
TWO SOLITUDES: CANADIAN COMMUNICATIONS REGULATION APPLIED TO THE INTERNET

by
Michael Koch *

*What rice is to the Japanese, what wine is to the French, regulation is to the Canadians. When any new phenomenon appears on the horizon, whether it's in vitro fertilization or superconductivity, our first response is always the same: how do we regulate this sucker?*¹

A. Introduction

The Internet is converging technologies, applications and industry sectors. In the case of Canada, the Internet also obscures the line between two distinct regulatory regimes, namely those applying to telecommunications and broadcasting. Telecommunications and broadcasting have always been regulated under separate legislation in Canada (although the two sectors of the communications industry are regulated by one body, the Canadian Radio-television and Telecommunications Commission, hereinafter referred to as the "Commission" or the "CRTC"). This separation was founded on the traditional understanding that the telecommunications industry gave rise to carriage issues, while the broadcasting industry gave rise primarily to issues concerning content. However, the conceptual line between the regulatory principles applying to these two sectors is increasingly being blurred, and the Internet is a significant manifestation of that process.

The "square peg" of the Internet does not fit neatly into the "round holes" of either telecommunications or broadcasting. Having conquered audio, the Internet is improving daily the quality of its full motion video and voice telephony applications. Significantly, certain of its audio and video applications consist of the very type of programming that has traditionally been the exclusive province of broadcasters employing hertzian waves, coaxial cable and satellite technology. As well, Internet telephony is expected to compete with traditional voice services employing circuit networks. Yet in spite of their parallels to existing communications services, Internet applications are delivered over a distinct technology - a packet-switched data network using a unique IP protocol. The Internet's underlying technology, as well as its international ubiquity, promise to strain existing regulatory models.

Canada's brief history of regulated competition in telecommunications and its long-standing concern for preserving its cultural identity in the shadow of its neighbour to the South

* Smith Lyons, Barristers & Solicitors, Toronto, Canada. The author wishes to acknowledge the invaluable research assistance of Lisa Lam and Michael Bussmann.

¹ Fulford, R. "As a Rule, Canadians Love to Regulate" *The Globe and Mail* (22 December 1993) at C1.

can hopefully provide some useful lessons for those attempting to regulate the Internet's world without borders.

This paper will consider how Canada has grappled thus far with the public values inherent in its telecommunications and broadcasting regimes, and will describe how these values are, or might be, applied to the Internet. This paper is divided into three parts. The first provides some background to the Canadian regulatory model for the reader unfamiliar with the separate regimes applicable to broadcasting and telecommunications in Canada. The second focuses on the way in which the legislative regime applicable to telecommunications regulation maps onto the Internet, and the challenge that Internet telephony presents for telecommunications regulation. The third and final part, dealing with the broadcasting regulatory regime, explores the legal and policy dimensions of the prospect of regulation of the Internet as a broadcasting medium², and describes some of the questions being considered by the Commission in a proceeding to consider issues associated with the "new media", including the Internet.³

B. Background

I. Telecommunications

Canada takes pride, of course, in the fact that the telephone was invented by a Canadian, Alexander Graham Bell.

Historically, telecommunications services in Canada were provided through a combination of private and publicly-owned monopolies the serving areas of which coincided roughly with the borders of the provinces and territories making up the country.⁴ These companies, commonly referred to as the telcos, have transformed over the years into the current members of the Stentor Alliance.

The telcos were regulated pursuant to various statutes, including, prior to 1993, the Railway Act. Under the Railway Act an independent regulator, the CRTC and its predecessor bodies regulated the rates of the telcos under federal jurisdiction to ensure that they were "just and

² This paper will not deal with criminal or public morality concerns relating to content over the Internet. For a comprehensive discussion of the various laws in Canada applicable to the Internet, see Pinsky, C. "The Internet: Brave New World or Same Old Thing? A Survey of Legal Issues Relating to the Regulation of Content Distributed Over the Internet" [paper presented at New Developments in Communications Law and Policy: Canada and the Global Information Society] (Canadian Bar Association – Ontario/Law Society of Upper Canada, 1996).

³ New Media- Call for Comments, Telecom Public Notice CRTC 98-20/Broadcasting Public Notice CRTC 1998-82, July 31, 1998. The CRTC held a public hearing during the months of November and December, 1998. Final submissions are due in February, with a decision expected later in the year.

⁴ The major exception to this rule is Bell Canada, which serves the provinces of both Quebec and Ontario, representing the majority of Canada's population. For a history of Bell Canada and Canada's telecommunications regulatory regime see Surtees, L. *Pa Bell: A. Jean de Grandpré & the Meteoric Rise of Bell Canada Enterprises* (Toronto: Random House, 1992).

reasonable” and to prevent unjust discrimination. Universal telephone service was a major policy of the Government's and Canada boasts one of the highest telephone penetration rates, at roughly 98%. This policy of making telephone service accessible to everyone, including those in communities in remote, sparsely populated areas, was achieved by maintaining interexchange (i.e., long-distance) rates that were well above cost, which provided an implicit subsidy to primary exchange (i.e., local) service.

During the 1980s, the CRTC began to permit limited resale of the telcos' facilities to provide service in competition with the telcos. However, it wasn't until 1992 that the CRTC ruled that competitive interexchange carriers and resellers should be permitted to interconnect with the telcos to provide long-distance service on an equal access basis.

The movement towards a competitive model necessitated the enactment of new legislation and in 1993, the Parliament of Canada passed the *Telecommunications Act*.⁵ By the time the *Telecommunications Act* was passed most of the telcos had been brought under federal jurisdiction (i.e., under the jurisdiction of the CRTC) through a series of decisions of the Supreme Court of Canada.⁶

Traditionally, the regulator's concern in the domain of telecommunications has been with the carriage of information, rather than with its content. The *Telecommunications Act* therefore focuses on telecommunications common carriers. Aside from persons landing international submarine cables, or providing basic international telecommunications services, service providers – including telecommunications common carriers - are not required to hold licences in order to operate.⁷

Competition in the provision of telecommunications services has now advanced to the point in Canada where the CRTC has seen fit to forbear from regulating the rates of all services provided by non-dominant carriers, as well as certain services provided by the telcos, including discount toll and toll-free services (i.e., long-distance), interexchange private lines on most routes and most data services including packet-switched data services. As well, consistent with the CRTC and the Government's policy of introducing competition in local telephony, industry groups with the guidance of the CRTC are hurriedly negotiating and implementing interconnection and other arrangements (e.g., local number portability) necessary for facilities-based competition to take root. At the same time, however, increased competition has heightened the need to replace or do away with the cross-subsidy of primary exchange service. Aside from issues surrounding the possible abuse by the telcos of their dominance in the provision of local

⁵ S.C. 1993, c. 38.

⁶ The one notable exception is SaskTel, owned by the Government of the Province of Saskatchewan, which by agreement between the federal and provincial government has not yet come under federal jurisdiction.

⁷ In *Regulatory Regime for the Provision of International Telecommunications Services*, Telecom Decision CRTC 98-17, the CRTC established a new licencing regime for providers of basic international telecommunications services.

access facilities, this cross-subsidization of services is likely to be the telecommunications regulatory issue of most relevance to the Internet.

II. Broadcasting

In contrast to the regulatory regime applying to telecommunications, the regulation of broadcasting in Canada has focused primarily on content. The CRTC's primary concern has been the creation and consumption by Canadians of Canadian productions, whether over the medium of radio or television. This concern is in large part a function of Canada's geographic and social realities. Canada shares a border of over 5000 kilometres with the United States, and 90% of Canada's population lives within only 100 kilometres of that border. As a consequence of this proximity, the prodigious cultural industries of the United States have long been perceived as a threat to the cultural identity of Canada. The following observation of Northrop Frye is apt:

I suppose that nowhere in the world is there a relationship between two countries even remotely like that of Canada and the United States. The full awareness of this relationship is largely confined to Canada, where it has churned up a good deal of speculation about "the Canadian identity", the extent to which Canadians may be said to be different from non-Canadians, meaning, ninety percent of the time, Americans. I am not concerned with this approach to the question, which seems to me futile and unreal. A national identity is (not "is in") its culture, and culture is a structure with several distinct levels.⁸

As technologies have advanced, the Canadian regulatory system has had to constantly reinvent itself in its struggle to remain relevant and effective. The physical proximity that first concerned Canadian policy-makers has been replaced by the Internet's virtual proximity, which affects all countries, regardless of their geographical location. As the technological means for multilateral trade in programming make exponential advances, all countries are now faced with the dilemma over whether to take measures to protect or foster a national identity or consciousness. This problem has dominated the regulatory landscape of broadcasting in Canada throughout its history. As a result, a brief retelling of this history can help one to understand the Canadian perspective on the question of regulating content on the Internet.

By the 1920s, the large number of Canadians with radio receivers were subject to an influx of information and entertainment emanating from the U.S., which was received over the airwaves from undertakings located across the border, as well as from Canadian stations that acted largely as relay stations for U.S. broadcasters. In 1929 Canada's first inquiry into its broadcasting policy, the Royal Commission on Radio Broadcasting, issued a report indicating that Canadians wanted to listen to Canadian programs but the majority of programs were coming from outside of Canada.⁹ The recommendation was made to establish a "publicly owned, nationwide system" to act as a "single national broadcasting system". It was felt even at that early

⁸ Frye, N. *The Eternal Act of Creation: Essays 1979-1990*. Ed. R. D. Denham. (Bloomington: Indiana University Press, 1993).

⁹ Canada, *Royal Commission on Broadcasting (Aird Commission) Report* (Ottawa: King's Printer, 1929) at 6.

stage that given Canada's small and widely dispersed population, private broadcasters would not be able to raise sufficient revenues from advertising in order to satisfy the desire for Canadian programming.¹⁰ Accordingly, in 1936 the publicly-funded Canadian Broadcasting Corporation (the "CBC") and CBC Radio were born. From that date forward, the combination of private and public elements has been a feature of the Canadian broadcasting system.

Throughout the 1950s a distinctive characteristic of Canadian cities within 50 miles of the U.S. border was their forest of rooftop television aerials. Television, however, presented a far greater challenge for the development of an indigenous Canadian industry, as the costs involved in production far exceeded those for radio programming.¹¹ Again, the small size of the domestic Canadian market was perceived to be insufficient to support Canadian production on a purely commercial basis. The Fowler Commission, established in 1955¹², concluded that, "by means of assistance, financial aid and a conscious stimulation (Canada must) compensate for (Canada's) disabilities of geography, sparse population and vast distances" to support a national broadcasting system. This Commission recognized that the private broadcasters were businesses and would continue to import American programs as long as it made business sense to do so.

In 1958, the current structure of the broadcasting regulatory regime took shape with the establishment of a public agency responsible to the Parliament of Canada. This predecessor to the CRTC was charged by the *Broadcasting Act* of 1958 with the regulatory oversight over both private and public broadcasters, and required private broadcasters to provide "programming that was predominantly Canadian". Thus, regulation of the content of broadcasting was born.¹³ The justification used for regulating content included the scarcity of frequencies, the influence of commercial sponsors and the pressure from U.S. economic forces.

The *Broadcasting Act* was updated in 1968, at which time the public interest objectives underlying it were made part of the legislation. These objectives, which have not changed significantly over time, reflected factors and objectives which lay at the heart of the desire to regulate broadcasting since the 1930s:¹⁴

- frequencies are a public resource and use of them is a privilege
- the broadcasting system should be owned by Canadians
- service should be extended to all Canadians
- the system should reflect a blend of public and private resources

¹⁰ Canada, *Task Force on Broadcasting Policy Report* (Co-chairs G.L. Caplan and F. Sauvgeau) at 7.

¹¹ *Ibid.* at 10-11.

¹² Canada, *Royal Commission on Broadcasting (Fowler Commission) Report* (Ottawa: Queen's Printer, 1957) at 10.

¹³ *Supra*, note 9 at 12.

¹⁴ *Op cit.*, at 8.

- programs should be of a high standard and primarily Canadian, but programs from other sources of a high standard should also be used.

In 1960 cable television was introduced into Canada, initially to provide access to television for those living in remote areas with no local broadcasters or where signals were weak. However, pressure was brought on the CRTC to permit cable television undertakings to carry the three American commercial networks. In 1971, cable was permitted to carry these three U.S. networks, ABC, CBS and NBC, as well as the public network, PBS. This package, known in Canada as “3 + 1”, soon became an expected birth-right of Canadians and the penetration of cable increased dramatically. Today, Canada is the most cabled country in the world, with a penetration rate of roughly 80%. With the growth in cable came a shift away from the concerns over the scarcity of frequencies towards a concern for priority of carriage on cable.

This issue of carriage on cable has been closely regulated by the CRTC over the years to ensure a predominance of Canadian signals and the priority carriage of certain signals such as that of the public broadcasters, both provincial, i.e., TVOntario, and federal, i.e., CBC Television. In addition, the CRTC imposed “simultaneous substitution” rules requiring cable television providers to replace the signal of certain lower priority signals (i.e., American networks) with those of higher-priority Canadian signals, where both signals carry the identical programming in the same time-slot. This measure, upheld by the Canadian courts, was aimed at stemming the erosion of the advertising revenue of local broadcasters.

Just as cable in the 1960s presented new technological challenges for regulating the influence of U.S. programming in Canada, in the 1970s, the advent of satellite-delivered signals created a demand for U.S. services, particularly in remote areas of the country where the construction of cable television undertakings was not economically viable. While initial Government policy was to restrict the reception by Canadians of these signals, the public outcry was so great that in the end the Government abandoned its policy of requiring receive-only earth stations to be licensed in order to receive broadcasting signals.¹⁵ These developments played a role in the creation of a domestic satellite industry and the launching of the Anik series of satellites.

This pattern of the incursion of U.S. signals into Canadian territory as an influence on the development of Canadian services was repeated in the context of satellite-delivered specialty stations. Canada has developed such a wide range of alternative specialty stations that there are 70 + applications for licences new services currently pending before the CRTC. In addition, access of licensed services to the capacity of the existing plant of cable undertakings is one of the most vexing issues facing the CRTC today. Most recently, with the advent of Direct-to-Home broadcasting satellites (referred to as DBS in the U.S. but DTH in Canada) Canada, together with other countries, has had to grapple with a technology that is analogous to the Internet in its lack of respect for political boundaries. In this context, there have been inconsistent decisions of courts across the country as to the legality of the marketing in Canada of U.S.-originating services such as DirecTV, which are referred to as “gray market services”.

¹⁵ *Ibid.*, at 605.

In the 1970s and 1980s, when technological and market forces were making U.S. programming more pervasive in Canada, the Government commissioned a series of policy papers and Royal Commissions to look into measures that would support the creation of Canadian programming. A Government paper on communications policy recognized in 1973 that “technical and economical aspects of communications are intimately related with social and cultural implications”.¹⁶ As a result, the recommendation was made to bring telecommunications and broadcasting under one agency. In 1976, therefore, the CRTC assumed jurisdiction over telecommunications.

In 1978 and again in 1982, Royal Commissions¹⁷ recognized that the only way to protect Canadian cultural sovereignty was to encourage the production of more Canadian programming. While private broadcasters had had Canadian content quotas imposed on them requiring them to devote a fixed percentage of their daily broadcasting schedule to Canadian programs, and while these same broadcasters profited from the protection of Canada’s restrictions on foreign ownership of broadcasting undertakings, these policies did not bear fruit in encouraging the production of expensive programming, such as drama.

Accordingly, in 1983, the Government established the Canadian Broadcast Program Development Fund, which for the first time used public funds to subsidize the production of Canadian programming for sale to private broadcasters. This and other sources of funding of Canadian production has evolved over the years to the point where cable, DTH and new wireless cable distributors are required to contribute a small percentage of their revenues to support the funding of Canadian production. On the part of the CRTC, it took measures in 1989, updated in 1994, to require larger broadcasters to commit a percentage of their revenues to the production of Canadian programming. This requirement is in addition to the requirement that they devote a percentage of their schedules to Canadian programming.

In establishing the mechanisms for public and industry funding of production of Canadian programming, a policy decision was made to promote the independent production sector in Canada. This policy has been a success or a failure, depending on whom you speak to. However, this industry has over the years become a source of excellent programming which has found a place on the screens not only of Canadian television viewers but viewers around the world. In spite of these successes, the question of how best to promote the production of Canadian programming has nonetheless continued to bedevil the industry and the CRTC recently initiated a major policy review of the entire regulatory structure relating to this issue.¹⁸

¹⁶ Canada – Department of Communications, *Proposals for a Communication Policy; A Position Paper of the Government of Canada* (Ottawa: The Department of Communications, 1973) at 4.

¹⁷ Canada, *The Federal Cultural Policy Review Committee (Applebaum – Hébert Committee) Report* (Ottawa: Queen’s Printer, 1982) and Canada, *Consultative Committee on the Implications of Telecommunications for Canadian Sovereignty, Telecommunications and Canada (Clyne Committee) Report* (Ottawa: Ministry of Supply and Services Canada, 1979).

¹⁸ Public Notice CRTC 1998-44, *Canadian Television Policy Review*.

III. The Internet - Just Some Of Its Uses

By definition, any list or description of the Internet's uses is obsolete as soon as it is written. Uses change, consolidate and multiply every day. There are established uses such as e-mail, list-servers, Use-net discussion groups, Internet relay chat facilities and connections to and through bulletin boards and on-line services; and rapidly evolving uses such as the World Wide Web (the "Web") and Internet telephony. Some of these uses have analogies to existing broadcasting and telecommunications services, while others do not. Communications via e-mail, list-servers and Use-net groups, which generally consist of alphanumeric messages sent by a user to one or more other users, has a strong analogy in other technologies for electronic data transmission. Internet relay chat, interactive bulletin boards and on-line services, which permit users to discuss, through alphanumeric messages, certain topics with other like-minded or interested persons, or to search databases, do not have ready analogies in pre-existing information technologies. Internet phone technology threatens to present a direct substitute for long-distance voice communications.

The Web, which consists of an endlessly interconnected means of exchanging information in a variety of forms, including alphanumeric text, still images, and increasingly, sound and video, presents the greatest challenge in terms of characterization. This technology also increasingly offers a real alternative to the traditional off-air and cable delivery of programming services which are regulated by the CRTC pursuant to the *Broadcasting Act*.

C. Telecommunications

The *Telecommunications Act*¹⁹ clearly applies to the Internet. However, this legislation only applies directly to telecommunications common carriers, i.e., owners and operators of transmission facilities. While the *Telecommunications Act* has, up to this point in time, played a seemingly innocuous role in regulation of the Internet, the prospect of Internet telephony has serious implications for the system of subsidies which form an important part of the Canadian telecommunications regulatory landscape.

I. Application of the Telecommunications Act Generally

The relevant questions respecting the application of the *Telecommunications Act* to the Internet are, "to whom specifically" and "how".

In order to answer the question, "to whom specifically", one must begin with the language of the statute. The *Telecommunications Act* expressly states, in section 3, that it does not apply in respect of "broadcasting by a broadcasting undertaking". Happily, "broadcasting undertaking" is defined as having "the same meaning as in subsection 2(1) of the *Broadcasting Act*" which shall be considered more closely below. Accordingly, to the extent that the *Broadcasting Act* applies to broadcasting by a broadcasting undertaking, the *Telecommunications Act* does not apply to that activity.

¹⁹ S.C. 1993, c. 38 (hereinafter the *Telecommunications Act*).

The *Telecommunications Act* applies only to a Canadian carrier, i.e., a telecommunications common carrier that is subject to the legislative authority of the Parliament of Canada. In turn, “telecommunications common carrier” is defined as follows:

a person who owns or operates a transmission facility used by that person or another person to provide telecommunications services to the public for compensation.

“Transmission facility” is defined as excluding any exempt apparatus. The definition of “exempt apparatus” is as follows:

any apparatus whose functions are limited to one or more of the following

- (a) the switching of telecommunications*
- (b) the input, capture, storage, organization, modification, retrieval, output or other processing of intelligence, or*
- (c) control of the speed, code, protocol, content, format, routing or similar aspects of the transmission of intelligence.*

It is readily apparent that the facilities of many undertakings involved in the provision of Internet services will fall within the definition of “exempt apparatus”. For example, the facilities owned and operated by an Internet service provider (“ISP”) that offers access to the Internet over transmission facilities owned and operated by another person, i.e., a Canadian carrier, would fall within the definition of “exempt apparatus”. Accordingly this ISP will not be regulated directly by the CRTC. The same analysis would apply to an on-line service provider or bulletin board operator.

One is left with those persons who own or operate the transmission facilities which are used in order to provide access to the Internet. These include the telcos and the cable companies, the latter of which, although they are licensed pursuant to the *Broadcasting Act*, are nonetheless considered by the CRTC to be Canadian carriers in their carriage of non-broadcasting services.²⁰ Except for services in respect of which the CRTC has determined to forebear, Canadian carriers cannot provide a telecommunications service except in accordance with a tariff filed with and approved by the CRTC.²¹ As the definition of “telecommunications service” includes the provision of facilities, even if the Canadian carrier does not itself provide Internet service to the public, its provision of the transmission facilities over which Internet access is provided is caught by the regulatory requirements of the *Telecommunications Act*.

In addition to price regulation, an important aspect of telecommunications regulation is the prohibition against unjust discrimination. In this regard, subsection 27(2) of the *Telecommunications Act* provides:

²⁰ See Telecom Decision CRTC 1996-1.

²¹ *Telecommunications Act*, s. 25.

No Canadian carrier shall, in relation to the provision of a telecommunications service or the charging of a rate for it, unjustly discriminate or give an undue or unreasonable preference toward any person, including itself, or subject any person to an undue or unreasonable advantage.

The telcos in Canada are now actively involved not only in providing the telecommunications facilities over which others can provide Internet access to the public, but also in providing that access service to end users directly. As well the major Canadian cable companies have begun to offer high-speed Internet access. As the Internet has become increasingly commercialised, the stakes have risen and with them, competitive issues in the provision of Internet access and the facilities for that access. To date, the CRTC has taken the approach that the market for Internet Services is sufficiently competitive to permit it to forbear from regulating Internet Services (but not access) provided by Canadian carriers.²² The CRTC has also determined that the incumbent telcos should be permitted to market their services jointly with Internet services provided by their affiliates.²³

In its July 31, 1998 notice initiating a proceeding regarding the new media (the “New Media Proceeding”), the CRTC provided a broad working definition of “new media”, stating:

New media can be described as encompassing singly or in combination, and whether interactive or not, services and products that make use of video, audio, graphics and alphanumeric text; and involving, along with other, more traditional means of distribution, digital delivery over networks interconnected on a local or global scale. The Commission considers that this may be a useful working description for the purposes of this proceeding.

The Commission asked in this notice whether these services, which would include e-commerce and e-mail, to name but a couple, could be considered telecommunications services pursuant to the *Telecommunications Act*. The answer is quite clearly, “yes”.

Although the question of access by non-facilities-based ISPs to high-speed access facilities was discussed at the public hearing and in the submissions of these ISPs filed in the New Media Proceeding, it appears that the most pressing telecommunications regulatory problem for the CRTC with regard to the Internet is the applicability of the current toll contribution regime to the Internet, Internet telephony in particular.

Indeed, in the Commission’s notice, which is largely focused on issues relevant to its mandate over broadcasting, the Commission acknowledged the challenge the new media present for the existing subsidy system in Canada. It stated:

... access by Canadians to new media services... continues to be an important issue. ...the objectives of [the Commission’s] traditional approach have been to achieve universality in telecommunications. The Commission, however, is also aware that, as technology continues to evolve, and as traditional telecommunica-

²² Telecom Order CRTC 97-471 (8 April 1997).

²³ Telecom Decision CRTC 97-1, *Bell Canada and Bell Sygma Inc. – Joint Marketing of Sympatico Internet Services* (13 January 1997).

tions services are increasingly delivered using alternative distribution networks such as the Internet, the existing subsidy approach may come under increasing pressure.

II. The Challenge to Traditional Subsidies: Internet Telephony

The CRTC has yet to engage in a comprehensive review of telecommunications regulatory issues applicable to the Internet, let alone Internet telephony. However, the CRTC has considered the impact on Internet usage of toll contribution, one of the established features of Canada's telecommunications regulatory regime.

Toll contribution is the mechanism used by the CRTC to render local telephone service similarly affordable throughout Canada. As alluded to above, the introduction of facilities-based long-distance competition brought with it the prospect of an erosion in the implicit contribution that the telcos' long-distance services paid towards supporting below-cost local service. Rejecting the option of eliminating this subsidy by raising rates for local service to their cost, the CRTC chose instead to require resellers and facilities-based competitors to pay "contribution" on circuits interconnecting with the PSTN used to provide joint-use interexchange service in competition with the telcos. In this manner, the implicit subsidy lost through erosion of the telcos' market share would be made up for by the toll contribution paid by competitors.

In a decision released May 1, 1997,²⁴ the CRTC considered whether contribution should be payable with respect to a range of uses or services which were not previously liable for contribution. One of the major issues in the proceeding was the liability of line-side interexchange data traffic to pay contribution. The Commission decided that it should be liable. The telcos argued that because it is difficult to distinguish line-side local Internet traffic from interexchange traffic, all Internet traffic should be subject to contribution charges, unless the ISP can demonstrate that the traffic is not interexchange. This raised a great hue and cry from the Internet community, which argued that imposing toll contribution charges on Internet use would squelch the growth in this market. The CRTC shied away from applying contribution to Internet traffic per se, indicating that it did not have enough information in order to make a determination. In doing so, however, the CRTC left the door open for it to change its approach in the future. It stated:

The Commission notes that the parties provided limited evidence addressing the appropriateness of applying contribution charges to Internet services; for example, most parties did not address the argument that ISPs are customers of the IXCs as opposed to being resellers of leased facilities.

Further, the impact of Internet usage on the PSTN is rapidly evolving as a result of, among other things, the development of new technology, including separate networks, used to deliver a greater number of services over the Internet.

In the circumstances, the Commission is not persuaded that it is appropriate at this time to extend the application of the existing contribution scheme to Internet Services.

²⁴ Telecom Order CRTC 97-590, *Scope of IX Contribution Paying Services*.

The Commission considers, however, that given the rapid evolution of Internet services, the above determination may have to be revisited in the future.

The Commission notes that, where the Internet network is used as the underlying transmission facility by a service provider to provide public switched IX voice or data services, the service provider is to register as a reseller and to pay contribution.

A critical reading of this decision would suggest that the CRTC's approach to contribution can be boiled down to the statement that it should be paid on services which "look like", or compete directly with, traditional interexchange telecommunications services provided by the incumbent carriers. This begs the question of how Internet telephony fits into the picture.

Internet telephony is a term used to describe the transmission of voice by way of packet-switched data networks and the IP protocol, in other words, over the same network used for the transmission of information generally on the Internet. Originally, Internet telephony required two personal computers and some additional software and hardware in order to complete a call. However, it is now possible for one, or even both parties to be speaking on conventional telephones. This is achieved by connecting the call by way of the Public Switched Telephone Network (the "PSTN") to a gateway. The gateway in turn converts a call into a packet-switched form and sends it off. When the gateway receives a call for a local PSTN number it converts the packet-switched information into a circuit-switched form and makes use of the PSTN to complete the call. This use of conventional telephone terminal equipment and the PSTN to originate and terminate calls raises the prospect of Internet telephony competing with conventional telephone calls which travel entirely over circuit-switched networks.

The CRTC's decision of May 1, 1997 could be interpreted to exclude from toll contribution liability ISPs serving individuals with the necessary conversion equipment on their own premises. In a subsequent decision, Telecom Order CRTC 98-28, the CRTC considered an application by ShadowTel for an exemption from the requirement to pay toll contribution. ShadowTel is a gateway provider of the kind described above. The CRTC explicitly rejected ShadowTel's contention that the inferior quality of voice service provided by the gateway in comparison with other carriers should influence its deliberations, and held that ShadowTel was liable for toll contribution.

In an order issued September 17, 1998, the CRTC provided further clarification regarding the applicability of toll contribution to the Internet and Internet telephony.²⁵ It expressly adopted a distinction between "PC Voice" and "PSTN Voice". The CRTC defined PC Voice as voice communication via the Internet using a personal computer or other terminal equipment which is equipped with a modem, and the hardware and software required to perform voice compression and conversation to a form which can be transmitted to or from an ISP over Internet Access Lines, or (IALs). An IAL is an access service provided by a local exchange carrier to an ISP which allows calls to be originated from or terminated to the PSTN, or Public

²⁵ Telecom Order CRTC 98-929 (17 September 1998).

Switched Telephone Network. IALs typically connect to a “gateway” or server which provides the functionality to connect a caller to the Internet.

The CRTC defined PSTN as voice communication via the Internet to or from a telephone set or other equipment where the conversion for carriage on the Internet is performed at the service provider’s (i.e., the ISP’s) equipment. The CRTC pointed out that, unlike PC Voice, PSTN Voice can be accommodated using a normal telephone set, without requiring the user to be equipped with a modem or a computer with special hardware or software at the terminal location.

The CRTC held that all traffic carried on IALs carrying any PSTN Voice traffic is subject to contribution charges, while IALs carrying only PC Voice would not be liable. Significantly, the CRTC also held that IP Data, i.e., all other usage on the Internet, should be contribution exempt.

As parties making submissions to the CRTC have observed,²⁶ advancements in technology will quickly serve to make any regulatory regime that is based on distinctions in type of traffic, networks, or equipment impossible to enforce. For instance, it will not be possible to distinguish packet-switched traffic from other data or voice traffic. As well, any distinctions the CRTC does make will in all probability influence the development of Internet telephony in such a way as to avoid contribution payments.²⁷ As a consequence, any regulatory structure established by the CRTC, such as the one in Telecom Order 97-590, is not likely to be sustainable in the future.

One solution for the CRTC would be to remove the cross-subsidies which presently exist. This would serve to remove contribution avoidance as a motivation in the development of Internet telephony specifically and telecommunications generally. However, in Canada this is a politically charged issue, and the removal of contribution requirements would have to be followed by a subsidy targeted at those in high cost areas, as well as those with the lowest means. At present, there does not appear to be the political will to engage in such a transition.

So long as the CRTC maintains the current toll contribution regime as it applies to the Internet, a powerful incentive will exist to avoid that regime. The toll contribution regime in general is in any event inherently unstable, as it is based on certain network configurations and thus is not technologically neutral. The instability inherent in Canada’s toll contribution regime suggests that the future of Internet telephony is not assured.²⁸ It is currently expanding in a

²⁶ For a detailed consideration of the proceeding leading to the Commission’s September 17 Order, see, Intven, H., Zohar, M., & Howard J. “Internet Telephony – The Regulatory Issues” [Paper presented at New Developments in Communications Law and Policy: Towards the Millennium] (Canadian Bar Association – Ontario/Law Society of Upper Canada, 1998).

²⁷ The comments of Stentor and America on Line Canada are noted in *ibid.* at 26 & 28.

²⁸ Several interexchange competitors applied to the Commission in Fall 1998 to have the existing contribution collection mechanism, which is a usage-based charge applicable only to interexchange services, changed to a percentage of revenue charge spread over a larger base of services. In a letter dated December 21, 1998 the CRTC rejected this application as formulated but indicated that it would commence a proceeding to re-

regulated market where contribution is being paid by traditional carriers domestically and the international settlement mechanism imposes above-cost termination rates internationally. This is a recipe for arbitrage. Yet at the same time as prices for traditional telephony services continue to descend as a result of technological and economic changes as well as liberalization of trade in basic telecommunications, the price of Internet telephony may go up as a result of the requirement to make contribution payments, or as a consequence of investments necessary to improve sound quality.

It is yet too early to predict what will be packet-switching's place on the spectrum of information transmission services.²⁹ It is possible that within the near future - as the volume of Internet traffic increases generally - voice traffic will no longer be the principal item in the shopping cart of telecommunications services, but rather a low cost addition added to a bundle of other services,³⁰ including e-commerce applications and video on demand. Whatever the scenario, it is clear that the Internet is increasingly placing pressure on the existing Canadian regulatory paradigm to change. Hopefully, the CRTC will make the necessary changes to the regulatory system in order to avoid it being overtaken by technological and other developments sweeping the telecommunications industry.

D. Broadcasting

An analysis of the *Broadcasting Act*³¹ reveals what is theoretically a very broad jurisdiction for the CRTC over all analogies to broadcasting, including, arguably, those presented by certain uses of the Internet. However, a contextual analysis of the legislation and its purposes raises doubt as to whether the CRTC should use its powers under the *Broadcasting Act* to regulate these uses and if so, how. In addition to an analysis of the CRTC's jurisdiction and powers under the *Broadcasting Act*, an overview of the practical implications of regulation of the Internet also points to the challenges likely to be encountered by the CRTC in applying the *Broadcasting Act* to the Internet.

Pursuant to the *Broadcasting Act*, the CRTC is authorized to license and otherwise regulate everything from traditional broadcasters and cable systems to direct-to-home satellite distribution undertakings and satellite-delivered pay-per-view programming undertakings. In relation to these activities, the CRTC exercises its powers to achieve such diverse goals as promoting the Canadian production industry, ensuring diversity in content and high quality in the programming received by Canadians, controlling commercial activity over the broadcasting system, providing employment opportunities with broadcasting licensees to minority groups and ensuring access to distribution undertakings by programming services. Now that it is possible to listen to

examine the contribution collection mechanism in 1999.

²⁹ Cairncross, F. "A Connected World; The 1997 Survey of Telecommunications" *The Economist* (13 September 1997) at 26.

³⁰ *Ibid.*, at 27.

³¹ S.C. 1991, c. 11 (hereinafter the *Broadcasting Act*).

a radio station in “real time”, and increasingly possible to download full motion video over the Internet, the question which naturally arises is whether such activity is similarly regulable pursuant to the *Broadcasting Act*. The CRTC has asked this very question in its notice initiating the New Media Proceeding.

I. The Legal Analysis

The threshold legal issue is whether the CRTC has the jurisdiction to regulate the Internet under the *Broadcasting Act*. Section 32 of the *Broadcasting Act* makes it an offence for a person to carry on a “broadcasting undertaking” without either a licence or an exemption from the requirement to hold one. The definition of “broadcasting undertaking” under section 2 of the *Broadcasting Act* states that it includes: (a) distribution undertakings; (b) programming undertakings and (c) networks.³² “Distribution undertaking” is defined as follows:

“distribution undertaking” means an undertaking for the reception of broadcasting and the retransmission thereof by radio waves or other means of telecommunication to more than one permanent or temporary residence or dwelling unit or to another such undertaking.

“Programming undertaking” is defined as follows:

“programming undertaking” means an undertaking for the transmission of programs, either directly by radio waves or other means of telecommunication or indirectly through a distribution undertaking, for reception by the public by means of broadcasting apparatus.

A network is a derivative of a programming undertaking.

The definitions of “program” and “broadcasting” are essential to the determination of whether a person is carrying on a broadcasting undertaking and therefore requires a licence. “Program” is defined in the *Broadcasting Act* as follows:

“program” means sound or visual images, or a combination of sounds and visual images, that are intended to inform, enlighten or entertain, but does not include visual images, whether or not combined with sounds, that consist predominantly of alphanumeric text.

“Broadcasting” is defined as follows:

“broadcasting” means any transmission of programs, whether or not encrypted, by radio waves or other means of telecommunication for reception by the public by means of broadcasting receiving apparatus, but does not include any such transmission of programs that is made solely for performance or display in a public place.

As can be seen, the definition of “program” expressly excludes visual images “that consist predominantly of alphanumeric text”.³³ In the world of conventional broadcasting and cable,

³² The language of the definition, which is inclusive rather than exclusive, suggests that there may be broadcasting undertakings which do not fit within one of the three enumerated types of broadcasting undertakings.

³³ The CRTC has stated that “predominantly” ought to be interpreted in its ordinary sense, i.e., that which is more influential or more powerful. Thus a purely quantitative analysis, i.e., a determination of the amount of space occupied by the alphanumeric text on the video screen, would be inconclusive. For instance, in a service

this has excluded services such as those delivering the weather, stock market information and news which are presented in letters and numbers. In relation to the Internet, this definition serves to exclude from the purview of the *Broadcasting Act* a large range of communications, whether they consist of e-mail messages or text posted and exchanged through list-servers, Use-net discussion groups, Internet relay chat facilities, or through on-line service providers or via bulletin board services.³⁴

The availability via the Internet of certain full motion video and sound services clearly results in the definition of "program" under the *Broadcasting Act* being met.³⁵ Until recently, the combination of limited bandwidth and the speed of modems used by those with access to the Internet have made the downloading of audio and full-motion video tremendously slow. However, recent innovations in software have made the transmission of stereophonic sound in "real time" over the Internet using even traditional modems (i.e. 28.8 kbps modems) a reality.³⁶ As well, cable access to the Internet currently available in large urban centres in Canada has resulted in drastic improvements in this area.³⁷

In order to determine whether the communication of programs over the Internet constitutes "broadcasting", it is necessary to re-examine a phrase contained both in the definition of "programming undertaking" and in the definition of "broadcasting". In both cases, the activity is caught by the definition if it involves, "transmission ... by radio waves or other means of telecommunication for reception by the public ...". "Other means of telecommunication" is broadly defined as including "wire, cable, radio, optical or other electromagnetic system, or any similar technical system"³⁸, a definition which certainly would include the Internet. More problematic is the word "transmission" and the phrase "for reception by the public".

in which a moving image occupied only 25% of the screen, the visual image nonetheless predominated since the viewer's eyes were drawn to and were held by the moving image, and the service was deemed to be "broadcasting". See Scott, S.E. "What Is Broadcasting?" *Entertainment, Media and Communications Law: Issues '94* (Vancouver: Continuing Legal Education of British Columbia, 1994) 3.2.01 at 3.2.08.

³⁴ Regarding still images, the CRTC has exempted undertakings providing programming exclusively to distribution undertakings, which consists entirely of still images with or without alphanumeric text, and with or without an audio component. The audio component may consist of "spoken words that relate to what is represented by the still image". See Broadcasting Public Notice CRTC 1993-51, *Exemption Order Respecting Still Image Programming Service Undertakings* (30 April 1993), as corrected by Broadcasting Public Notice CRTC 1993-51-1 (14 January 1994).

³⁵ Whether the interactive services so pervasive on the World Wide Web constitute "programs" is much less clear.

³⁶ By downloading run-time decoder software, an Internet user can now listen to real-time radio broadcasts of several Canadian radio stations through their computer.

³⁷ Cable access is far faster than ISDN access offered by the telcos. For instance, ISDN provides Internet downloading and access at a rate of 128 kb per second, while cable access operates at approximately 500 kb per second but is theoretically capable of up to 10,000 kb per second.

³⁸ *Telecommunications Act*, s. 81.

The concept of transmission underlines one of the distinguishing features of the Internet. The concept of “transmission” over the Internet does indeed have a unique meaning. It is the person receiving the program who is active in retrieving the program, as opposed to the viewer of traditional broadcasting, who is essentially passive, so much so that the term “couch potato” is used in Canada to describe him or her. In our example it is the viewer through his or her computer who will not only select from among the films available, but will also actively instruct the host computer to download or start streaming the file in which it is contained. Although delivery of full motion video programs over the Web remains akin to a dog standing on its hind legs (“It is not done well, but one is surprised to find it done at all”),³⁹ it will be used as an example of an Internet service, in order to focus the discussion.

“Transmission” is not defined in the *Broadcasting Act*. Transmission is defined in the Shorter Oxford English Dictionary as follows: “The action of transmitting or fact of being transmitted; conveyance from one person or place to another; transference. b. Physics. Conveyance or passage through a medium, as of light, heat, sound, etc...”.⁴⁰ In a criminal case involving theft of telecommunications⁴¹, the Supreme Court of Canada held essentially that the transference of electromagnetic impulses from the central processing unit of a computer to a terminal did not constitute a transmission because it was internal to the computer and did not achieve a transference from one person or location to another. Although not directly on point, and antique in computer terms, this case is of assistance in two respects. First, it can be argued based on this decision that a court will apply a functional definition of transmission, rather than a definition focussing on the laws of physics. Second, a court will in all likelihood not accept that the mere “uploading” of a program onto the server of the same computer constitutes a transmission.

Based on the foregoing, although there are distinct differences in the way that a transmission would occur over the Internet as compared with a transmission using hertzian waves, the courts are likely to use a functional definition of transmission which focuses on the transference of information or the act of communication. Accordingly, when a person “posts” a computer file containing a video or audio program onto its web site, which is retrieved by others connected to the Internet, there is a transmission of a program. As will be seen further on, a more difficult task is trying to analogize to the different types of broadcasting undertakings envisaged by the *Broadcasting Act*.

The most difficult part of the legal analysis is to determine whether the “posting” of a video or audio program to a web site and its retrieval constitutes a transmission “for reception by the public”. The principal concern in this regard would appear to be with the issue of point-to-point non-simultaneous transmission to members of the public. Because the Internet is fully interactive and completely addressable, it is distinguishable from the classic broadcasting para-

³⁹ Ebert, Roger. “Movies on the Net are still not ready for prime time.” *Yahoo! Internet Life* (22 May 1998).

⁴⁰ 3d ed. (Oxford, Clarendon Press, 1973) at 2348.

⁴¹ *R. v. McLaughlin*, [1980] 2 S.C.R. 331.

digm in which there is one transmission which is being passively received by many members of the public all at one time. Rather, in the case of the Internet, there may be an infinite number of "receptions" each occurring at times separated by time intervals so small as to be virtually indistinguishable. The question is therefore raised whether there is a transmission for reception by the public where each conveyance from the host computer of the web site to the viewer's computer is meant for only one user.

Much has been written in Canada on the meaning of the phrase "for reception by the public" and the application of the definition of broadcasting to such diverse technologies as video-on-demand ("VOD") and video games.⁴² The CRTC has in fact chosen to assume jurisdiction over both of these applications. In the case of VOD, the CRTC initially exempted this service from the requirement to hold a licence but subsequently issued licences. In the case of video games, this service is currently exempt from the requirement to hold a licence.⁴³ By holding that these services fall within the definition of "broadcasting" but exempting them from the requirement to hold licences⁴⁴, the CRTC found an easy way out of a difficult situation. It avoided an immediate confrontation with the provider of the service by exempting it from the requirement to hold a licence, while at the same time avoiding making an overt decision that it is not given the jurisdiction to regulate such a service by the *Broadcasting Act*.

It is against this background that one must consider whether the type of transmission occurring over the Internet is a "transmission ... for reception by the public." Canadian Courts have interpreted the word "public" in a number of different contexts, all of which point to the acceptance of a meaning of "public" which includes "a portion of the public".⁴⁵ This arguably is of assistance in answering the question of whether it is sufficient for a subset of the general public to receive a transmission, but does not satisfactorily answer the question whether a transmission intended for reception by only one computer constitutes broadcasting.

The legislative history of the definition of "broadcasting" contained in the *Broadcasting Act*, which was amended from previous legislation, is of some help in this regard. This legislative history has been fully discussed elsewhere.⁴⁶ It will be sufficient for our purposes to note that before the *Broadcasting Act* was enacted, a predecessor bill, Bill C-136, contained an exclusion from the definition of "broadcasting" for "any such transmission of programs ... made on the

⁴² I am obliged to the following two papers: Scott, *supra* note 30; Intven, H. "Traffic Rules on Canada's Information Highways: The Regulatory Framework for New Cable and Telephone Services" (1993-1995) 4 M.C.L.R. 131.

⁴³ Broadcasting Public Notice CRTC 1994-34, *Call for Comments – Proposed Exemption Order Respecting Video Games Programming Service Undertakings* (23 March 1994).

⁴⁴ The exemption process pursuant to subsection 9(4) of the *Broadcasting Act* is discussed in greater detail below.

⁴⁵ See *e.g.* *R. v. McKillop* (1971), 4 C.C.C. (2d) 390 (Ont. Prov. Ct.); *Jennings v. Stephens*, [1936] 1 Ch. 469 (C.A.); *R. v. Continental Cablevision Inc. et al.* (1974), 5 O.R. (2d) 523 (Ont. Prov. Ct.), *aff'd (sub nom. R. v. Maahs and Teleprompter Cable Communications Corp.)* (1975), 6 O.R. (2d) 774 (Ont. Dist. Ct.) [hereinafter *Continental Cablevision*].

⁴⁶ See Scott, *supra* note 30; Intven, *supra* note 38.

demand of a particular person for reception only by that person.” Apparently, that exclusion was dropped from the *Broadcasting Act* so that it would apply to pay-per-view television.⁴⁷ This history, which would be available to a court reviewing the CRTC’s exercise of jurisdiction, would appear to support an interpretation that Parliament contemplated the inclusion in the definition of “broadcasting” of the transmission of a program intended for reception by just one person. On the other hand, it might be argued that Parliament could not have contemplated transmission of programs via the Internet given the uses of the Internet at the time, when the Internet was being used solely by governments, the military and academia. However, there is evidence that the Government’s intention in defining broadcasting broadly under the *Broadcasting Act* was to secure a technology-neutral, content-based definition of broadcasting.⁴⁸ This would indeed support an argument that Parliament’s intention was to cast the *Broadcasting Act*’s net wide enough to capture the transmission of programs over the Internet.

Assuming that the delivery of video by way of the Internet in our example is correctly interpreted as being broadcasting, the more difficult question is whether in fact there are persons carrying on a “broadcasting undertaking”. This is where the “square pegs” of the Internet may not fit into the “round holes” of the *Broadcasting Act*. The CRTC is acutely aware of this difficulty. In its notice initiating the New Media Proceeding, the Commission states:

... the Commission is aware that the approaches that have proven successful in the past with respect to the distribution of the programming services of conventional broadcasting undertakings may be inappropriate for the distribution of new media services to Canadians...

As set out above, central to the regulatory scheme under the *Broadcasting Act* is the requirement, in section 32, for the licensing of a person carrying on a broadcasting undertaking. A “programming undertaking” is in turn defined as an “undertaking for the transmission of programs ... for reception by the public”. Who then in our example would carry on a programming undertaking? It would appear that every person owning or operating a host computer on which is stored computer programs which are capable of transmission to members of the public might arguably constitute a programming undertaking. A contrary argument could be made that the “supplying” host computer does not, in and of itself, proactively “transmit” and, therefore, is not an undertaking for transmission. It is submitted that this latter interpretation is too narrow. Although the host computer does not transmit without direction from the receiving computer, the phrase “undertaking for transmission” is broad enough to encompass the originating point, and source of the content, of a transmission.

Whether or not an ISP in our example is a “distribution undertaking” depends on whether it can be said to be an undertaking “for the reception of broadcasting and the retransmission thereof ... to more than one permanent or temporary residence ... or to another such undertaking”. One of the major issues to be grappled with by the Commission in the New Me-

⁴⁷ Grant, P.S. *1994-95 Canadian Broadcast and Cable Regulatory Handbook* (Ottawa: McCarthy Tétrault, 1994) at 14.

⁴⁸ See Scott, *supra* note 30; *Government Response to the Fifteenth Report of the Standing Committee on Communications and Culture* (June 1988).

dia Proceeding, is whether an ISP can be said to be a broadcasting undertaking at all, because of its lack of control over content and the fact that its primary function is not in relation to broadcasting.

As can be seen, the result of holding a transmission of a program over the Internet to be "broadcasting" is that one is led to apply the *Broadcasting Act* to a communications environment that is significantly different from that currently regulated by the CRTC.

The position of cable systems and telcos providing Internet access must also be considered. Fortunately, a regulatory precedent exists for this issue. In the case of the carriage of Internet service by telcos, this is a service which is analogous to video dial tone. The CRTC has determined that in carrying video dial tone, the telcos would have no role in controlling content and hence would be acting merely in their common carrier capacity under the *Telecommunications Act*.⁴⁹

II. The Policy Analysis

If the service provided falls within the definition of broadcasting, should the CRTC regulate it? The "should" question is almost entirely one of policy.

Subsection 9(4) of the *Broadcasting Act*, referred to above, provides for the CRTC's exemption of persons carrying on broadcasting undertakings in the following language:

The CRTC shall, by order, on such terms and conditions as it deems appropriate, exempt persons who carry on broadcasting undertakings of any class specified in the order from any or all of the requirements of this Part or of a regulation made under this Part where the CRTC is satisfied that compliance with those requirements will not contribute in a material manner to the implementation of the broadcasting policy set out in subsection 3(1).

Although couched in mandatory language, this provision grants the CRTC an obviously broad discretion to exempt a class of broadcasting undertakings effectively from all of the regulatory requirements pursuant to the *Broadcasting Act*, including the requirement to hold a licence.

Subsection 9(4) links the determination of whether or not to exempt a class of undertakings directly to the broadcasting policy elaborated on in subsection 3(1) of the *Broadcasting Act* ("the Policy"). The Policy is set out in great detail and is in some respects repetitive. The "key preoccupations" reflected in the Policy can be summarized as follows:

... the central focus of the legislation is to promote a broadcasting system which safeguards, enriches and strengthens the cultural, social and economic fabric of Canada, essentially by providing a broad mix of Canadian programs aimed at informing, enlightening and entertaining all Canadians.⁵⁰

⁴⁹ Telecom Decision 1994-19, *Review of the Regulatory Framework* (16 September 1994).

⁵⁰ Scott, *supra* note 30 at 3.2.19.

In its response to a 1995 request by the Government of Canada for it to report on the “information highway”, the CRTC emphasized the continued importance and centrality of ensuring Canadian content:⁵¹

[The Broadcasting Act] is an expression of the will of Parliament studied, debated and passed just over four years ago. This legislation anticipated both the extraordinary pace of technological change and an explosion of broadcasting services in a competitive environment. Nevertheless, the framers of that legislation held to the primary importance of maintaining a Canadian system that offers Canadians programming of high standard and one that, in its totality, reinforces the sovereignty of their country and their own cultural identity.

While Canadians clearly and justifiably want to choose from the widest possible ranges of services offered by the information highway, they do not want to lose their Canadian choices. In the marketplace of ideas, Canadians wish to be more than consumers; they wish to be participants in a system that reflects their lives and values.

... The challenge is to manage the transition to the new environment in such a way as not to lose the central values on which our system has been built.

Curiously, this report of the CRTC did not grapple with the reality that the Internet was a de facto information highway⁵².

In the notice initiating the New Media Proceeding, the Commission has once again reconfirmed the centrality of the promotion of Canadian production to its mandate pursuant to the *Broadcasting Act*:

A fundamental objective of the Broadcasting Act is to ensure the availability of high quality and diverse Canadian programming that maximizes use of Canadian creative and other resources in a manner that supports Canadian sovereignty and Canada's cultural identity. The substantial growth and development of new media, and their delivery over both global and domestic networks, have not altered this fundamental objective, which has challenged and preoccupied Canadians for much of the 20th century.

Taking this concern for Canadian content as being central to the Policy, what would the effect be of exempting programming undertakings transmitting only over the Internet⁵³ from the licensing and other regulatory requirements of the *Broadcasting Act*? One argument is that the root of the regulation of broadcasting is the concern over limited spectrum. Indeed, the notion that the airwaves are public is still mentioned in the Policy, notwithstanding the myriad other means of transmission available. An argument can therefore be made that, at its core, the

⁵¹ Canadian Radio-television & Telecommunications Commission, *Competition and Culture on Canada's Information Highway: Managing the Realities of Transition* (Ottawa: Public Works and Government Services Canada, 1995) at 27-29 [hereinafter *Competition and Culture on Canada's Information Highway*].

⁵² It is interesting to note that to many people - mainly those not involved in Canada's traditional broadcasting and telecommunications industries - the information highway is synonymous with the Internet.

⁵³ It is interesting that broadcasters are making precisely the same service available over the Internet as over the airwaves, although new, more interactive music services are also available over the Web.

concern over Canadian content is over access, i.e., if minimum requirements were not enforced, Canadian programs, which are expensive to produce, would be crowded out by foreign (i.e., U.S.) product, which is in great demand and even greater - and therefore relatively inexpensive - supply.

The Internet applications discussed in our example would arguably not be a threat to the rationale underlying the Policy. The Internet offers, by definition, as diffuse a source of programming as can be imagined, without any limitation in terms of the capacity to make programs accessible. Indeed, the distinguishing feature of the Internet as a vehicle for broadcasting is the low cost involved in transmission. It is true that it would require a considerable investment in servers and other computer facilities in order for a single web site operator to make a wide variety of programs available to many persons on a true "on demand" basis. However, for an individual to make limited appeal programs available for transmission to others would require a negligible investment. Thus, even without regulation, it can be argued that the Internet will make Canadian programs more accessible to those Canadians connected to the Internet. In this sense, the transmission of programs over the Internet is more analogous to the sale of printed material or rental of video cassettes than to traditional broadcasting.

In addition to the concern over foreign programming "crowding out" access to Canadian programming, there admittedly is a concern over the amount of quality Canadian production which takes place. In fact, as Canada's leading communications law scholar points out, even within the context of the CRTC's regulation of Canadian content, there has been a shift from regulation which dictates the percentage of programming shown which is Canadian towards a system of imposing commitments on elements of the broadcasting system to fund Canadian production.⁵⁴ Thus it might be argued that if those transmitting programs over the Internet are not regulated to at least contribute to those funds, there will exist an intolerable inequity between those being regulated and those not subject to regulation. Ultimately, it would be argued, the cost associated with complying with regulatory requirements will lead regulated undertakings to change their mode of operation to one which is not regulated and the benefits of the regulation, i.e., funding for Canadian production, will disappear. However, this conclusion would appear to be premature with respect to the Internet. Although growing exponentially, the penetration rate in 1997 of households in Canada with Internet access was 13%,⁵⁵ while the penetration rate for cable television service in Canada is above 80% . It appears, therefore, that an argument can be made that an uneven application of the *Broadcasting Act* to traditional broadcasting undertakings and undertakings transmitting programs over the Internet would not defeat the goals of the Policy at this time. It should also be borne in mind that the criterion for exemption specified by subsection 9(4) is that "compliance with those requirements will not contribute in a material manner to the implementation of the broadcasting policy..." (emphasis added).

⁵⁴ Janisch, H.N. "Aid for Sisyphus: Incentives and Canadian Content Regulation in Broadcasting" (1993) 31 Alta. L. Rev. 575.

⁵⁵ "New Consumers, New Technologies and New Media: An Opportunity for Canada, A Discussion Paper by Stentor Resource Centre Inc." [available at www.Stentor.ca/corporate_papers] (March 1998).

When considering whether to exempt undertakings which only transmit programs over the Internet, the CRTC arguably should take two additional factors into account. One is the potential inefficacy of attempts to regulate. The starting point for the analysis of whether a person is subject to regulation under the *Broadcasting Act* is whether that person "carries on a broadcasting undertaking". Subsection 4(2) of the *Broadcasting Act* provides in part: "This Act applies in respect of broadcasting undertakings carried on in whole or in part within Canada ...". This has meant that undertakings such as cable systems of which an integral part is located outside of Canada, i.e., on U.S. soil, are subject to the *Broadcasting Act*.⁵⁶ However, a web site located in the U.S. or anywhere in the world would be beyond the CRTC's control in the same way that an over the air transmitter located near the Canada/U.S. border is beyond the CRTC's control.⁵⁷ Without the presence of some part of the undertaking on Canadian soil, it will not be possible to enforce any regulation of such a programming undertaking. In turn, the ability to simply move web sites outside of Canada in order to avoid regulation would become too attractive in the event that the CRTC were to determine to regulate such undertakings. The CRTC's notice initiating the New Media Proceeding recognizes this concern, as well, stating, "approaches that have proven successful in the past... may be... inappropriate in an age of worldwide networks and the global delivery of services."

Lessons learned from the regulation of traditional broadcasting media in Canada should also be taken into account when assessing whether to regulate the Internet and if so, how. This history teaches that the best method of ensuring that Canadians have the opportunity to see and hear Canadian stories is not to restrict foreign programming, but rather to foster production and promotion of indigenous product. In this regard, many participants in the New Media Proceeding pointed to the success of Canada's new media industry, a success achieved with the help of a global marketplace and in the absence of regulatory intervention. In addition, the presence of a number of Websites aggregating Canadian content has been noticed. Indeed, the fact that the vast majority of Internet services, are informational rather than entertainment-oriented appears to be driving Canadians' demand for uniquely Canadian new media services.

The recent Final Report of the Information Highway Advisory Council,⁵⁸ established by the Government of Canada, recommends measures to strengthen the Canadian presence on the Internet:

While the Internet currently provides Canadians with a wide range of opportunities to share their cultural values using the Information Highway, governments and the private sector should work together to take maximum advantage of these capabilities as a means of strengthening Canada's linguistic and cultural reality by ensuring that:

⁵⁶ See generally *Continental Cablevision*, *supra* note 42.

⁵⁷ "The interpretive rules respecting the territorial application of legislation are based on the international law doctrine of territorial sovereignty. Under this doctrine, each state exercises exclusive jurisdiction over its own territory." Ed. R. Sullivan *Driedger on the Construction of Statutes*, 3d ed. (Toronto: Butterworths, 1994) at 333.

⁵⁸ Information Highway Advisory Council, *Preparing Canada for a Digital World (Final Report of the Information Highway Advisory Council)* (9 September 1997).

- a. *the appropriate environment and incentives exist to encourage Canadian content providers to maximize their opportunities to employ the Internet for the delivery of content-intensive products and services; and*
- b. *the Internet's protocols, search engines and navigational tools, as well as its governing standards, permit open access and use for all forms of cultural expression.*

These recommendations dovetail with recommendations elsewhere in the report calling for the establishment of a Canadian multimedia fund to support, "the development, production, distribution and marketing of Canadian cultural and educational multimedia products that foster a knowledge and understanding of Canada and create a greater understanding of Canada's cultural identity". The proposal is that this fund be given of at least \$50 million annually by the Government. Elsewhere in its report, the council recommends that the Government, "take the necessary measures to ensure that in new media, as in established media, Canadian advertising supports Canadian media content." However, the report acknowledges that global on-line networks such as the Internet, "raise questions how to achieve this goal."

At the root of the problem with regulating the transmission of programs over the Internet is the fact that the definition of broadcasting contained in the *Broadcasting Act* is overly broad when applied to the Internet environment, which emphasizes interactivity and choice over unidirectional, mass communication. In its report to the Government regarding the information highway, the CRTC recommended that the *Broadcasting Act* be amended,

... perhaps by way of suitable changes to the definition of "program", so as to exclude, in addition to predominantly alphanumeric text, other services that, while they likely fall within the definition of broadcasting, will not foreseeably contribute materially to the achievement of the Broadcasting Act's objectives.

These might include such services as: interactive courses offered by accredited institutions or used by medical institutions, online commercial multimedia services, and educational multimedia materials directed to schools.⁵⁹

It is unclear what the CRTC meant precisely by "online commercial multimedia services", although it will have an opportunity to clear this up in the New Media Proceeding. However, an amendment along the lines suggested by the CRTC would recognize the unique character of the overwhelming majority of services provided over the Internet and represent a step in the right direction to address the overly broad nature of the definition of broadcasting contained in the legislation.

E. Conclusion

To the limited extent that the Internet has interacted with telecommunications and broadcasting regulation in Canada, the discussion has centred around fitting it into traditional categories of telecommunications and broadcasting services. This process is encouraged by two intersecting, but quite separate regulatory regimes governing broadcasting and telecommunications.

⁵⁹ *Competition and Culture on Canada's Information Highway, supra* note 50 at 30.

Ultimately, it cannot be denied that there is a certain tension between the policy objectives underlying the *Telecommunications Act*, which are concerns of infrastructure development, connectivity and economic benefits, with those under the *Broadcasting Act*, which are more focused on content and cultural objectives. One of the great challenges for the Commission and all parties to the New Media Proceeding will be the balancing of these objectives in a way that serves the cultural objectives underlying the *Broadcasting Act* while treating the Internet as an engine for the development and deployment of an exciting and useful range of new technologies and applications.