advances in the quality of telephone service have generally been enjoyed in urban areas at an earlier stage than in rural and remote areas, due to the higher cost of providing service in those regions of the country, over the years, many advances have been made. Multi-party service has given way to single-line service and, as successive switch modernization programs have pushed new technology further out into the telephone companies' networks, the vast majority of Canadians now have high quality local telephone service available at reasonable prices.

97. During the past twenty years, there has been a major push by both governments and regulators to close the remaining gaps in coverage and improve the quality of service to rural and remote services both through direct investment by some governments and by Commission-sanctioned service improvement plans (SIPs) that have been financed by both the telephone companies and their subscribers under special regulated programs.

98. In 1999 the Commission conducted a review of *Telephone Service to High-Cost Serving Areas*.[51] In that proceeding it determined that in 1999, over 99% of access lines in Canada provided basic individual line service. It found that 97% were connected to a digital switch that provided touch tone service and could connect to the Internet via low speed data transmission without incurring long distance charges. In its decision the Commission directed the telephone companies to develop new service improvement plans for unserved and

[51] Telecom Decision CRTC 99-16, 19 October 1999.

underserved communities. By 2004, 1,703 communities had benefited from these plans, resulting in 12,877 previously unserved customers receiving basic individual line service and 34,200 underserved customers having their service upgraded to basic individual line service. The service improvement plans have been highly successful in extending both the reach and quality of telephone service in rural and remote high cost service areas.

99. It should be noted that, although the Commission has been successful in eliminating the subsidy from most urban subscribers' local telephone service, there is still a very large subsidy built into local telephone service in many rural and remote areas.

100. For example, in Band G of Bell Canada's operating territory, local access lines still receive a subsidy of $23.79 per month; in TELUS (BC) Band G, the subsidy is $22.86 per month while in Manitoba and Saskatchewan, the subsidy is $67.31 and $33.65 per month, respectively.[52] The price of telephone service in these latter regions would more than double if the subsidy were completely removed. The impact on customers of some of the smaller independent telephone companies in Ontario and Quebec would also be significant.

101. The impact would be particularly significant in the Far North, where there are unique geographic, climatic and demographic challenges in providing telephone service. Northwestel, for example, serves the Yukon, Nunavut, the Northwest Territories and part of Northern British Columbia, the largest operating territory in Canada, yet with less than one half of one percent of the country's total population, and with the vast majority of its communities having fewer than 500 telephone lines, many accessible only by air. Most of its 80,000 lines are subsidized.

102. In all, the contribution program still subsidizes telephone service to 2.5 million lines, or 19.4% of all residential lines. All of the above should be kept in mind when considering the views of those who might question whether universal service is still a relevant policy objective in the coming decade.

103. The universal service goal has never been a precisely defined concept and it has evolved over the years as technology developed and customers' expectations increased.

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[52] Telecom Decision CRTC 2004-81, *Final 2004 revenue-percent charge and related matters*, 9 December 2004.

104. In the 21st century, the focus of governments in Canada has shifted towards Internet and broadband access and the promise that it holds for economic and social development in our country. As is documented in the Telecom Review Panel's Consultation Paper, numerous government sponsored programs at the federal and provincial levels have encouraged the widespread development of broadband access networks and have provided direct investment in the extension of broadband to regions where the cost of service would otherwise make extension of service uneconomical. These efforts, which are continuing today, have been very successful in extending the reach of broadband to schools, hospitals, libraries and communities that otherwise would not have been able to participate in the information society.

105. For its part, the Commission has not redefined universal service in terms of broadband access. Having spent the last decade trying to reduce the level of subsidy to local telephone service down to economically sustainable levels, it has not seen fit to reintroduce what would clearly be a multi-billion dollar subsidy program to provide broadband access on a universal basis in Canada. Rather than take this approach, the Commission has focussed on creating an environment that is conducive to the competitive provision of broadband services and has let the federal and provincial governments assume leadership in direct subsidization of broadband network builds in regions where high cost makes their competitive provision unlikely.[53]

106. The penetration of our broadband services exceeds that of our major trading partners[54] and is placing Canadians in an excellent position to take advantage of the social and economic benefits of the new economy.

The Future of Economic Regulation

107. Although economic regulation is becoming less pervasive over time, it still has an important role to play in certain sectors of the telecommunications industry. Generally speaking, the Commission has been moving along a continuum from rate of return regulation, to incentive regulation, to ultimate forbearance of market segments or classes of services where the tests for forbearance in section 34 of the *Act* have been satisfied. The main focus of economic

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53 As regards dial-up Internet access, the Commission has required the telephone companies to include toll-free access to the Internet as part of their local service improvement plans.

54 OECD Broadband Statistics, December 2004.

regulation in the past few years has been on the local market, where the ILECs have remained dominant. This has necessitated both price cap regulation and the imposition of marketing restrictions on the ILECs to prevent abuse of dominance and price discrimination in dealing with customers, as well as competing carriers and service providers that rely on local access to deliver their services to the public.

108. The reduction and ultimate removal of these forms of economic regulation are envisaged once competitive market forces are strong enough to replace regulation to protect the interests of consumers and sustain competition. A comprehensive proceeding to review the benchmarks for local forbearance is currently underway.[55] However, without wishing in any way to prejudge the outcome of that proceeding, and as discussed further below, it is unlikely that all markets, in all regions of the country will be sufficiently competitive to satisfy all forbearance tests. It is highly likely that both consumers and service providers will continue to rely on the ILECs for local access in some regions for the foreseeable future.

109. The existing legislation has proven to be flexible in managing this transition from a monopoly to a competitive market structure involving a hybrid structure of facilities and service-based competitors. A question that arises is whether we have advanced far enough along the continuum to merit a different approach going forward.

110. Questions that arise in this regard include whether the presumptions of rate regulation and prior tariff approval in sections 25 and 27 of the *Act* should be maintained or whether we should move towards a system where economic regulation must be justified on a case-by-case basis by the regulator, and where price regulation should be focussed on the *ex post facto* consideration of complaints.

111. The European Community (EC) is often cited as an example of this approach to regulation. The EC's "*Framework Directive*", which was released on 7 March 2002,[56] sought to harmonize regulation across member countries by reducing entry barriers in national markets and fostering the development of competition both within domestic markets of member states and across

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55 Telecom Public Notice CRTC 2005-2, *Forbearance from regulation of local exchange services*, 28 April 2005.

56 Directive 2002/21/EC, OJ L 108/33.

borders within the EC. A major component of the Directive is to reduce sector-specific regulation at the national level to instances where it is warranted by the presence of "significant market power" (SMP) in a given market. Moreover, the regulatory response must be proportionate to the problem and must only be maintained as long as necessary. Under this regime, *ex ante* regulatory rules are only permitted where they are considered to be more effective than general competition law remedies to address the market problems identified and must be withdrawn once the desired objectives are met in the market.

112. Pursuant to this regime, the EC has identified eighteen distinct markets in the telecommunications sector which must be examined by the appropriate National Regulatory Authority (NRA) to determine whether SMP exists. If NRAs wish to define additional market segments, they may do so, but they must utilize EC competition law principles to define the market, and their methodology must comply with EC guidelines on market analysis and assessment of SMP.

113. The tests used to determine whether an operator has SMP in a given market segment are described in the following passage from Arnold & Porter's *The New EU Regulatory Framework for Electronic Communications*:

> …An operator will be judged dominant if, either individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and consumers. When an operator has SMP in a specific market, it may also be deemed to have SMP on a closely related market where the links between those markets are such as to allow the market power held in one market to be leveraged into the second market.
>
> An operator will be presumed to be dominant if it enjoys a market share of over 40%, as compared to the current 25%. While market share is one factor taken into account when assessing the existence of a dominant position, other relevant factors which will be taken into account by the Commission and the European Courts are:
>
> - overall size of the undertaking
> - control of "essential facility" type infrastructures
> - technological advantages

- absence of countervailing buying power
- economies of scale and scope
- vertical integration
- highly developed distribution and sale network
- absence of potential competition.[57]

114. Pursuant to these directives, individual NRAs have gone through the exercise of determining which market segments are served by an operator with SMP. Once a finding of SMP is made, certain requirements to unbundled local loops apply pursuant to the EC's *Access Directive*,[58] and it is open to the NRA to apply sector-specific regulation on either an *ex ante* or *ex post* basis, as it considers justified.

115. As regards forbearance, NRAs are under an obligation to refrain from regulating a market once it has been deemed to be "effectively competitive" based on a market analysis that finds no SMP to exist.

116. Before considering the potential implications of importing this type of approach into Canada, it is important to note the context in which the EC imposed this regime in 2002. The principal goal of the EC in the telecommunications sector has been to develop a competitive common market for communications services, to restrict regulation to the necessary minimum and to aim for technological neutrality and accommodation of converging markets.[59] Much of the EC's focus has therefore been on breaking down national barriers to competition. In its 1999 Review, it found that measures implemented in 1997 to harmonize and reduce national licensing requirements and other barriers to a common market, had largely failed. Rather than a

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57 At p. xix.

58 Directive 2002/19/EC, OJ L 108/7.

59 *The 1999 Communications Review, Towards a new framework for Electronic Communications infrastructure and associated services*, COM (1999) 539.

harmonized regime, it found fifteen distinct national regimes with anywhere from two to forty-nine different regulatory requirements for new entrants. The *Framework Directive*, and the other related directives implemented by the EC in 2002, must therefore be viewed in this context.

117. This is significantly different from the Canadian context, where unified federal jurisdiction over telecommunications since the early 1990s has enabled the development of a harmonized regime across Canada. In Canada, we have established open entry models for competition in all sectors of the telecommunications market (subject to foreign ownership requirements) and do not have the same structural issues to resolve in establishing a trans-national market that the EC has to address.

118. Moreover, our telecommunications legislation is not unidimensional. As discussed above, the fostering of competitive markets is an important element of telecommunications policy in Canada - but not the only one. Other policy objectives tend to get left out of the equation if one reverts solely to competition law principles.

119. Leaving those other policy objectives aside, one might question whether the EC approach would produce a different result in Canada from what has been achieved under section 34 of the *Telecommunications Act*. Starting in 2002 in Europe, national regulators began reviewing the telecommunications service markets identified by the EC to determine whether an operator possessed SMP. In contrast, this process began in Canada in 1993 and, well before 2002, approximately 70% of the market (by revenue) had been forborne from *ex ante* price regulation. The only significant markets in Canada that remain subject to *ex ante* price regulation are the local exchange and local access markets, where the telephone companies have been found to enjoy SMP.

120. The tests used by the Commission pursuant to section 34 of the *Telecommunications Act* to determine whether to forbear from regulation also include competition law tests which seek to determine whether a carrier possesses significant market power. As noted above, in the EC, a 40% market share raises a rebuttable presumption of SMP. Using that test, all of the ILECs in Canada would be presumed to possess significant market power.

121. While the Commission is currently reviewing its tests for forbearance in the context of the local market, and would not wish to prejudge the outcome of that proceeding, it would simply note that using the EC's guidelines, no NRA in Europe has yet forborne from regulating the basic local telephone market, although some jurisdictions do make use of *ex post*, rather than *ex ante*, regulation.

122. In these circumstances one might question whether the EC model would be a good fit in Canada. We know that competition in the local telephone market is developing unevenly across Canada, that some areas have little or no competition, and still other more remote areas may never see competition. If the presumption of rate regulation were eliminated, and if the regulator had to justify rate regulation based on criteria such as a finding of significant market power, the regulator could conceivably have to embark on an analysis of all local telephone markets (however they are defined for purposes of the forbearance tests) to investigate whether SMP exists. If it were found to exist, the Commission would have to assess whether less intrusive forms of regulatory intervention would be as effective as *ex ante* price regulation. This could be a rather massive exercise in a country like Canada with its diversity of regions and its many rural and remote areas. Moreover, this exercise would have to be performed periodically to see whether the market structure had changed.

123. Are we far enough along the continuum from monopoly to competition in local markets to justify a reverse onus? Would the result be much different from the exercise under section 34 of the *Act*, where we do the same analysis of markets that appear to have become competitive and decide whether to forbear based on the absence of significant market power? In its current forbearance proceeding, the Commission is trying to establish objective benchmarks, based on competition law principles, to determine when competitive forces are sufficient to justify forbearance. If this proceeding is successful in developing such benchmarks, telephone companies will be able to apply for forbearance when they believe the benchmarks are satisfied. This would appear to be a more efficient procedure to follow than reviewing all local markets in Canada, before any pre-conditions are satisfied, to see whether significant market power exists.

124. As regards the use of the *ex post* or *ex ante* approaches, three observations may be offered. First, many of the regulatory safeguards that are currently in place have arisen as a result of complaints regarding conduct of a dominant carrier that was found to constitute a breach of subsection 27(2) of the *Act.* These safeguards have often been modified over time in response to further infractions. The second point is that under an *ex post* review approach, the damage can be done to the competitive market by the time the complaint is made, responded to and ruled upon. Finally, if one looks at the price cap model that currently applies to the ILECs and the tariff streamlining measures recently adopted by the Commission, there are many price changes that can be made by the ILECs without prior notice to the public and without much more than a filing requirement.

Technological Change

125. As discussed above, the *Telecommunications Act* addresses technology in two of the policy objectives in section 7: subsection 7(b) speaks in terms of rendering reliable and affordable telecommunications services of <u>high quality</u>; while subsection 7(g) seeks to encourage innovation in the provision of telecommunications services.

126. Historically, in the days of rate of return regulation, the Commission approached technology change and innovation in telecommunications in the context of construction program reviews and quality of service reviews. Under that regime, the Commission reviewed the telephone companies' plans for network development and the introduction of new technology, and passed judgment on whether those plans were financially reasonable. New technologies and services were introduced based on the best judgment of the telephone companies with oversight by the Commission. Under that regime we saw the introduction of successive generations of switching equipment, such as the introduction of digital switching in the 1980's and related call-management services. We also saw the occasional rejection by the Commission of the telephone companies' investment plans, such as their plan to include large portions of their broadband (Beacon) investment in the Utility Segment of their rate base just prior to the introduction of local competition and price cap regulation.[60] As discussed above, another

[60] Telecom Decision CRTC 95-21, *Implementation of Regulatory Framework - Splitting of the Rate Base and Related Issues,* 31 October 1995.

mechanism that was used in the past decade was the concept of service improvement plans, designed to finance the ILECs' upgrade of service in underserved areas from multi-party to single line service and to fill in service gaps.

127. With the advent of competition and forbearance from regulation of many telecommunications services, there has been much less of a role for the Commission to play in ruling on the reasonableness of the ILECs' investments in new technology outside of rural and remote areas. With the introduction of a price cap regime on local exchange services in the late 1990's, this role was further diminished. The price cap regime left investment decisions up to the ILECs. The economic incentive for increased productivity improvements now drives the ILECs to pursue new technologies in the local market, while competitive market forces drives them in other more competitive sectors.

128. In light of these changes in industry structure and regulation, the Commission has viewed its role in competitive markets as one of allowing competitive market forces to drive innovation and technology and to ensure, to the greatest degree possible, that Commission policies do not distort investment decisions.

129. In markets where competition has not developed, the Commission has sought to ensure high quality service availability through service improvement plans.

130. In this new environment, the Commission has pursued a policy of technological neutrality that is designed to ensure that regulatory interventions in the market do not inadvertently incent or disincent the choice of a particular technology. The local competition regime is a prime example of the application of this principle of technology neutrality. It permits both the ILECs and new entrants to utilize whatever technologies they wish to compete with each other in the provision of local telephone services. The result of this policy is that we now see competitors using various types of wireless access, fibre, coaxial cable, digital subscriber line (DSL) over copper pair, as well as traditional copper pairs to provide analog, digital and IP-based telephone services. Market trials of broadband over power line (BPL) are also underway in Canada and

Industry Canada has recently initiated a public consultation on the use of BPL systems.[61] The theory behind this approach is found in the objectives of the telecommunications policy in section 7 of the *Act*, as well as in the economic literature, that competition is the best mechanism to allocate economic resources, and that market forces will spur innovation and the use of new technologies, more efficiently than regulation.

131. Under this approach, there is less of a role for the regulator to play - except in regions of the country where market forces are not strong enough to drive innovation or new services. In those regions, the universal service objective in subsection 7(b) requires the Commission to find ways to ensure that high quality, affordable telecommunications services are accessible to Canadians in both urban and rural areas in all regions of Canada. This is where service improvement plans, as well as other government subsidy programs, come in to help finance the extension of high quality telecommunications services to regions where competitive market forces are insufficient or not present at all to do the job.

132. The Commission has also recognized the importance of regulation that incents new investment in Canadian telecommunications infrastructure in order to improve the quality of service and service innovation. As mentioned above, in the days of rate of return regulation, this was done through granting the telephone companies a high enough rate of return on investment to finance new infrastructure and by approving construction programs. In the new competitive environment, a policy of technological neutrality doesn't mean that the Commission is necessarily technology blind. Rather, the Commission's role is a more subtle one of encouraging facilities-based competition and trying to ensure that its policies do not act as a damper on new investment.[62] The Commission recognizes the importance of technology changes and the implications they can have on the state of competition domestically and internationally. As a key economic building block, it is essential that Canada keeps pace with technological developments in North America and abroad if it is to remain prosperous in the information age.

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61 Canada Gazette Notice SMSE-005-05, *Consultation Paper on Broadband over Power Line (BPL) Communication Systems*, July 2005.

62 See for example, the Commission's discussion of this issue in Telecom Decision CRTC 2005-6, *Competitor Digital Network Services*, 3 February 2005.

133. The Review Panel's Consultation Paper talks of the shift towards IP-based technologies and the implications that this will have for the Canadian telecommunications industry. It talks in terms of "one pipe, multiple applications" and questions whether the Canadian environment is likely to evolve into a form of duopoly.

134. The Commission has some concerns about whether the telecommunications legislation should anticipate changes in technology or the industry structure that might evolve as a result of technological change, and base regulatory reforms on possible outcomes.

135. If a country guesses right on technology at an early stage in its evolution, it may get a leg up on competing nations in terms of infrastructure development, applications development and economic spin-off. But what if the bet is placed on the wrong technology, or what if the next generation technology develops more quickly than anticipated? Will our institutions and industries be able to adapt to the changes as readily as they might in a more dynamic environment where the market is left to determine technology choices?

136. The road is littered with technology predictions that have not come to pass and, as the pace of technological change increases, such predictions become more risky to make. It is risky to guess where technology is headed or to influence technological outcomes, and it could be very risky to design regulatory reforms around specific technologies - or to anticipate what the market structure will look like 5 or 10 years out.

137. We must also bear in mind that Canada is still a relatively small country which is integrated into the North American market. Most technology decisions are not made in Canada - they are made in the much larger North American market which is driven by competitive market forces. In this environment, it is difficult for the Canadian telecommunications industry to decide unilaterally on new technology directions. If it does, it can find itself without the benefit of low cost technology produced for a mass market, and unable to pursue an independent strategy.

The choice of CT2 plus technology in the mid-1990's provides an excellent example of this impediment. Unfortunately, that technology had to be abandoned because the rest of the world went in a different direction.[63]

138. Competitive market forces are what drive technology choices in North America and the rest of the world, and it is competitive market forces that tend to spur innovation. An excellent example of how the market drives technological change is found in the wireless market, where competitors have introduced three successive network generations of wireless technology in just 20 years. It is not regulatory policies that are driving these network overhauls - it is competitive market forces and the demand by consumers for new services and products. In this environment, there is no discussion of how to recover investment in legacy equipment. It is more a question of "do or die" for competitors in order to stay one step ahead of their competitors, retain customers, drive revenues and increase market share.

139. This is generally a good thing and, when market forces work in this way there is less of a role for regulatory intervention.

140. This is not to say that it isn't productive to look forward to what technology might bring. Regardless of whether we end up with single pipes capable of delivering multiple services or multiple networks delivering specialized services, it is possible under the existing legislation to develop a regulatory framework that is capable of adapting to the industry structure and the technologies employed.

Facilities-based Competition vs. Service-based Competition

141. Much of the CRTC's attention over the past decade has been directed at encouraging facilities-based competition as the best means to realize the benefits of competition in terms of price, innovation and choice and as the best means of ultimately forbearing from regulation of the ILECs' services.

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[63] *The Designation of Spectrum for Cordless Telephones and Proposals for the Future Use of the Bands 944-952 MHz and 953-956 MHz*, Industry Canada, July 1996.

142. However, facilities-based competition has not been the sole focus of the Commission. Consistent with the Government of Canada's *1987 Policy Statement*, which envisaged a competitive network of networks with numerous other service providers accessing and utilizing those networks on reasonable terms and conditions, the Commission has fostered service-based competition and resale activity by ensuring access by service providers to the networks and services of facilities-based carriers. Even before the *1987 Policy Statement*, the Commission had responded to the emerging electronic services market by allowing resale for the provision of enhanced services.[64] In 1990, the resale of private lines was permitted[65] and in 1992 the MTS/WATS market was opened to competition.[66] Following passage of the *Telecommunications Act*, the Commission continued these access policies granting equal access to resellers on the same basis as facilities-based carriers,[67] granting service providers the ability to co-locate at the ILECs' central offices and to access local loops for the provision of DSL services,[68] and granting Internet service providers (ISPs) the right to access cable television companies' high speed broadband networks for the provision of competing Internet services.[69]

143. The Commission believes that this hybrid approach is consistent with Government policy that encourages facilities-based competition - but recognizes the important role played by resellers and other service providers in the information services environment.

144. While facilities-based competition in the local wireline market has been slow to develop, it has been successful in the wireless and long distance markets, which have been forborne from rate regulation for some years now. Even in the local wireline market, we may now, eight years after the decision to open the market, be on the verge of realizing the goal of broad-based facilities-based local competition. This is the promise of cable television companies' entry into

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64 Telecom Decision CRTC 84-18, *Enhanced Services*, 12 July 1984.

65 Telecom Decision CRTC 90-3, *Resale and Sharing of Private Line Services*, 1 March 1990.

66 Telecom Decision CRTC 92-12, *Competition in the Provision of Public Long Distance Voice Telephone Services and Related Resale and Sharing Issues*, 12 June 1992.

67 Telecom Decision CRTC 93-8, *Trunk-side Access by Resellers to the Public Switched Telephone Network*, 23 July 1993.

68 Order CRTC 2000-983, *Digital subscriber line service providers' access approved for unbundled loops and co-location*, 27 October 2000.

69 Telecom Decision CRTC 99-8, *Regulation under the* Telecommunications Act *of Cable Carriers' Access Services*, 6 July 1999; and Telecom Decision CRTC 99-11, *Application concerning access by Internet service providers to incumbent cable carriers' telecommunications facilities*, 14 September 1999.

the local telephone market using either circuit-switched networks to deliver traditional telephone services, or high-speed broadband networks to deliver VoIP services, in competition with the telephone companies. If this promise materializes, Canada may find itself in the very enviable position of having two competing broadband networks to a significant number of Canadian homes and businesses, and all of the competitive services that can run over those networks.

145. However, our hybrid approach to network and service competition is not the only model. Over the years there have been calls from some quarters for less of a focus on facilities-based competition and more of a focus on the provision of wholesale access to the ILECs' networks.

146. The wholesale access model has been used in a number of countries, including the United Kingdom and the United States, as a mechanism for fostering the development of service competition. This model has a certain appeal because it provides a rationale for forbearing from retail rate regulation without actually developing competing networks. The theory is that if the network provider makes underlying network services available to its competitors at cost-based rates, then it will not be able to charge excessive rates to its own customers without risking competitive entry.

147. However, the wholesale/retail dichotomy is not a panacea. Even if the network provider makes its network available to its competitors at its avoidable cost, the competitor may not be able to compete on price due to the cost efficiencies built into the network provider's integrated network. Moreover, the more reliant the competitor is on the existing network, the less likely its own administrative costs, which might be lower than the network provider's, are going to make a significant impact on price. Furthermore, getting the wholesale price right is critical. It requires the regulator to set the wholesale rate at a level where it neither gives competitors an advantage, nor puts them at a disadvantage. This is difficult to do and, if wholesale rates are pursued as the only strategy for developing a competitive market, it puts tremendous pressure on the regulator to get the price right. In countries that have followed this strategy, regulators have been placed in the awkward position of being called upon to adjust the wholesale rate if competitors find they can't operate successfully at the level initially set. Since forbearance from regulation of the incumbent's retail rates is dependent on competition from its wholesale

customers, the regulator can be placed in the position of having to adjust the wholesale rates in order to affect competitive outcomes. This can be a prescription for on-going disputes and regulatory proceedings.

148. Adopting the wholesale rate approach alone can also have a dampening effect on new facilities investment and innovation. As the wholesale rate is lowered to stimulate competition at the retail level, investment in competing facilities becomes less attractive. If competitors are given wholesale access to all of the incumbent's network features, it may also act as a disincentive for the incumbents to invest in new technologies and features that they have to share with their competitors. In the longer term, this could lead to less investment in infrastructure and less investment in innovative technologies.

149. For this reason, the Commission has used mandated wholesale rates sparingly, in market segments where competitors do not yet have competing facilities, and where competitors' traffic volumes are relatively low.[70] Wholesale rates have generally been regarded by the Commission as a means for facilitating the development of competition by both facilities-based carriers and telecommunications service providers, and not as a substitute for facilities-based competition.

150. Some commentators have suggested that regulators in a number of countries have retreated along a continuum from facilities-based competition, to access to unbundled essential facilities, to regulated wholesale rates when their optimal model for competition fails and gives way to their second and third choices.[71]

151. It is questionable whether we have to follow this downward spiral in Canada or whether we have to choose one form of competition over another. With the extensive development of competing broadband networks in Canada and the recent entry by the cable television companies into the local telephone market, we are now very well placed to realize the benefits of facilities-based competition. At the same time, we know that these new IP-based broadband networks are capable of carrying numerous applications and services that can be

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70 See, for example, Telecom Decision CRTC 2005-6, *Competitor Digital Network Services*, 3 February 2005.

71 See, for example, Michael H. Ryan, *Regulation, competition and infrastructure investment: an evolving policy*, World Bank/European Commission Conference on Private Participation in Mediterranean Infrastructure, Rome, September 2003.

provided by third party service providers. Recent examples include the VoIP services provided by Primus Canada and Vonage Canada, among others. These non-facilities-based service providers can bring new innovations and services to consumers by riding on competing carriers' networks, thereby generating increased use of those networks and increased competition in the provision of telecommunications services.

152. Since these competing service providers rely on access to underlying broadband networks that they themselves do not own, it is important to preserve the rights of broadband customers to access their service providers of choice and to ensure that service providers' network access rights are also protected in order to take full advantage of the dual potential of facilities-based and service-based competition.

Sector-specific Regulation vs. Laws of General Application

153. There has been some debate in recent years as to whether there should be a shift from sector-specific regulation in Canada towards greater application of the laws of general application to the telecommunications sector. In particular, the question has arisen whether competition law principles and laws should replace current telecommunications policy and law in this sector.

154. There are really a number of elements to this issue, which often get blurred in a manner that confuses the debate: one issue is whether to rely more on competition laws of general application and less on sector-specific legislation to regulate conduct in the telecommunications industry; a second issue is whether a single body or two separate bodies should administer the telecommunications and competition legislation in respect of the telecommunications industry; and a third issue is, if a single body is going to perform that function, which is the most appropriate body.

155. If we look at what is going on around the world, we can see various combinations and permutations being adopted.

156. If one examines the issue of sector-specific regulation versus competition law, one is hard-pressed to find a single country that has abandoned sector-specific regulation in favour of competition law. While a lot of countries, including Canada, have moved towards greater reliance on competitive market forces to achieve their policy objectives and have placed less reliance on regulation, none has yet achieved total deregulation.

157. The one country that experimented with total reliance on laws of general application in the telecommunications sector was New Zealand, which deregulated much of its economy in the late 1980's and relied on its *Commerce Act*, a competition law statute of general application, to address disputes in the telecommunications industry. It is well-known that this proved to be a slow and ineffective means of resolving competitive disputes.

158. The history of the Clear - Telecom New Zealand local interconnection dispute in New Zealand highlights the problems posed by referring highly technical and economically sensitive interconnection disputes to the courts. Despite an initial memorandum of undertaking entered into by the two carriers on 24 August 1990, the parties were unable to reach agreement on terms and Clear filed a law suit against Telecom New Zealand alleging violation of section 36 of the *Commerce Act* respecting abuse of dominance. That case resulted in extensive technical and economic evidence being filed with the court. Following a High Court decision in December 1992, and a reversal by the Court of Appeal in 1993, both parties appealed to the then final court of appeal for New Zealand, the Judicial Committee of the British Privy Council in 1994. A decision was finally rendered more than four years after the dispute began and, in the meantime, there was still no competition in the provision of wireline local services in New Zealand.[72] Even after the Privy Council's decision, areas of dispute remained, which were again the subject of litigation. Four years and several court appearances later, the parties were still involved in interlocutory motions concerning their pleadings (a decision of the High Court having been overruled by the Court of Appeal in June of 1998, eight years after the initial memorandum of understanding between the parties) and some of the substantive issue in

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[72] See Milton Mueller, *On the Frontier of Deregulation: New Zealand Telecommunications and the Problem of Interconnecting Competing Networks*, Reason Public Policy Institute, May 1994.

the case had still not been resolved. In the 1999 general election in New Zealand, a new government was elected on a platform that included the promise of a telecommunications regulatory regime and the new *Telecommunications Act* came into force in 2001.

159. It should, however, be noted that even in the period prior to the new legislation, the Government of New Zealand had retained some power over Telecom New Zealand's conduct, through what is known in New Zealand as the "Kiwi Share Obligations". This symbolic share, which was retained by the government at the time of privatization of Telecom New Zealand, required the incumbent telephone company to maintain flat-rated local telephone and dial-up Internet service, maintain availability of service, and imposed a price cap equal to the rate of inflation on local service.

160. The new *Telecommunications Act*, which was introduced in New Zealand in 2001, contains provisions for the sector-specific regulation of the telecommunications market. Pursuant to this legislation, a Telecommunications Commissioner has been appointed with powers to regulate interconnection, resolve access disputes, establish service obligations, establish costing and accounting mechanisms, set rates, and establish a contribution regime.

161. Some other countries, which have chosen to move certain aspects of their telecommunications regulatory regime under the jurisdiction of their competition authority, have nonetheless retained sector-specific regulation. Jurisdiction in Australia has been split between the Competition and Consumer Commission (ACCC) and the Communications and Media Authority (ACMA)[73] with the ACCC dealing with economic regulation, interconnection and other competitive issues and the ACMA dealing with more technical aspects of telecommunications regulation, such as radio licensing and implementation of local number portability or equal access. However, even the ACCC regulates the competitive side of telecommunications pursuant to sector-specific legislation included in Parts XIB and XIC of the *Trade Practices Act*. These parts contain almost 200 pages of statutory provisions applicable solely to the telecommunications industry. So the split in jurisdiction has not altered

[73] In 2005, the Australian Communications Authority (ACA) and the Australian Broadcasting Authority (ABA) were merged into a single authority called the Australian Communications and Media Authority (ACMA) pursuant to the Australian Communications and Media Authority Act 2005.

the sector-specific nature of the legislation. Even though the ACCC is a single regulatory agency, it has organized itself into separate components dealing with anti-trust laws and with economic regulation. The latter division has been further structured with separate groups focusing on telecommunications, energy and transportation - each of which are governed by different parts of the Act.

162. Australia therefore represents a jurisdiction where sector-specific regulation still applies - but in which jurisdiction has been split differently from Canada, between two regulatory agencies.

163. In the United Kingdom, a different approach has been taken, partly in response to the EC *Framework Directive*. Rather than split jurisdiction between the anti-trust authority (the Office of Fair Trading) and the sector-specific regulator (Ofcom) the UK has given Ofcom concurrent powers to administer competition laws with respect to the telecommunications sector, as well as the sector-specific legislation set forth in the *Telecommunications Act*. This enables Ofcom to respond to the requirements of the EC *Framework Directive* and to apply EC Treaty law which takes precedence over national laws in respect of some competition and regulatory issues.

164. It would therefore be incorrect to suppose that sector-specific regulation has been abandoned in the U.K. It has not. Even the EC *Framework Directive* requires regulators to have regard to a wide range of social policy objectives that do not appear in anti-trust statutes. In Europe, these include:

- ensuring that users, including disabled users, derive maximum benefit in terms of choice, price, and quality;
- ensuring all citizens have access to a universal service specified in Directive 2002/22/EC (Universal Service Directive);
- ensuring a high level of protection for consumers in their dealings with suppliers, in particular by ensuring the availability of simple and inexpensive dispute resolution procedures carried out by a body that is independent of the parties involved;
- contributing to ensuring a high level of protection of personal data and privacy;

- promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available electronic communications services;

- addressing the needs of specific social groups, in particular disabled users; and

- ensuring that the integrity and security of public communications networks are maintained.[74]

165. In the United States, the FCC has been similarly endowed, but not to the same degree as Ofcom, with jurisdiction to administer American anti-trust laws in the communications sector. However, this has not displaced the *Communications Act* as the primary industry-specific legislation governing the telecommunications sector, and has not displaced the primary jurisdiction of the Department of Justice under the anti-trust legislation.

166. Obviously, different countries are drawing the line between sector-specific regulation and general competition law at different points and are establishing different divisions of labour between different regulatory authorities. In doing so, they are responding to different circumstances within their own countries and, in the case of EC countries, they are also responding to a different jurisdictional framework involving supra national laws.

167. Here in Canada, we need to consider what would best serve our policy objectives. If we were to move towards a competition law model what would the implications be?

168. One implication would be the possible loss of other policy objectives in the *Telecommunications Act*. The object of the *Competition Act* is stated in section 1.1 as follows:

> 1.1 The purpose of this Act is to maintain and encourage competition in Canada in order to promote the efficiency and adaptability of the Canadian economy, in order to expand opportunities for Canadian participation in world markets while at the same time recognizing the role of foreign competition in Canada, in order to ensure that small and medium-sized enterprises have an equitable opportunity to participate in the Canadian economy and in order to provide consumers with competitive prices and product choices.

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[74] *Framework Directive*, ss. 2 and 4.

169. This is an excellent objective - but it is the only one in the Act. Competition law principles do not address the universal service objective of rendering reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada; does not deal with unjust discrimination, undue preference and undue disadvantage in the provision of telecommunications services or rates; does not provide for the interconnection of networks or access to ancillary databases required by competitors; does not contribute to the protection of the privacy of individuals; does not contain mechanisms to ensure access to telecommunications networks by disabled persons; does not contain provisions enabling the establishment of 9-1-1 emergency services; and does not protect individuals from the nuisance caused by unsolicited communications. Nor does the *Competition Act* create a body with technical expertise in the communications sector or a quasi-judicial body empowered to resolve disputes over interconnection or access rates. The Commissioner of Competition is empowered to investigate complaints and to recommend criminal prosecutions to the Attorney General or proceedings before the Competition Tribunal in respect of reviewable practices. However, these are formal proceedings that take a very long time to complete. It can take up to five years between the alleged infraction of the law occurring and a decision by the Competition Tribunal or the courts. Moreover, the Tribunal is not equipped to handle a myriad of cases and has stated that its function is not to monitor or regulate an industry. Since it was established in 1993, the Tribunal has decided relatively few cases involving abuse of dominance and predatory pricing across all sectors of the economy. (In contrast, the Commission has issued 41 telecommunications decisions in the first seven months of this year.)

170. The focus of the *Telecommunications Act* and the *Competition Act* are also different. The *Competition Act* assumes the presence of a competitive market and seeks to enforce principles of fair competition. The *Telecommunications Act* is addressing areas where competition has yet to evolve to a state where it can reasonably be expected to discipline market power. In this environment, regulatory supervision may be more appropriate than prosecutions.

171. In this environment, it might be more productive to focus on how best to marry the Bureau's expertise in defining markets and assessing market power with the Commission's sector-specific knowledge and status as a quasi-judicial administrative body. Consideration could, for example, be given to allowing the Commissioner and her staff to participate more directly in CRTC proceedings involving competition issues where the Bureau's expertise could be utilized. Such arrangements exist in the United States and Germany, for example, where the agencies are permitted to share information and to consult on competition issues of mutual interest.

Regulatory Treatment of Telecommunications Service Providers

172. As discussed above, most of the provisions of the *Telecommunications Act* do not apply to resellers and service providers that do not own or operate "transmission facilities". The definitions in section 2 of the *Act* have been interpreted to exclude from the definition of "Canadian carrier" service providers that may own switching equipment, but either lease transmission facilities from other carriers or otherwise use third parties' networks to deliver their services.[75] This removes resellers and service providers from the Commission's regulatory jurisdiction under all but a few sections of the *Act.*

173. Since the passage of the *Telecommunications Act,* Parliament has seen fit to depart from this general rule in two respects. Amendments to the *Act* have included "telecommunications service providers" in the scope of subsection 16.1 of the *Act*, respecting the international telecommunications licensing regime, and in subsection 46.5, respecting contribution payments into the fund for high cost service areas.

174. Subject to these limited exceptions, the Commission has no jurisdiction to directly regulate resellers and other service providers. However, in an effort to ensure compliance with important public policy objectives, the Commission has imposed certain obligations on these entities through the tariffs of the carriers that provide underlying services and facilities to them.

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[75] Telecom Public Notice CRTC 93-62, *Exemption of Resellers from Regulation,* 4 October 1993.

These are found in provisions of the ILECs' tariffs respecting resale activity, as well as in access tariffs for various types of services. Since service providers and resellers are considered to be customers of the underlying carrier, the only way to ensure compliance with the terms of these arrangements is through suspension or disconnection of service.

175. With the development of broadband networks and the ability of service providers to duplicate IP-based services offered by carriers, the question arises whether this indirect form of regulation is adequate to implement public policies respecting such important issues as 9-1-1 emergency services, access for the disabled, protection of privacy, prohibition of nuisance, and interaction with law enforcement agencies. The recent public proceeding with respect to VoIP services has brought this issue into focus.[76] VoIP services are now being sold that are functionally equivalent to local exchange service and are intended as a substitute for basic telephone service. In the past, resellers could resell the local exchange carriers' basic local service, which included all of these important features. Now, in a VoIP environment, they can provide their own service with or without these features. While the objectives in section 7 of the *Act* require the Commission to address these issues, the *Act* currently limits the Commission's ability to do so, except in an indirect manner.

176. While the Commission is not suggesting that any form of rate regulation be imposed on telecommunications service providers, it would be useful to consider whether the Commission's power in section 24 of the *Act* to impose conditions on the offering of telecommunications services should be extended to apply to telecommunications service providers, in the same way as certain other sections of the *Act* have been extended in the past. Similarly, the broader powers to enforce these obligations should accompany any such amendment. The current regime leaves the Commission with termination of service as the only recourse against service providers who break the rules. This is a rather draconian response and may not be in the public interest when it is considered that the implication of terminating service to a VoIP service provider is the consequent disconnection of all of its customers who rely on it to provide

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[76] Telecom Decision CRTC 2005-28, *Regulatory framework for voice communication services using Internet protocol*, 12 May 2005.

basic local telephone service. It would be desirable for the Commission to have more flexible enforcement options that do not disrupt service to Canadians. These could include a fining power, as discussed further below.

Access to Support Structures and Multi-dwelling Units

177. In a monopoly environment, access by telephone companies to support structures or to buildings was generally not problematic, since building owners had an interest in ensuring that their tenants had access to telephone service, and it was in the interest of electrical utilities and telephone companies to pool their support structures and to grant each other reciprocal rights, in order to avoid costly and unsightly duplication of poles.

178. With the advent of the cable television industry in the 1960's, access to existing support structures became an issue when the cable companies sought to string their coaxial cables on poles owned by the telephone companies or electrical utilities. This issue was ultimately addressed by ordering access to the telephone companies' facilities pursuant to Commission-approved tariffs. Although the rates and terms and conditions for such access have proved to be contentious over the years, this issue was addressed through exercise of the Commission's powers under the *Railway Act* and latterly, under the *Telecommunications Act.* Similar rights of access were subsequently granted to other competing telecommunications carriers.

179. Access to support structures owned by electrical utilities has proven to be more problematic. For many years the Commission reviewed the rates and terms and conditions of access by telecommunications carriers and cable companies to support structures owned by municipal electrical utilities pursuant to the Commission's powers to review agreements with regulated telecommunications carriers. However, oversight of electrical utility support structure rates was not consistent, and rates and terms and conditions of access varied significantly from province to province. Matters came to a head in 1999 when the Commission was called upon to rule with respect to its jurisdiction under the *Telecommunications Act* to resolve a rate dispute between the cable television companies and the municipal electrical utilities. The dispute turned on the interpretation of subsection 43(5) of the *Act*, which provides as follows:

> Where a person who provides services to the public cannot, on terms acceptable to it, gain access to the supporting structure of a transmission line constructed on a highway or other public place, that person may apply to the Commission for a right of access to the supporting structure for the purposes of providing such services and the Commission may grant the permission subject to any conditions that the Commission determines.

180. In its decision,[77] the Commission held that subsection 43(5) provides it with the authority to set rates, terms and conditions of access to supporting structures by any person who offers services to the public, including Canadian carriers and broadcasting distribution undertakings. In interpreting subsection 43(5), the Commission considered that the terms and phrases in the section must be interpreted based on their ordinary meanings as well as the context of the *Act*. The Commission concluded that "transmission line", as defined in ordinary dictionaries, would include lines used to distribute electricity. The term was not restricted, as it was in other subsections of section 43, to transmission lines of a Canadian carrier or cable distribution.

181. The Commission's decision on this point was successfully appealed to the Federal Court of Appeal and ultimately to the Supreme Court of Canada.[78] The Supreme Court held that the phrase "transmission line" cannot be interpreted to extend to electrical distribution lines since Parliament must be taken to have known that power poles support "distribution lines" rather than "transmission lines". The Court also held that subsection 43(5) could not be interpreted to extend to private property including private easements where some of the electrical poles were located. Finally, the Court ruled that the Commission could not rely on the policy objectives in section 7 to overcome these limitations in subsection 43(5).

182. This decision by the courts has placed the issue of access to support structures owned by electrical utilities outside of the Commission's jurisdiction. Some provincial regulators of electrical utilities, such as the Ontario Energy Board, have now assumed jurisdiction over this issue. However, there is no guarantee that this will occur in all provinces or that a uniform

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77 Telecom Decision CRTC 99-13, *Part VII Application - Access to Supporting Structures of Municipal Power Utilities - CCTA vs MEA et al - Final Decision*, 28 September 1999.

78 *Barrie Public Utilities v. Canadian Cable Television Association*, 2003 SCC 28, 16 May 2003.

approach will be taken to issues of access and rates. Having achieved unified federal jurisdiction over telecommunications, access to support structures stands out as one important exception, that might be worthy of re-examination.

183. Access to multi-dwelling units (MDUs) has also emerged as an important issue in the new competitive telecommunications environment. With the advent of competing carriers wishing to serve tenants in buildings owned by third-party landlords, opportunities have arisen for some building owners to either restrict access or to exact onerous terms for access to their building. After the Commission expended a great deal of effort and resources over the past decade encouraging the development of a competitive market and breaking down barriers to entry with a view to increasing consumer choice, MDUs have emerged as a new form of "bottleneck" or "gatekeeper" capable of limiting access and restricting consumer choice.

184. The Commission has responded to this problem by developing an access code and guidelines for contractual arrangements between building owners and carriers and by establishing rules respecting the use of in-building wiring. The Commission has also indicated its intention to enforce these rules against individual building owners who seek to impede access to MDUs or otherwise disregard the rules by relying on the power in section 42 of the *Act* to require or permit any telecommunications facilities to be provided or installed.[79]

185. The Commission's decision was met by an immediate legal challenge questioning the Commission's jurisdiction under section 42 to make this type of order against building owners. Although the application was denied by the Federal Court of Appeal on the ground that it was premature in advance of the issuance of an actual order against a building owner,[80] the fact that this application was made in advance of an actual order raises the likelihood that a new legal challenge may be made if the Commission issues this type of order in the future.

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79 Telecom Decision CRTC 2003-45, *Provision of telecommunications services to customers in multi-dwelling units*, 30 June 2003.

80 *Canadian Institute of Public and Private Real Estate Cos. v. Bell Canada et al.*, 2004 FCA 243.

186. In these circumstances, while the Commission is confident of its jurisdiction, given the importance of this issue to the attainment of the policy objectives in section 7 of the *Act*, the Telecom Policy Review Panel might wish to consider further ways of giving effect to them.

Creation of a Fining Power

187. At the present time, the Commission does not have the power to fine telecommunications carriers or service providers for breach of the requirements of the *Act* or of the Commission's decisions or orders. The penalties for carriers that breach the *Act*, which are set out in sections 73 and 74, are criminal in nature, and require prosecutions to be undertaken by the Attorney-General. The power in section 63 for enforcement of Commission orders through registration with the Federal Court can involve a multi-stage process that is not well-suited to the punishment of carriers for regulatory infractions. As discussed above, due to the Commission's relatively narrow jurisdiction over resellers and other telecommunications service providers, most of the provisions of the *Act* are not enforceable against them.

188. Criminal sanctions are not well suited to any but the most serious infractions of the *Act*, Commission orders or decisions. Because of this, the Commission has no real means of disciplining carriers for their infractions. In the case of resellers and service providers who disregard the terms and conditions governing their access to carriers' facilities, the only remedy for breach is disconnection which, as discussed above, is a rather draconian penalty for all but the most flagrant of breaches. Disconnection also has negative implications for the service provider's customers who rely on it for service.

189. In these circumstances, the introduction of a fining power in the *Act*, without criminal connotations, would be a welcome addition. In the most recent budget plan, the Government indicated its intention to amend the *Act* to give the CRTC a general fining power. The Government has also seen fit to include a fining power in proposed amendments to the

Telecommunications Act respecting the implementation and administration of a "do not call list" by the Commission.[81] It should be noted that other telecommunications regulators, such as the Federal Communications Commission (FCC) in the United States, have this power.

190. If enacted by Parliament, this fining power will apply to all persons who breach the new provisions regardless of their status as carriers, service providers or individuals. Considerable work has already been done to refine the fining power in Bill C-37 and to cloak it in the appropriate safeguards. The Telecom Policy Review Panel may be able to build on the work that has already been done in this area.

Change of Control

191. At the present time the *Telecommunications Act* does not require approval by the Commission of changes in control of Canadian carriers. The absence of this requirement creates a regime in which the Commission is required to regulate with a view to enhancing the competitiveness of Canadian telecommunications and fostering increased reliance on market forces, and in which it has opened nearly all telecom markets to competition, but in which it does not have the power to prevent consolidation or re-monopolization of the industry through mergers and acquisitions

192. This gap in the Commission's powers may be contrasted with the broadcasting sector, where all broadcasting undertakings, including broadcasting distribution undertakings (BDUs), are required to seek Commission approval for changes in control.[82] While as a practical matter the major BDU groups and ILECs offer (or are about to offer) both broadcast distribution and telecom services, and are therefore both currently subject to the requirement of seeking CRTC approval of changes in control under the *Broadcasting Act*, this would no longer be the case where an ILEC ceased being a licensee of a broadcasting undertaking.

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81 *Bill C-37: An Act to Amend the Telecommunications Act*, 13 June 2005.

82 See, for example, *Broadcasting Distribution Regulations*, SOR/97-555, section 4(4), 8 December 1997, as amended; and *Radio Regulations, 1986*, section 11(4), SOR/86-982, as amended. A similar condition is included in the conditions of licence attaching to major classes of licences issued under the *Radiocommunication Act* such as cellular, personal communications systems (PCS) and multi-point communications systems (MCS) licences. These conditions require Industry Canada approval for changes in control.

193. This situation appears to be inconsistent with Commission's mandate to implement the objectives of the *Telecommunications Act.* It is also inconsistent with the situation that exists in the United States, where the FCC has the power to approve telecommunications mergers regardless of the convergence strategies adopted by the carriers in question.

The Next Five Years

194. Since the passage of the *Telecommunications Act* significant strides have been made in converting the structure of the Canadian telecommunications system from one characterized by monopoly telephone companies, with limited competition in certain market segments, into a more competitive environment consisting of wireline, wireless and IP-based carriers, as well as a significant array of other telecommunications service providers.

195. After some very hard work by the Commission to remove the barriers to entry in a number of telecommunications sectors, and after a very slow and painful start to competition in the provision of local exchange services, Canada may now be on the threshold of significant facilities-based competition.

196. Over the past few years, Canada has become a world leader in the deployment of high-speed broadband networks ranking ahead of most of its OECD trading partners, including the United States and the United Kingdom.[83] While this gap has been narrowing over the last two or three years,[84] Canada remains in an excellent position to take advantage of the new information-based economy and places consumers in an excellent position to benefit from price and service competition in what is fast becoming a converged market.

197. While commenting on the painstaking process of implementing the new competitive framework in Canada, the OECD has approved of the results:

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[83] The latest data shows Canada in fifth place worldwide, behind Korea, Netherlands, Denmark and Iceland. The United States is 12th place and the United Kingdom in 14th. (OECD Broadband Statistics, December 2004.)

[84] In 2001 Canada's broadband penetration rate was 8.8%, double that of any other country except Korea. While that number more than doubled by 2004, to 17.8%, the countries from 2nd to 12th place in 2004 were now experiencing broadband penetration rates ranging from 19.0% to 14.5%. (Ibid.)

> …Canada is one of the leading OECD countries in terms of its performance in the telecommunication sector. Its best practice performance is largely due to its regulatory processes and frameworks and policy structures. The development of competition in the telecommunication service sector has shown good progress but, as is the case for other OECD countries, is still insufficient for local telephone service and local access and in the short distance leased line market. But many of the contentious regulatory problems that have marred performance in other OECD countries have been largely resolved in the Canadian telecommunication context. Low prices, good quality service and relatively rapid diffusion of new technologies characterise the Canadian telecommunication landscape. The regulatory framework is transparent and allows for full participation of all interested parties. Consensus building has been a key factor in the development and implementation of regulations.[85]

198. The future is very bright for the Canadian telecommunications system. As noted by the OECD, the extensive groundwork performed since the passage of the *Telecommunications Act* to break down entry barriers, foster competition and rationalize pricing of telecommunications services, has placed us in an excellent position to take full advantage of the new information economy. Our high penetration of broadband access services enhances our telecommunications infrastructure in comparison with our major trading partners, and the introduction of new IP-based services such as VoIP by competing carriers and service providers bodes well for a competitive environment. The hard slogging that characterized telecommunications regulation over the past twelve years is on the verge of bearing fruit.

199. Yet even if all sectors are rate-deregulated, the Canadian telecommunications sector will still not have completed a transition from monopoly to full competition, where no regulation is required. The *Telecommunications Act* was not framed with that outcome in mind, nor is it realistic to suppose that it can happen in the foreseeable future.

200. No matter how successful we are in introducing facilities-based competition, the geography and demographics of our country dictate that there will be regions that lack competitive choices and regions where the high cost of providing service will make the provision of service at market rates unattractive. As long as we continue to stand by our universal service objectives,

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[85] *Regulatory Reform in the Telecommunications Industry*, OECD, 2002, at p. 6.

regulatory intervention will continue to be required to address these issues. Competition will inevitably be uneven and the possibility of *de facto* monopoly supply and re-monopolization in some regions of the country must be viewed as a distinct possibility.

201. Even in markets where competition develops and thrives, there will be a role for regulation if we wish to continue to ensure access to the network by persons with disabilities, access to a national emergency response system through 9-1-1 service, access by law enforcement agencies, and the fulfillment of other public interest objectives.

202. In the network of networks environment that we have developed, interconnection of competing networks and access to facilities will remain of central concern. None of these arrangements are static and they must evolve technically over time in a uniform and systematic manner. Our telecommunications infrastructure is just too interdependent to suppose that it can be left to competitive market forces in the same way as a competitive market for "widgets". Too many parties rely on access and services from their principal competitors for us to ever reasonably believe that it will all continue to work smoothly without on-going supervision. The telecommunications network is too important to us from an economic and social perspective to take this type of risk and engage in legislative experimentation that assumes free market conditions.

203. Our hybrid model of competition at both the network and service level will require on-going protection of access rights for non-facilities-based service providers, as well as protection of the right of customers to use their network provider to access their service provider of choice. This will be particularly important in the IP environment where many applications and services will pass over interconnected networks, and where fair access by competing service providers will remain of vital concern.

204. This is far from a gloomy prognosis. It merely recognizes the unique nature of the telecommunications industry and its importance to our country's livelihood and well-being. We are not out of step with the rest of the world as some commentators have suggested. We are in many ways at the head of the pack. The Commission does not believe in regulation for the

sake of regulation - but rather regulation where it is required to protect consumers from the adverse effects of market power; to ensure that the Government's telecommunications policy objectives are satisfied when competitive market forces are either inadequate or not designed to achieve the desired results; and to continue to ensure the orderly development throughout Canada of a world class telecommunications system.

205. We need not fear for the future of Canadian telecommunications. To the contrary, we should be excited by it, as we look forward to the continuing development of this very important and dynamic sector of our economy and our society.