# SSi Micro Ltd.

## Submission to the Broadcasting and Telecommunications Legislative Review Panel

## In response to "The New Environment: Call for Comments"

***CONNECTING CANADIANS TO A WORLD OF POSSIBILITIES***

**January 11, 2019**

**Executive Summary**

ES1. SSi Micro Ltd., a company specializing in remote-area connectivity, is pleased to provide this written submission to the Broadcasting and Telecommunications Legislation Review Panel.

ES2. We are committed to reducing barriers for those living in the North and other remote and rural areas to access advanced telecommunications networks and the global connections these make available. In the context of Canada's communications legislation, we are:

- A *facilities-based telecommunications common carrier*, Canadian-owned and operated, and subject to regulation by the CRTC pursuant to the *Telecommunications Act*;

- A local competitor – a *wireless competitive local exchange carrier* ("CLEC") – that interconnects with the incumbent local exchange carrier ("ILEC") in the North;

- A *spectrum licensee,* delivering wireless communications subject to ISED's licensing regime under the *Radiocommunication Act*;

- A *provider of broadband service*, and thus an internet service provider;

- And *an over-the-top provider of local content* in Northern communities.

In addition, we have expressed to the Commission our interest in working with local Inuit organizations and First Nations in the North to establish new radio services.

ES3. In view of our shared goals of improving all Canadians' access to communications technologies and our experience with all of the legislation that is the subject of the Panel's review, we make the following recommendations, clustered within three areas for improvement.

ES4. First area for improvement: **strengthen** the *Telecommunications* and *Radiocommunication Acts* to reinforce principles of **competitive and technological neutrality**

> ***Recommendation 1.1:*** *Establish reasonable and non-discriminatory interconnection between networks as a basic requirement for operating facilities that are used to offer telecommunications services to the public in Canada.*
>
> ***Recommendation 1.2:*** *Introduce to the* Radiocommunication Act *the presumption that licensees must enable open access and interconnection.*

> ***Recommendation 1.3:*** *Endorse the 2006 Policy Directive to the Commission as the baseline for regulation where competition exists, but retain forbearance powers so that the CRTC can examine on a case-by-case basis markets that are becoming competitive.*

ES5. Second area for improvement: implement more effective separation of the policy-setting and policy-implementation functions across all three Acts with a view to **improving** their **enforceability.**

> ***Recommendation 2.1:*** *Ensure that Ministerial and Cabinet discretion applies only to policy-making functions under all three of the* Telecommunications Act, Radiocommunication Act, *and* Broadcasting Act.

> ***Recommendation 2.2:*** *Ensure that all policy implementation functions are subject to effective enforcement mechanisms, such as transparent internal review and judicial review.*

> ***Recommendation 2.3:*** *Ensure that the implementing agencies (such as the CRTC) are properly resourced to carry out all of their policy implementation functions.*

ES6. Third area for improvement: **scale** the regulatory obligations established by all three Acts so that **obligations** are **proportionate to the scarcity** of the resources that are used or controlled by the regulated entity.

> ***Recommendation 3.1:*** *Eliminate licensing regimes other than for use of radio spectrum.*

> ***Recommendation 3.2:*** *Facilitate and expedite the use of radio spectrum, for minimal fees, in areas where there is less congestion, particularly in Canada's North and more remote areas.*

> ***Recommendation 3.3:*** *When developing support mechanisms for Canadian content, consider both the degree to which contributors benefit from making content available and the nature of the contribution each is best suited to making.*

## Introduction

1. SSi Micro Ltd. ("SSi") appreciates the opportunity to answer "Responding to the New Environment: A Call for Comments" (the "Call"), issued by the Broadcasting and Telecommunications Legislation Review Panel (the "Panel") on September 24, 2018.

2. We are pleased to be able to contribute to the Panel's review of the suite of legislation that governs Canada's telecommunications and broadcasting sectors. We note the objective of this review is to ensure that "Canada has effective legislative and regulatory tools in place to support increased innovation, competition, diversity and choice" in a period of continuous change in the economic, cultural and technological approaches with which we, as Canadians, approach the global phenomenon that is the digital revolution.

3. SSi is a Northern company, specializing in remote-area connectivity. We provide broadband, mobile and other communications services across Canada's North. We are committed to reducing barriers to access by Northerners to advanced telecommunications networks and the global connections they make available to individuals, businesses and governments.

4. We also have first-hand experience of many of the facets of regulation that the current suite of communications legislation sets in place. We are a Canadian carrier pursuant to the *Telecommunications Act*, a spectrum licensee pursuant to the *Radiocommunication Act*, and an over-the-top provider of local content produced in Nunavut, with the intent to become an FM radio licensee pursuant to the *Broadcasting Act.*

5. The digital revolution is not new. The change that digitization brings about has been a constant feature of the past twenty-five or so years during which Canadians have relied on the rules and the administrative agencies enabled and directed by the existing *Telecommunications Act, Radiocommunication Act,* and *Broadcasting Act* to guide our interaction with digital technologies and the rapidly growing range of services they make available.

6. During that time, Canada's regulatory bodies have introduced and developed a set of flexible principles that have generally served Canadians well as guidelines for the public and private sector service providers that connect our people to the world of possibilities the digital revolution has brought about. Working within the existing legislative framework and guided by principles of competitive and technological neutrality, the Canadian Radio-television and Telecommunications Commission ("CRTC") and both the policy-making and

spectrum-regulating functions of Innovation, Science and Economic Development Canada ("ISED") have overseen the development of a communications sector that for the most part achieves the goals expressed in the Panel's Terms of Reference:

> *A world-class communications sector should enable Canadians to connect with each other and the world, be competitive, be innovative, contribute to economic growth, and provide reliable services at affordable rates to Canadians across the country.*

7. However, the benefits of Canada's existing communications networks are not distributed evenly or fairly. Too many Canadians, especially in Canada's North, remain on the wrong side of a digital divide – and that is unacceptable in a wealthy country priding itself on a legal system that values fairness, and an economic system that emphasizes equality of opportunity. Northerners face significant barriers of quality, availability and affordability in their efforts to access telecommunications resources that southern Canadians take for granted.

8. Northerners, regulators and legislators also hear the incumbent phone company making frankly outrageous calls to return to a past monopoly model, including claims that measures to enable competition from private firms actually discourage private investment.[1] Yet we know from our experience in the North that here, as in southern Canada, a monopoly is good only for the monopolist. For consumers, monopoly comes with a cost: poorer service, a lack of innovation, limited choice and, ultimately, higher prices. To serve all of Canada's people, wherever they live, we must instead harness the creativity and investments of a fully competitive market – even where that competition is best enabled by facilitating cooperation in the creation and operation of shared gateways and open access to scarce backbone facilities.

---

[1] On November 5, 2018, Northwestel Inc. recommended to the Parliamentary Committee on Indigenous and Northern Affairs that "the Government should look to abandon any obligation for subsidy recipients in Canada's North to offer wholesale access."

The reasoning offered for this denial of competition was:

"This challenging business case [for telecommunications in the North] is made significantly more adverse by structural mechanisms that drive market conditions. Examples are the requirements to provide wholesale access. Unlike most southern jurisdictions, there are simply not enough customers and not enough revenue from local services in these smallest communities to support one service provider, let alone two or more in communities that are forced into competition for facilities access that directly impacts future private sector investment."

From: https://openparliament.ca/committees/aboriginal-affairs/42-1/127/johannes-lampe-1/?page=4

9. Our recommendations to the Panel are designed primarily to improve how Canada's communications system reaches and serves the people who live in remote areas. We urge the Panel to recognize that in order to reduce barriers to access by all Canadians to advanced telecommunications networks – and to the applications and programming they enable – we will still need to rely on the principles and the instruments that have extended these networks across much of southern and urban Canada. We cannot simply assume that Canada has achieved robust, sustainable competition in communications, and therefore strip telecommunications regulators of the tools they have used over the past quarter century to promote and protect competition. The legislative framework can and should be strengthened to guard against re-monopolization of the networks that deliver increasingly vital connections to people, businesses and governments throughout the country.

10. Our recommendations are clustered around three main areas for improvement:

    - **First**, **strengthening** the *Telecommunications* and *Radiocommunication Acts* to reinforce principles of **competitive and technological neutrality**;

    - **Second**, implementing more effective separation of the policy-setting and policy-implementation functions across all three Acts with a view to **improving** their **enforceability**; and

    - **Third**, **scaling** the regulatory obligations established by all three Acts so that **obligations** are **proportionate to the scarcity** of the resources that are used or controlled by the regulated entity.

11. In preparing these recommendations, we have attempted to be as specific and thorough as possible. To facilitate this, we must first explain some of the ways in which the challenges of serving Canada's remote and Northern regions differ from the situation in the South. These differences do not necessitate a departure from the principles that have served Canada's communications sector over the past quarter-century; but they must be taken into account as we revise the legislation so that all Canadians can benefit from anticipated technological changes as the digital revolution continues to work its way through our economy and our society.

***SSi provides innovative, competitive telecommunications services to Northerners***

12. SSi was founded and is headquartered in the Northwest Territories. We specialize in improving remote-area connectivity across Canada's North and beyond. Our experience

reinforces our conviction that engaging, enabling and mobilizing the talents of Northerners as citizens, consumers, and entrepreneurs, is the cornerstone of sustainable development across the region. The very local connections that we create connect the people of the North to a world of possibilities – to the global information economy that will allow them to research, discuss, and bring about solutions to the challenges they face, living in remote and often difficult environments.

13. SSi was launched in 1990 by Jeff and Stef Philipp. We are deeply rooted in Canada's North: Our name reflects the company's origins in the Snowshoe Inn, which Jeff's parents founded more than fifty years ago in Fort Providence, Northwest Territories.

14. We provide broadband, mobile and other communications services across Canada's North, and are expanding into other markets. We have also carried out projects in remote and rural areas in Africa, the South Pacific and South-East Asia.

15. Telecommunications is not our only passion: Our new energy division – SSiE – is developing new and innovative clean energy solutions for the same remote and rural areas that we connect through our telecommunications infrastructure.

16. In the context of Canada's communications legislation, we are:

    - A *facilities-based telecommunications common carrier*, Canadian-owned and operated, and subject to regulation by the CRTC pursuant to the *Telecommunications Act*;

    - A local competitor – a *wireless competitive local exchange carrier* ("CLEC") – that interconnects with the incumbent local exchange carrier ("ILEC") in the North;

    - A *spectrum licensee,* delivering wireless communications subject to ISED's licensing regime under the *Radiocommunication Act*;

    - A *provider of broadband service*, and thus an internet service provider;

    - And *an over-the-top provider of local content* in certain communities in Nunavut.

17. In addition, we have expressed to the Commission our interest in working with local Inuit organizations and First Nations in the North to establish new radio services.

18. In 2005, SSi built and launched the QINIQ network to provide affordable broadband service to all 25 communities in Nunavut. Investments by the Federal Government covered part of the initial costs of satellite transport and infrastructure.

19. Since then, we have co-invested with Canada over $150 million into Nunavut infrastructure alone, and we have paid over $10 million to our community service providers, local agents who are key to our success in all of Nunavut's twenty-five communities.

20. QINIQ improved the lives of Nunavummiut by providing access to cost-effective broadband connectivity, offering every Nunavut community access to affordable broadband on the same terms and conditions. Before 2005, most people in Nunavut had no access at all to broadband infrastructure. Even today, we are still the only broadband provider to serve all 25 communities in the Territory.

21. And, in 2018, using the latest 4G LTE technologies, we became the first company to launch mobile voice and data services in all twenty-five Nunavut communities. Prior to the arrival of SSi Mobile, the vast majority of these communities had never had access to cell service.

22. Our new 4G LTE system enables services such as high-performance broadband, mobile voice and data, telemetry applications, video conferencing, and more. We are also offering, for the first time ever, a less expensive and more versatile alternative to the old wireline phone – one that eliminates long distance charges in Nunavut to bring families closer together.

***Funding telecommunications networks in Canada's North***

23. In our experience of introducing advanced telecommunications networks to Canada's most remote Northern regions, we have sought wherever possible to work with and through local communities. This lets us develop and refine products and packages that suit the real needs of the people we serve, while involving local people to the greatest extent possible to sell, install and repair our facilities. It is true that most of these locations meet the CRTC's criteria for high-cost serving areas: vast distances to cover, sparse population, and the challenging physical environment that constrains both the construction, maintenance and operation of telecommunications facilities and, in some cases, even the choice of technologies all increase the cost of serving these people.

24. But serving the North properly requires flexibility on the revenue side, as well. This begins with a business model that recognizes that the vast majority of the people we serve are Indigenous. While there is certainly poverty, overcrowding, and cultural dislocation within

many of the populations we serve, the cultural and material resources of specific Indigenous communities, notably the Inuit and certain First Nations, offer opportunities to design services to meet community preferences such as seasonal mobility, and to leverage community resources in order to build the facilities to support those services.

25. Funding network construction and operation so that we can offer rates that are affordable and attractive to the populations we serve often requires public funding as well as our own investment. Public investment in the North is challenging: the tax base is small, and the Territories themselves are dependent upon federal tax revenue to meet their own objectives.

26. Territorial governments are both vitally important customers in their own right and essential conduits for the social, economic and community services that advanced telecommunications networks can deliver. These services include education, medicine and the administration of justice – all services enabled by advanced telecommunications networks that, in turn, make it all the more important for individuals and communities to connect to communications services.

27. When territorial governments become involved in new network construction, whether by direct investment or funding or by influencing federal funding decisions, their decisions can have an outsized impact on competitive conditions and technology choices in the market. We compete vigorously for their business, as we do for any investment or support funds that are made available. However, we are aware of the impact of these governments' mixed roles as customers and policy-makers.

28. It is vital to surmount the challenges of funding and investing in new network construction, whether from private or public resources, because the capacity of backbone, or transport, facilities that connect local networks in the North to southern Canada and the wider world has not kept pace with rising demand for bandwidth. And while we ourselves are working to address this challenge, we cannot fund all the backbone facilities that the North needs.

29. And, it should go without saying, it is equally vital to keep the particular conditions and needs of Canada's North firmly in mind when the Panel reports to government concerning changes that should be made to Canada's communications legislation. This is especially true with respect to the first theme of the Panel's Call for Comments, "reducing barriers to access by all Canadians to advanced telecommunications networks." But it applies with equal force to the objectives of supporting the creation, production and discoverability of Canadian content and improving the rights of the digital consumer.

### *First Area for Improvement: Ensure the Legislative Framework Facilitates Competition*

30. We urge the Panel to endorse the principles of competitive and technological neutrality in its own recommendations to the government. The following facts must guide your recommendations if legislative revisions are to reduce barriers to access by all Canadians to advanced telecommunications networks:

    - **Competition is not assured:** The legislative framework must continue to encourage competitive entry and provide regulators and, as appropriate, the courts and telecom operators themselves, with the direction and the tools they need to protect markets from re-monopolization and from other abuses of dominant position.

    - **Telecommunications networks are still subject to bottlenecks:** In the North, the primary bottleneck remains the backbone or transport network that joins competitive local facilities to national and global networks. The legislative framework, therefore, must enable competing firms to have open and equitable access to network bottlenecks wherever they occur.

    - **Technological neutrality is both possible and necessary:** All-digital networks can use terrestrial wireless, satellite, and wireline facilities, increasingly interchangeably. This translates into a range of potential solutions to ensure advanced telecommunications networks and services reach all Canadians in cost-effective ways that can and should translate into affordable and flexible choices. However, regulators must still have the power to establish and then enforce rules concerning the interconnection of these technologies that facilitate interchange among competing carriers.

*Competition is Not Assured*

31. The Panel may hear that competition is thriving in all parts of Canada, and therefore there is no need to ensure policy-makers and regulators have tools to address anticompetitive behaviour by firms that continue to dominate by virtue of their ownership of bottleneck facilities, their market share in wholesale or retail markets, or their legacy of subsidized and protected monopoly position.

32. We urge the Panel to view such claims with scepticism. They are dubious with respect to southern Canada, and outright false when it comes to the North.

33. In Canada's North, facilities-based competitors like SSi continue to press the CRTC, ISED and others to enforce rules concerning network interconnection, access to and quality of competitor services, and access to support structures and facilities controlled by the ILEC that competitors in the south might well take for granted.[2]

[2] For instance, local service competition was only recently allowed in Northwestel's serving territory, following the issuance of Telecom Regulatory Policy CRTC 2011-771 "Northwestel Inc. – Review of regulatory framework". The need for competitive entry in the North, and the failure of the monopoly model, was explained well by the Commission in its assessment of the market:

"The Commission recognizes the importance of telecommunications services in the North and the investments needed to address northern residents' desire for a telecommunications network that offers parity with the rest of the country, supports Arctic sovereignty and national security, and provides opportunities for economic development. The Commission also recognizes that northern communities require innovative solutions for the provision of telecommunications services comparable to those available in the rest of the country and for applications to access services such as health care, education, government programs, public safety, and banking.

"The Commission is concerned that Northwestel's shareholders have benefited from the price cap regulatory framework to a far greater extent than its customers. Since 2007, Northwestel has received over $20 million in annual subsidy for the provision of service in remote communities and its annual income from operations has nearly doubled to $69.3 million in 2010. Despite this, the company has failed to make the necessary investments in its network. Northwestel's infrastructure is aging and services comparable to those provided in the rest of Canada are unavailable in many remote communities. The Commission is also concerned that this situation has likely affected the quality, reliability, and choice of services available to customers, as evidenced by a number of outages in various communities and the lack of service options. […]

"The Commission considers that Canadians who reside in the North should be able to enjoy the full benefits of competition. Accordingly, the Commission has decided to introduce local competition in Northwestel's territory to provide a choice of service providers and different service options. As a result of this decision, it is expected that residents in many parts of the North will have a choice of service provider beginning 1 May 2012."

And further:

**"**The Commission determines *t*hat, in light of the parties' submissions in this proceeding as well as the benefits that would be provided to consumers, such as a greater choice and innovative services, it would be appropriate to implement facilities-based local competition throughout Northwestel's operating territory at this time."

Despite the changes to the regulatory framework allowing competition, *SSi* can speak from experience that competitive entry has been slow in coming – incumbent inertia is a powerful thing - and has required a number of follow-up interventions and rulings by the Commission. Recent CRTC recent rulings have ordered Northwestel to provide competitor services including:

- After 8 years of dispute*,* final rates for backbone connectivity service across Northwestel's monopoly fibre line connecting the south [Telecom Order CRTC 2018-338*, "*Wholesale Connect service*"]*;
- Initiating a minimal competitor quality of service regime on Northwestel at the same time it determined that less stringent supervision of comparable aspects of other ILECs' competitor offerings is warranted [Telecom Regulatory Policy CRTC 2018-123, "Review of the competitor quality of service regime"];

34. Revised legislation should explicitly endorse competition as the best means of delivering the benefits of telecommunications services and digital technologies to Canadians. In addition, revisions should establish the clear expectation that any operator of telecommunications network facilities used to offer services to the public will permit interconnection on reasonable and non-discriminatory terms, and a very high standard must be set to avoid any delay in fulfilling requests for network interconnection or facilities.

*There are Still Bottlenecks in Telecommunications Networks*

35. The Panel may also hear from ILECs and others that with the advent of local competition across the country, no significant bottlenecks remain for which regulatory intervention is required to ensure that competitors have access on equitable terms and conditions. This too is false.

36. SSi's successes in offering remote-area broadband internet access since 2005 across Canada's North and, since 2018, mobile wireless voice and data services in all twenty-five Nunavut communities, attest to a major change in the market since the existing suite of communications legislation was enacted between 1989 and 1993. Even in Canada's most remote regions, competition in local networks – often called the "last mile" – is not only feasible: it is proven.

37. However, our ability to offer affordable, attractive services to local customers still depends upon obtaining timely, fairly-priced, non-discriminatory access to the backbone, or transport, facilities that link the remote communities we serve to southern Canada and from there, to the world.

38. Backbone facilities remain a bottleneck to competition in the North for a host of interrelated reasons. Long distances, coupled with complex and expensive construction challenges and sparse populations from which to recover costs mean that there are few

---

- Affirming the need for ongoing regulation of government-supported backbone facilities, such as the Mackenzie Valley Fibre Link [Telecom Decision CRTC 2017-299, "Northwestel Inc. – Request for forbearance from the regulation of operation and maintenance services provided to support the Government of Northwest Territories' Mackenzie Valley Fibre Link network" and Telecom Decision CRTC 2017-300, "Northwestel Inc. - Request for forbearance from the regulation of Wholesale Connect service in the communities served by the Mackenzie Valley Fibre Link network"]; and
- Disciplining Northwestel for a pattern of "non-compliance and a systemic disregard" of its regulatory obligations by failing to file proposed tariffs for special facilities in a timely manner [Telecom Decision CRTC 2018-465, "Application to ratify the charging of certain Special Services Tariff rates"].

available facilities. Compounding the problem is the fact that many of the facilities that do exist are owned or controlled by the incumbent LEC. The ILEC has a strong motive and, unfortunately, many opportunities to restrict access to the backbone facilities it either builds or buys.

39. In an industry where the value of the services provided is – as it has always been – enhanced by number of connections they enable, policy-makers and regulators should view with suspicion any effort to restrict access to those connections, whether for customers or competitors. The legislation should make open access to networks the expectation, imposing a high standard those who would restrict interconnection to justify their actions.

*Technological Neutrality Facilitates Innovation*

40. Today and for the foreseeable future, advanced digital telecommunications networks are being designed and built to offer a range of overlapping functions that cross the old categories of voice, data and content. Though at any single decision point not all of these technologies are equally practical as a means of serving remote locations where there is little or no road access, it is important that policy-making and regulatory functions not preclude service providers from choosing a different technology in the future, as more suitable configurations become available. For example, low-earth orbit satellite systems under development seem promising as a way to help meet needs in the North for additional, high-speed and high-capacity backbone connectivity.

41. It is important, therefore, that the legislation governing Canada's communications sector provide strong signals to favour both competitive and technological neutrality.

42. The following changes to the *Telecommunications Act* will send the right kind of signals:

***Recommendation 1.1: Establish reasonable and non-discriminatory interconnection between networks as a basic requirement for operating facilities that are used to offer telecommunications services to the public in Canada.***

43. The government should express a clear preference for reasonable and non-discriminatory network interconnection in the legislation and any policy direction made to the institution or institutions that are charged with implementation.

44. To give effect to this recommendation, the revised telecommunications legislation should incorporate the expectation that all networks should facilitate open access for purposes of interconnection. The idea of "open access" is intended to convey several important ideas:

    - If the network operator is permitted to charge for access, the rates it charges must be reasonable. The bill-and-keep principle that the Commission established as the basis for local network interconnection, which recognizes that interconnecting networks are peers and should compensate one another for the exchange of traffic only in the event of significant imbalance, should be the basis of interconnection whenever possible.[3]

    - Likewise, if the most effective or efficient way to facilitate interconnection is for a network operator to provide competitors with access to its own facilities at wholesale rates, those rates should be reasonable. While the operator should be able to recover its reasonable costs of providing wholesale access, it should not be able to disadvantage its competitors by requiring them to contribute excessively to its profit.

    - Network operators should not be permitted to discriminate between the networks with which they interconnect. Nor should they be permitted to accord firms with which they have alliances, shared ownership or other close connections more preferential terms, including earlier access, than they make available to arm's-length competitors.

    - It is essential that competitors have *timely* access to the interconnecting, backbone and other facilities they require. This cannot be stated strongly enough: in a competitive marketplace, access delayed equals access denied.

45. Making open access interconnection the default may also require revision to the *Telecommunications Act*, s. 29, which specifies that the Commission has jurisdiction to approve interconnection agreements, and s. 40, which empowers the Commission to order a Canadian carrier to connect its telecommunications facilities to any other telecommunications facilities and establish the conditions on which this connection will take place. Although it is important that the Commission retain this jurisdiction, these sections may need to be re-phrased to convey the expectation that interconnection will take place. The legislation should then shift the burden of proof to the network operator

[3] Telecom Decision CRTC 97-8, "Local Competition," paragraphs 56-65.

that seeks to restrict interconnection with or access to its facilities, as it now does to require a Canadian carrier to prove that its existing or proposed discrimination is not unjust, undue or unreasonable (*Telecommunications Act,* s. 27(4)).

46. The meaning of the phrase "just and reasonable rates," currently found in s. 27(1) of the *Telecommunications Act,* has recently been the subject of proceedings before the CRTC.[4] We believe it is clear that the intention of the legislature in enacting that *Act* was to build on to the foundation of the CRTC's former jurisdiction under the *Railway Act*, including by permitting the Commission to determine the meaning of "just and reasonable" in light of the telecommunications policy for Canada enunciated at s. 7 of the *Telecommunications Act*. However, other parties to that proceeding have argued that the phrase imports expectations that the incumbent LEC, so long as it has not been explicitly relieved of an ill-defined "obligation to serve", must always be able to recover a "reasonable" rate of return, irrespective of the evolution of the regulatory framework and rules in accordance with the telecommunications policy.[5]

47. The phrase is useful, and for the most part we believe that it has served the Commission well as it has sought to balance the various interests referenced in the telecommunications policy. However, if the Commission or the courts ultimately determine that "just and reasonable" does establish any sort of priority for the ILECs, including the idea that the ILECs have prior claim on telecommunications revenues to the point that they can prevent the Commission from adjusting the regulatory framework to better suit changing conditions (in this case, by phasing out the ILEC-only local subsidy system), the language should be adjusted in revised legislation. The alternative is a position that we believe is untenable, as well as highly distorting in a competitive marketplace. It would serve to entrench an ILEC position of privilege at the expense of enabling the industry as a whole, to say nothing of the regulator, to develop the regulatory framework as conditions evolve.

***Recommendation 1.2: Introduce to the* Radiocommunication Act *the presumption that licensees must enable open access and interconnection***

[4] Independent Telecommunications Providers Association ("ITPA"), Application to Review and Vary Telecom Regulatory Policy CRTC 2018-213, Phase-out of the local service subsidy regime (CRTC file # 8662-J92-201808015).
[5] See for instance the application of ITPA and the intervention of TELUS Communications Canada ("TELUS") in the above-noted proceeding (CRTC #8662-J92-201808015). We elaborated our views on this matter, in particular concerning the intention of the legislature, in our Comments filed with the Commission on November 23, 2018, available from the Commission's website at https://services.crtc.gc.ca/pub/ListeInterventionList/Documents.aspx?ID=276960&en=2018-0801-5&dt=i&lang=e&S=C&PA=T&PT=PT1&PST=A (last accessed January 10, 2019).

48. The principle of technological neutrality requires that all telecommunications networks be subject to the same policy, including the expectation that they must be available for interconnection to other networks on the terms we have described as constituting "open access". This means that wireless networks should be subject to the same general expectations, as should network operators that interconnect between wireless and wireline facilities.

49. The *Radiocommunication Act,* s. 5(1.1), currently permits the licensing authority that it establishes – the Minister, now ISED – to "have regard" to the objectives of the telecommunications policy set out in section 7 of the *Telecommunications Act.*

50. All interconnecting and competing technologies, including wireless technologies, should be subject to the same policy objectives. It is not sufficient to permit the regulatory authorities governing wireless communications to "have regard" to policy provisions that prioritize peer-to-peer interconnection among networks. They should be implementing the same policy as is enunciated with respect to wired networks.

***Recommendation 1.3: Endorse the 2006 Policy Directive to the Commission as the baseline for regulation where competition exists, but retain forbearance powers so that the CRTC can examine on a case-by-case basis markets that are becoming competitive***

51. Each of the *Telecommunications Act* (s. 7) and the *Broadcasting Act* (ss. 3(1) and 5(2)) currently contain extensive statements of the policy objectives that the Commission is to serve as it regulates the communications sector. The two policy statements also broadly define the scope of the directives that the Governor-in-Council may issue to the Commission by virtue of the *Telecommunications Act*, s. 8, and the *Broadcasting Act*, s. 6.

52. In the case of the *Telecommunications Act*, the policy objectives include the following statements concerning the roles that competition and regulation are to play with respect to ensuring that telecommunications services are provided in such a way that the other objectives can be met:

> *7. It is hereby affirmed that telecommunications performs an essential role in the maintenance of Canada's identity and sovereignty and that the Canadian telecommunications policy has as its objectives*
> *…*
> *(c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications;*

> *…*
> *(f) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective;*
> *…*

53. In 2006, the Governor-in-Council issued a Direction to the CRTC pursuant to s. 8 of the *Telecommunications Act* that gave specific priority to s. 7(f) (the "2006 Policy Direction"). Instead of increasing reliance on market forces as one among several objectives to be achieved through telecommunications policy, the 2006 Policy Direction mandated that the Commission implement the policy objectives relying "to the maximum extent feasible" on market forces. The Policy Direction also stated that the Commission should rely only on regulatory measures that satisfied certain criteria. One of those criteria was that the Commission should "specify the telecommunications policy objective that is advanced by those [regulatory] measures and demonstrate their compliance with this Order."[6]

54. We believe that the 2006 Policy Direction embodies the ideals of competitive and technological neutrality to a useful degree and should be retained, if not strengthened, in the renewed legislative framework that will apply to Canadian telecommunications in the future.

55. We note, for example, that the 2006 Policy Direction asks the Commission to advert to "technological and competitive neutrality" in matters of network interconnection arrangements, regimes for access to support structures and the like, and mandated access to wholesale services.

56. However, the wording of the 2006 Policy Direction, and its status as a Direction to the Commission as to how it must seek to achieve all of the objectives of section 7, leaves some room for ambiguity.

57. First, the wording of the Direction is such that it is not clear whether by specifying certain types of regulatory determinations that should be made in a competitively and technologically neutral fashion, Cabinet's intention was to leave this vital principle to the Commission's discretion in other matters.

58. As we have argued recently, the Commission can and should apply the principle of technological and competitive neutrality to the decisions it will make concerning how to

[6] "Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives," SOR/2006-355 (P.C. 2006-1534 of 14 December 2006), s. 1(b)(i) quoted.

allocate its new Broadband Fund. The Commission has endorsed these principles in its determinations concerning the eligibility and assessment criteria for projects proposed to the new Fund.[7] However, it was not always clear that this would be the Commission's intention.[8] Therefore, we recommend that the principles be clearly endorsed as basic elements of any new telecommunications legislation for Canada.

59. Second, although the Commission has taken great care in addressing the matters the 2006 Policy Direction requires it to specify in every decision it has issued concerning the regulation of telecommunications since the Direction came into force, it is not necessarily clear even now how the CRTC should reconcile the Direction's specific requirements with the remaining policy objectives, or with provisions of the *Telecommunications Act*, such as the requirement that rates must be "just and reasonable" (s. 27), that pre-date the *Act* and have their roots in legislation that applied long before competitive and technological neutrality became the norm.

60. CRTC Chairperson Ian Scott recently identified greater clarity as one of four desired "outcomes that would enable the CRTC to carry out its mandate in the most efficient and effective way":

> *The fourth cuts across both broadcasting and telecommunications. As they currently stand, the Broadcasting and Telecommunications Acts describe only objectives. For example, that the broadcasting system should safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada. Or that the telecommunications system safeguard, enrich and strengthen the country's social and economic fabrics. It should be the objective of legislative drafters in Parliament to clearly state the purpose of each piece of legislation. Rather than providing the regulator with a long list of attributes that get weighed one against another, the drafters of these new laws should provide us with a simple, clear statement of purpose that will allow the Commission to pursue its objective. Greater clarity on purpose and roles will allow us to be more effective in our work.*[9]

[7] See Telecom Regulatory Policy CRTC 2018-377, Development of the Commission's Broadband Fund, 27 September 2018.
[8] See Telecom Notice of Consultation CRTC 2017-112 and SSi's comments on TNC 2017-112, filed 28 June 2017.
[9] Ian Scott to the annual conference of the Canadian Chapter of the International Institute of Communications, Ottawa, Ontario, November 1, 2018, at https://www.canada.ca/en/radio-television-telecommunications/news/2018/11/ian-scott-to-the-annual-conference-of-the-canadian-chapter-of-the-international-institute-of-communications.html (last accessed 6 January 2019).

61. We believe that the "simple, clear statement of purpose" to which Chairperson Scott refers should include an acknowledgement of the principles of technological and competitive neutrality.[10]

***Second Area for Improvement: Renew the Institutional Framework and Improve Enforceability by Clearly Separating Policy-Making from Policy-Implementation Functions***

62. The second major objective we urge the Panel to achieve through their review of Canada's communications legislation is to renew the institutional framework that governs the sector. In particular, we believe the institutional framework can be greatly improved by defining and separating the policy-making and policy-implementation functions across all three of the *Telecommunications Act*, the *Radiocommunication Act*, and the *Broadcasting Act.*

63. The most significant problem created by the overlap of policy-making and policy-implementation functions in the existing legislation is that the involvement of a government department, namely ISED, in both functions can make it difficult or complicated for stakeholders to take action to ensure that implementation accords with stated policy (as well as with the department's proper jurisdiction and applicable law).

64. The *Radiocommunication Act* creates the most significant area of anomaly. The Minister is entrusted with responsibility both to establish spectrum policy and to determine who may use spectrum.

65. For the most part, ISED and its predecessors have been scrupulous in ensuring that spectrum policy is developed in a transparent manner, making a practice of consulting stakeholders as specific issues are examined and determined. ISED has also sought to ensure that, once the policy has been established, it is carried out so as to avoid the

[10] We note that the Commission has repeated this request in its formal written submission to the Panel, filed on January 10, 2019 (available at https://crtc.gc.ca/eng/publications/reports/rp190110.htm, last accessed 10 January 2019):

> *"Generally speaking, any new legislation's objectives should articulate clearly defined outcomes, should not unduly overlap with each other, and should not be prescriptive. For example, it should not specify or make assumptions with regard to the type of service or technology by which outcomes should be achieved. A useful approach could be the introduction of a clear and simple purpose clause that frames the context of whatever communications legislation is advanced. Any set of objectives or outcomes would then be read and interpreted in light of this clause, without placing undue limitations on how those outcomes are implemented."*

imputation of bias. ISED's adoption of auction methodologies to allocate contested spectrum is an example of such methods.[11]

66. However, if something does go wrong – if, for instance, implementation deviates from policy – stakeholders are left with very few means to challenge the results. While administrative law appears to offer a route to ensure that implementation functions are carried out consistent with policy, in reality it is difficult, and rare, to overcome the degree of discretion and deference the courts show towards ministerial decisions.

67. Similar problems can arise in the event that a government department's implementation of policy through granting functions deviates from the stated policy the grants were to serve. Parties that believe such a deviation has taken place must rely on the goodwill of department personnel to resolve issues. While this works reasonably well more often than not, it is not a substitute for a legislative framework that clearly establishes where appeals may be taken from implementation decisions and for what sorts of errors.

68. By contrast, both the *Telecommunications Act* (s. 64) and the *Broadcasting Act* (s. 31) provide for appeals from CRTC decisions on matters of law or jurisdiction to the Federal Court of Appeal.[12]

69. However, both of those Acts also provide for a form of appeal to Cabinet from CRTC decisions. The Governor-in-Council may vary or rescind a decision of the Commission pursuant to the *Telecommunications Act* or send it back for partial or full reconsideration (s. 12). Likewise, the *Broadcasting Act* permits the Governor-in-Council to set aside or refer back a CRTC decision to issue, amend or renew a specific licence; it may also set aside the Commission's decision to confirm its own previous decision on the same licensing matters (s. 28).

[11] This is not to suggest that spectrum auctions are now or will remain the best possible method to satisfy Canada's policy or efficiency objectives with respect to the use of spectrum. See, on this subject, Eli Noam's prescient paper, "Beyond Spectrum Auctions: Taking the Next Step to Open Spectrum Access," *Telecommunications Policy* 21:5 (1997), 461-475, referred to again further below.

[12] We do note that the provisions of these two Acts differ concerning the degree of deference that the Federal Court of Appeal is to accord to the findings of fact, and we question whether this difference is justifiable on policy terms. Compare Telecommunications Act, s. 64(5), which states that the Court "may draw any inference that is not inconsistent with the findings of fact made by the Commission and that is necessary for determining a question of law or jurisdiction", with Broadcasting Act, s. 31(1), which simply states that with the stated exception of an appeal to the Federal Court of Appeal on a matter of law or jurisdiction (s. 32(2)), "every decision and order of the Commission is final and conclusive."

70. Unlike the jurisdiction of the Federal Court of Appeal concerning the determinations of the Commission, the existing legislation does not specify or constrain the reasons why the Cabinet might choose to vary or rescind, set aside or refer back a Commission decision. These provisions of the *Telecommunications Act* and the *Broadcasting Act* are problematic, because the Cabinet can be asked to reconsider the findings of fact made by the expert tribunal. The Cabinet can also, potentially, consider whether a CRTC decision accords with the law or falls within the Commission's jurisdiction, thereby overlapping with the Court's jurisdiction. Or the Cabinet could simply be asked to overturn a determination of the expert tribunal for political reasons.[13]

71. The limited process that the *Telecommunications Act*, especially, but also the *Broadcasting Act* establish around appeals to Cabinet means that, once again, persons affected by a decision or potentially affected by an appeal must rely on the goodwill of the department that administers such appeals (ISED and Heritage, respectively) in order to be heard.[14] We also note that even as the *Telecommunications Act* was being enacted, serious commentators raised the question why the Cabinet needed both broader substantive powers (to vary or rescind, rather than to set aside or refer back) and more limited procedural requirements in telecommunications cases than in broadcasting ones. We believe that the powers and procedures should be harmonized with a view to limiting the potential for unfettered action by Cabinet.[15]

72. The problem is quite fundamental. All three Acts protect and preserve ministerial (and Cabinet) discretion, which is not inappropriate in the Canadian system of government. However, when that discretion is exercised over the implementation, rather than the creation, of policy, it can lead to inconsistency and even to the appearance of bias. In the absence of clear paths to judicial review of implementation, affected persons have little recourse.

---

[13] A very recent example illustrates the uncertainty of substantive grounds, as well as the problem of inadequate procedural protections for parties interested in a Cabinet appeal, of simultaneous appeals to the Commission to review and vary its own determination and petition to Cabinet to review and vary the same decision. This is the set of applications, both dated December 19, 2018, from Southwestern Integrated Fibre Technology Inc. (SWIFT), appealing various aspects of Telecom Regulatory Policy CRTC 2018-377, Development of the Commission's Broadband Fund.

[14] Section 12(3) of the Telecommunications Act requires the Commission to "send a copy" of any Cabinet petition it receives "to each person who made any oral representation to the Commission in relation to the decision that is the subject of the petition". Since in recent years, the Commission has conducted the vast majority of its telecommunications proceedings without oral hearing, this anomaly should be corrected.

[15] "Report of the Standing Senate Committee on Transport and Communications on the Subject-matter of Bill C-62, An Act respecting Telecommunications," June 1992, at pp. 24-25.

73. Separation of policy-making from policy-implementation functions will also improve **clarity** by identifying which organ of government holds responsibility for what sorts of functions.

74. Under the existing law, in addition to its crucial role in shaping and enacting the legislation in the first place, Cabinet, directed by the relevant ministers, exercises the power to issue **directions of general application** under the *Telecommunications Act* (s. 8, with respect to the Canadian telecommunications policy set out in s. 7) and the *Broadcasting Act* (s. 6, with respect to "broad policy matters" relating to the broadcasting policy and regulatory policy set out in s. 3(1) and 5(2), respectively, with specific licensing matters explicitly excluded by s. 7). This power can fairly be described as one of making policy, and it has permitted the Cabinet to provide more precise direction concerning how the CRTC should interpret the broad statements of policy in its enabling legislation.

75. However, the Minister also exercises the following powers under the current law, which might involve policy making, but definitely also involves the interpretation and implementation of existing policy as it is expressed in the legislation:

    - The power to vary or rescind (telecommunications) or set aside or refer back (broadcasting) a CRTC decision, discussed above;

    - The Governor-in-Council also has the power under the *Broadcasting Act* to issue directions to the Commission on a number of matters, listed in s. 26, that relate to how it can approach the licensing decisions it is empowered to make. Although some of these issues might, generously, be categorized as policy making matters, such as defining classes of applicants which cannot be licensed or whose licences cannot be amended or renewed, others are clearly a matter of the implementation of policy, such as the power to direct the Commission concerning the maximum number of channels or frequencies that can be licensed in a given geographic area, or to require licensees to broadcast a specific program (s. 27(2));

    - Still acting through the Governor-in-Council, the Minister can require the CRTC to provide it with a report on a matter within the Commission's jurisdiction under the *Telecommunications Act* (or a Special Act), by virtue of s. 14 of the *Telecommunications Act.* It has a similar power under the *Broadcasting Act* (s. 15), although it is required to consult with the Commission before making any such request. Although such reports might be used as the basis of policy-making, the very broad wording of these powers raises the possibility that the Commission might be

required to report to the Governor-in-Council concerning how it is approaching the implementation of policy.[16]

76. The Minister's powers with respect to technical matters, although rarely used, also straddle the line between policy making and policy implementation. Under the *Telecommunications Act,* the Minister can make certain technical standards binding (s. 15); under the *Broadcasting Act*, the Minister can require the Commission to consider certain technical matters (s. 14(2)).

77. From our perspective, rethinking the powers of the Ministers and Governor-in-Council with a view to ensuring they are limited to the appropriate sphere of making policy could add significant and welcome clarity, certainty and enforceability to the legislative framework. The power to review and vary specific CRTC determinations (*Telecommunications Act*) and to set aside or refer back broadcasting decisions (*Broadcasting Act*) are particularly egregious in this respect, since they permit the Governor-in-Council to act as an informal court of appeal from the Commission's implementation decisions – one with few procedural safeguards, and whose determinations are themselves not subject to effective judicial or policy review.

***Recommendation 2.1: Ensure that Ministerial and Cabinet discretion applies only to policy-making functions under all three of the* Telecommunications Act, Radiocommunication Act, *and* Broadcasting Act.**

***Recommendation 2.2: Ensure that all policy implementation functions are subject to effective enforcement mechanisms, such as transparent internal review and judicial review.***

***Recommendation 2.3: Ensure that the implementing agency (such as the CRTC) is properly resourced to carry out all of their policy implementation functions.***

[16] For instance, the annual series of reports to the Governor in Council concerning the status of competition in Canadian telecommunications markets and the deployment and accessibility of advanced telecommunications infrastructure and services, continued since 2006 as the Commission's annual CRTC Telecommunications Monitoring Report, provides data that the government may use as the foundation of policy decisions, but also reports at least indirectly on the effectiveness of the Commission's implementation of aspects of the telecommunications policy and the 2006 Policy Directive. More recently, the Commission's 31 May 2018 digital report on future programming distribution models, Harnessing Change: The Future of Programming Distribution in Canada identified both the types of changes that market trajectories might require to the Broadcasting Act and the Telecommunications Act, and initiatives that it could take within its existing mandate and powers to address the trajectories.

### *Third Area for Improvement: Ensure that regulatory obligations are proportional to the resources and interests of service providers by scaling them to the scarcity of the resource utilized*

78. The current legislative framework imposes disproportionate regulatory burdens across the communications sector based on the technology participants use and the services they provide. This review provides an excellent opportunity to harmonize regulation so that principle, not technology choice, guides the distribution of its benefits and obligations.

79. The key principle, we suggest, is proportionality. It should apply in two dimensions.

80. First, regulatory obligations should increase with the scarcity, and therefore the value, of the resources used. This principle is already implicit in the *Telecommunications Act*, but should be extended to the *Radiocommunication Act* and *Broadcasting Act*, as well.

81. Second, players that benefit from offering programming services to the Canadian public should be required to contribute to supporting the creation, production, and discoverability of Canadian content in proportion to both the extent to which they benefit from that activity, and to their own strengths.

*Regulatory Obligations Should Be Proportional to Scarcity*

82. The existing legislation establishes two licensing regimes: the *Radiocommunication Act* entrusts the Minister (ISED) to license spectrum usage generally; and the *Broadcasting Act* requires the CRTC to issue licences (or exemptions) and set conditions of licence for a particular use to which spectrum can be put, as well as the rest of the system that supports that use.

83. The *Telecommunications Act*, by contrast, relies on the market to determine where, and by whom, firms will invest in telecommunications facilities, and then sets conditions with which those firms must comply in order to offer services to the public, depending on the kinds of facilities they own or control.[17]

[17] Bill C-62, which was ultimately enacted as the Telecommunications Act, did propose a Ministerial licensing scheme. It was removed in response to widespread criticism, which was itself reflected in the recommendations contained in the "Report of the Senate Standing Committee on Transport and Communications on the Subject-matter of Bill C-62, An Act respecting telecommunications."

84. Consistent with our first "area of improvement," we believe that it is still necessary for the Commission to have the power to order carriers, notably the ILECs, that exercise market power such as the power to control access to bottleneck facilities, to meet obligations that exceed the conditions that apply to non-dominant carriers and service providers. These obligations should include the requirement they make interconnection available and provide wholesale access to bottleneck facilities on terms and conditions that are always both reasonable and non-discriminatory.

85. But we also believe that the licensing schemes, especially the reliance of the *Broadcasting Act* on licensing, could usefully be harmonized with how the Commission operates under the *Telecommunications Act.*

86. We recognize and support the principle that scarce public resources, such as spectrum, need to be allocated so as to ensure that they are used in accordance with public policy decisions about what they should be used for, and how they can be managed most efficiently. We therefore can see the value of a licensing regime for uses of spectrum, including the use of spectrum for broadcasting.

87. However, we do not believe that what are often complex, time consuming and costly processes to deliver exclusive licences are always the best way to ensure all stakeholders can make an equitable and effective contribution to such diverse objectives as: protecting the rights of the digital consumer; expanding the availability of broadcast and telecom services that make use of radio spectrum into Canada's North and more remote areas; or supporting the creation, production and discoverability of Canadian content.[18]

88. On the content side, especially, it seems increasingly clear a legislative framework based on licensing over-the-air broadcasting is difficult to adapt to ensure all parties contribute appropriately to the creation, production and discoverability of Canadian content.

89. If the Commission had tools other than its current complex licensing scheme to ensure that programming content providers that do not use spectrum resources also make an

[18] Ever more efficient means of spectrum allocation should be considered. For example, in a very forward-thinking article from 1997, "Beyond Spectrum Auctions", Eli Noam was contemplating ways to move beyond the current system of auctioning exclusive licences, which "may soon become technologically obsolete [and] economically inefficient […]. An alternative is to step beyond the current paradigm of licensed exclusivity to a system of full openness of entry. This would allow access to spectrum bands through access fees that are determined by demand and supply conditions at the time. Prices for access would vary, depending on congestion." Noam, "Beyond Spectrum Auctions," at 461.

appropriate contribution, it should be possible for the regulator to establish new operating rules that ensure regulatory burdens are more proportionate to scarcity.

90. Such new rules could, and should, provide for easier, faster and less costly licensing processes for proponents of new programming services in areas, such as sparsely populated remote and rural parts of Canada, where they neither interfere nor necessarily compete with other users. Consistent with the principle of proportionality, these lighter requirements should apply even to programming service proponents wishing to use available spectrum resources.

*Programming Support Obligations Should be Proportional to Benefit and Strengths*

91. The evolution of distinct telephone, broadcasting, and cable television systems into sophisticated digital networks that Canadians increasingly call upon indistinguishably to meet their needs for communication as well as for information and entertainment has put a strain on the ability of Canada's differing regulatory systems to achieve their policy goals. As the Panel notes in its Call for Comments:

> *Digital disruption has had a significant effect on creators, culture and content in both English and French communications markets. The economics of creation, distribution, consumption and pricing have all been affected. The shifting market dynamics are likely to be a permanent aspect of the landscape. … [P]roducing quality Canadian content … remains a challenge under the current Canadian content rules that were designed to focus on a domestic rather than global marketplace. This is particularly problematic as* ***Canadians shift viewing to online streaming services that directly compete with regulated Canadian broadcasters.*** *At present, online programming services are exempted from Canadian content requirements.*

92. The Panel identifies the resulting challenge as being how to modify the legislative and regulatory framework "to ensure that all players, including online players that garner revenue in Canada, play a role in the creation, production, and distribution of Canadian content" and contribute to its discoverability. We urge the Panel to consider how proportionality can help achieve these goals, as well.

93. We agree that all players that offer Canadian programming content in order to enrich the range of services they can offer their customers in a competitive market should contribute equitably to achieving goals such as supporting its creation, production and discoverability.

94. However, for that contribution to be equitable, it should be proportionate, not only to the benefit that each player obtains from offering Canadian programming, but also to the nature of the contribution each player can make.

95. It is inequitable to levy a financial contribution upon all internet service providers ("ISPs"), for example, simply because the service they provide can be used, at the customer's instance, to obtain access to programming resources. Customers should be able to choose the internet services they want, as well as the internet-delivered resources they would like to consume.

96. If an ISP distinguishes itself in the market by delivering programming services to consumers, however, it is not unfair to require that ISP to make some sort of contribution to program support.

97. That contribution requirement can be structured to provide ISPs (and others) with incentives to devote their particular talents towards the policy goals. A more proportional contribution for a small ISP to make might be the development or promotion of an algorithm that improves the discoverability of Canadian content, rather than a proportion of revenues. This would be especially true if the ISP in this case were required to send a proportion of its revenues to a competitor's larger fund to support content.

***Recommendation 3.1: Eliminate licensing regimes other than for use of radio spectrum.***

***Recommendation 3.2: Facilitate and expedite the use of radio spectrum, for minimal fees, in areas where there is less congestion, particularly in Canada's North and more remote areas.***

***Recommendation 3.3: When developing support mechanisms for Canadian content, consider both the degree to which contributors benefit from making content available and the nature of the contribution each is best suited to making.***

*******