Final Report | January 2020

Canada's COMMUNICATIONS FUTURE: Time to Act



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Letter to the Honourable Minister of Innovation, Science and Industry and the Honourable Minister of Canadian Heritage

January 29, 2020

Dear Minister Bains and Minister Guilbeault,

On behalf of the members of the Broadcasting and Telecommunications Legislative Review Panel, I am pleased to submit to you our final Report with recommendations on modernizing the legislation governing Canada's communications sector.

This Report is the product of a review of Canada's communications laws including the *Broadcasting Act*, the *Telecommunications Act*, and the *Radiocommunication Act*. This is the first time that the three statutes are reviewed together in a comprehensive and integrated fashion. Therefore, Canadians can be confident that the legislative framework is a unified whole, relevant in the digital age.

As an independent panel, we were given the freedom to think broadly and openly about how best to build communications legislation for the future, and we are grateful to the government for this opportunity.

Our Panel knew that we had to think big and consider what would serve Canadians today and years into the future. We feel strongly that, while our laws need to respond to the issues of today, a lasting legislative framework must be resilient, flexible, and adaptable to the unforeseen but inescapable changes of tomorrow. We believe that our recommendations will provide policymakers and regulators with the legislative framework and regulatory tools necessary to realize the promise of communications technologies.

The single most important message to convey on behalf of Canadians is one of urgency. I encourage your government to move promptly to consider this Report and engage with Canadians to implement the necessary changes to ensure that Canada is positioned for success.

It has been a pleasure and a privilege to have travelled across the country and met with a wide range of stakeholders, governments, experts, and members of the public. They hosted us in their communities and territories, and we appreciate this. This Report has been greatly influenced by their views and the perspective of those who responded to our *Call for Comments* on how legislation should be updated to reflect the rapidly changing environment. I would like to thank everyone who participated in the consultation process.

I would like to recognize and thank my fellow panelists Peter Grant, Marina Pavlović, Monique Simard, Monica Song, and Pierre Trudel for their expertise, their passion and their unwavering determination

and commitment to address the issues and questions posed in our Terms of Reference. Hank Intven also brought his in-depth expertise and experience to our work during his time as a panelist, and I would like to extend my appreciation for his contribution. I would also like to thank the distinguished team of advisors who assisted the Panel in this process and whose wise counsel and advice was appreciated and considered.

The Panel was fortunate to have received the support of the Broadcasting and Telecommunications Legislative Review Secretariat. They are an extraordinary team of public servants whose contributions enriched the development of the Report and ensured its successful completion. They were aided along the way by a team of enthusiastic and bright students. I would like to highlight the leadership of Helen C. Kennedy and James Nicholson in their role as co-leads as well as Special Advisor Kelly Beaton and thank them for their invaluable efforts, encouragement, and support throughout this process.

Finally, on a personal note, I would like to thank you for your confidence in my leadership. It has been an honour to serve Canadians on this critically important matter.

Sincerely,

Janet Yale

Chair

Broadcasting and Telecommunications Legislative Review Panel

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OVERVIEW

Our Panel was tasked in June 2018 by the Minister of Innovation, Science and Economic Development (now the Minister of Innovation, Science and Industry) and the Minister of Canadian Heritage to review Canada's decades-old communications legislative framework.

This review is taking place at a time of unprecedented and fast-paced change. In this dynamic environment, we are taking a broad view of the communications landscape while responding to the specific questions posed to us in the Terms of Reference. We view Canada's communications legislation as a critical part of an ecosystem of legislative frameworks and regulatory regimes which must work together to address the issues on the minds of many Canadians – whether it be affordability, economic competitiveness, cultural sovereignty, accessibility, consumer rights, or privacy and online safety.

To capture this broad thinking, we focused on four themes:

- Reducing barriers to access by all Canadians to advanced telecommunications networks
- Supporting the creation, production and discoverability of Canadian content
- Improving the rights of the digital consumer
- Renewing the institutional framework for the communications sector

These themes informed our *Call for Comments* – issued in September 2018, kicking off our engagement and outreach with stakeholders – as well as our What We Heard Report released in June 2019. They are reflected in the body of this Report and our recommendations as well.

Our learnings from Canadians have been top-of-mind as we formulated our recommendations for change. Our extensive engagement with Canadians from a diverse cross-section of communities, including accessibility groups and official language minority groups, helped us consider our task in the context of the daily realities Canadians face. And it reinforced the pressing need for legislative reform.

The issues raised by and on behalf of Indigenous Peoples are particularly important, as Canada continues on the path of Reconciliation. We met with several leaders of Indigenous Nations and members of Indigenous communities, including from Northern locations. They took the time to share their valuable knowledge and insights about how we might make progress on communications issues as they affect Indigenous Peoples and communities.

We recognize that our recommendations will need to be understood and implemented in the context of a range of other Indigenous-specific policies and initiatives related to Canada's colonial past and Reconciliation. There are many matters between the federal Crown and Indigenous Peoples and their governments now in play, and we want to emphasize the importance of communications issues in

that context. Our work in this area should be seen as only a first step. We encourage the government to continue to engage with members of Indigenous Peoples and communities to ensure that their communications needs continue to be appropriately addressed.

OUR VISION

Our work is firmly rooted in an overarching vision for the legislative framework: one that reaffirms Canada's sovereignty, supports our democratic values and inclusivity, and aims to realize the promise of advanced technologies for the benefit of Canada's economy and future prosperity, and Canadians as citizens, users, and creators. All Canadians deserve to live a connected life: to connect with ideas, opinions, content, news and information, people, cultures, services and economic opportunities locally, nationally and globally. And to do so in a trusted environment.

Overall, we have put forward a comprehensive set of recommendations for a modernized communications legislative and regulatory framework that would better prepare the country for an era of constant and rapid technological change. In this new regime, all undertakings, including international online platform providers not currently covered, would contribute fairly and proportionately to Canada's national objectives, whether with respect to cultural policy or the goal of universal broadband connectivity; users would be better served and their interests protected; the roll-out of advanced networks would be accelerated to spur innovation and provide affordable services to Canadians.

Digital communications technology is not new. What is different and challenging is the new network environment in which everything is connected and cognitized. Traditional approaches to regulation are no longer enough; lines of business and activities, once siloed, have blurred. New areas of risk have emerged. These issues must all be addressed.

Economic prosperity increasingly depends on two imperatives: first, investment in high-quality, safe and secure telecommunications networks; second, the capacity of businesses to take advantage of this infrastructure and new technologies to adapt their business models, to innovate and to capitalize on new opportunities at home and abroad. In this context, a new framework must safeguard against anti-competitive behaviour that erects barriers to innovation or compromises affordability to Canadians, while ensuring the safety and security of telecommunications infrastructure.

Culturally, the framework must ensure that Canada's creators continue to have the means for Canadian stories to be told and discovered in a world of so many choices – at home and on the world stage. And the national public broadcaster must be relevant and act as a strong Canadian cultural anchor in the face of technological change, changing viewing habits and evolving business models in the sector.

Like governments and citizens around the world, Canada must address the way in which communications technologies and online platforms may threaten democracy and civic participation. More than ever, Canadians need independent, trusted, accurate and diverse Canadian sources of news.

Behind many of the technologies Canadians have come to rely on are globally dominant online platform providers who leave users with little power or control to negotiate terms or conditions of service. And most platform users are sharing massive amounts of personal data with little awareness of how it is being or may be used. In doing so, Canadians are accepting an implicit trade-off: permitting the use of their personal information in return for the convenience and personalization of online services.

Big Data – the result of the massive amounts of personal information collected through this exchange - is creating tremendous value for the online platform providers. Yet, in the current environment, there is little control over the ways in which this personal information may be manipulated or shared, and little power to derive benefits for Canadians from this value.

Online platforms have also created forums that enable the dissemination of harmful content, fake news and disinformation, and violent and extremist content. The question of whether and how domestic and foreign technology companies should take responsibility for harmful content on their platforms must be addressed.

Simply put, Canada and its leaders have to act now to address these challenges and realize the promise of advanced communications technologies. Canada and its leaders need to get this right – the nation's cultural and national sovereignty, economic prosperity and democratic values are at stake.

OUR KEY RECOMMENDATIONS

BRINGING ALL MEDIA COMMUNICATIONS ENTITIES INTO THE ACT

At the heart of our recommendations is a new model which recognizes the realities of a borderless, online world: one in which Canadians now access media content based on what is relevant to them, not the means of delivery or the nationality of the media content service provider; and one in which service providers compete directly and actively to attract Canadian audiences and benefit from Canadians' subscription revenues, advertising revenues and personal information. This new model would bring all those providing media content services to Canadians - whether online or through conventional means, whether foreign or domestic, whether or not they have a place of business in Canada – within the scope of the *Broadcasting Act* and under the jurisdiction of the CRTC.

By media content, we mean audio, audiovisual as well as news content delivered by means of telecommunications. Historically, news content was only regulated by the CRTC if it was delivered through licensees such as radio and television stations, and specialty news services. Canadians are increasingly accessing news content online, which now consists of a mix of audio, audiovisual and text; so we have modified our definitions accordingly.

Our new model is platform agnostic and technology neutral. It focuses on the activities being carried out and establishes consistent obligations to support Canadian cultural policy for all media content undertakings involved in similar activities.

To implement this model, a new registration regime would be created, to be administered by the CRTC. Under this approach, any media content undertaking with significant Canadian revenues and delivering media content by means of the Internet would be required to register. With this registration requirement, Canada's policy and regulatory model would no longer be limited by an increasingly out-of-date reliance on licensing as a technique for regulation. This registration regime would apply to both foreign and domestic undertakings on the Internet. Those involved in a media content undertaking by traditional means would continue to be licensed under the Act but under an increasingly flexible regime.

As it does today, the CRTC would have a broad power to exempt in instances in which regulation is neither necessary nor appropriate to achieve cultural policy objectives.

Those who benefit from accessing our market – both licensees and registrants – should have obligations to support Canadian content. Specific requirements would vary depending on the activity being conducted. The Act would differentiate among the following activities:

- Curation: the provision of a service for the dissemination of media content over which the service provider has editorial control. This includes traditional Canadian programming services, as well as online streaming services, such as Amazon Prime, Crave, Netflix, Spotify and illico.tv.
- Aggregation: the provision of service for the aggregation and dissemination of media content offerings from curators. This includes cable companies – i.e. traditional Broadcast Distribution Undertakings (BDUs) as well as their online offerings; new virtual BDUs that package a number of online streaming services, such as StackTV; and news aggregators such as MSN News and Yahoo! News.
- Sharing: the provision of a service that enables users to share amateur or professional media content. This includes YouTube, Facebook and other sharing platforms to the extent they enable the sharing of audio or audiovisual content, or alphanumeric news content.

All licensees and registrants would be obligated to contribute to Canadian content in a transparent fashion. Media curation undertakings brought under the regime – including Netflix and other online streaming services - would be required to devote a portion of their program budgets to Canadian programs. Media content aggregators and sharers would contribute through levies. All these financial contributions would be based on a simple calculation of the percentage of Canadian-derived revenues. The CRTC would determine the specifics – i.e. who contributes how much, based on which activities.

It would also oversee administration and compliance. Entities with multiple lines of business would have varying obligations, depending on the nature of their activities.

We want to be clear that we are not recommending that Canadian content be supported by the socalled 'Netflix Tax' - charging consumers an extra levy on subscriptions to such services as Netflix. It is more appropriate to establish a regime that requires such online streaming services that benefit from operating in Canada to invest in Canadian programming that they believe will attract and appeal to Canadians. This approach would ensure a meaningful contribution to Canadian cultural policy objectives and the production sector. It need not result in higher prices for consumers.

The application of GST/HST to foreign online services is a different matter. Consistent with actions taken by some provinces and many other countries, we recommend that sales tax be applied equitably to media communications services provided by foreign online providers. This would eliminate the disadvantage to competing Canadian providers.

Our recommendations also introduce a new financing model and other initiatives to support the creation, production and discoverability of Canadian content and a strong production sector that would:

- strengthen Canadian producers' ability to negotiate terms of trade with the purchasers of their content so that they may retain the commercial rights;
- make it easier for broadcasters to adapt their business models to create and produce Canadian content; and
- merge Telefilm Canada and the Canada Media Fund to create a new publicly funded institution that supports screen-based content, with a view to ensuring innovation and content from diverse voices, such as official language minority communities and Indigenous Peoples and communities.

A NEW ROLE FOR CBC/RADIO-CANADA

Our framework would transform Canada's public broadcaster into a public media institution with a singular focus on serving a public rather than a commercial purpose; one prepared to experiment and increase the diversity of its content while remaining committed to high-quality standards. Among our recommendations to achieve this is that CBC/Radio-Canada should gradually eliminate advertising on all platforms over the next five years, starting with news content.

The Act would also explicitly state that CBC/Radio-Canada should reflect national, regional and local communities to national, regional and local audiences, and reflect Indigenous Peoples and promote Indigenous cultures and languages. In this way, Canadians would have access to content from different parts of the country that reflects their values, cultures and perspectives.

A FOCUS ON USERS

Central to all our recommendations is a desire to better position users of communications services – whether that be individual consumers, not-for-profit institutions or private sector organizations. This imperative is the common element in all our recommendations for reform, whether we are talking about access to broadband, access to media content, including diverse, trusted and accurate sources of news content, safeguards against privacy breaches, Big Data or harmful content.

As a first priority, we recommend that a universal service objective be enshrined in the Telecommunications Act. Affordable universal access to broadband is a must. It enables all Canadians to participate equally in society and to access Canadian choices and the best of content from around the world.

At the same time, we also recommend that an explicit policy objective be added to the *Telecommunications* Act to affirm a user right to an open Internet – in which lawful content can be accessed anytime, from anywhere – in order to ensure freedom of speech and innovation.

We also recommend four distinct strategies to further the goal of affordability:

- Continuing to foster competition as a key tool to enhance affordability and choice: our recommendations require the CRTC to monitor and assess closely the state of competition in key electronic communications markets, including the market shares of non-Canadian participants, to ensure that rates are just and reasonable, and take remedial action if required. They focus on reducing systemic barriers to competition in electronic communications markets and providing the CRTC with a broader toolkit including:
 - establishing an obligation, as a condition of forbearance from retail rate regulation, either to mandate supply of related wholesale inputs or to explain why it is not necessary or appropriate to do so;
 - o replacing the tariff regime with a modernized system for reference offers that would improve wholesale outcomes by elevating the importance of terms and conditions of service, including service supply and quality conditions;
 - broadening the power of the CRTC to mandate interconnection;
 - expanding access to telephone numbers and related numbering resources, including those relied upon in the Internet of Things ecosystem, by all providers under the jurisdiction of the *Telecommunications Act*; and
 - creating authority for the Minister to delegate to the CRTC sole responsibility for establishing terms and conditions of access to wholesale wireless services and for resolving competitive disputes regarding conditions of spectrum licences.
- Broader scope of regulation: our recommendations require that all providers of electronic communications services be included under the CRTC's jurisdiction. Electronic

- communications services would be a new, inclusive term in the Telecommunications Act that would modify existing definitions to encompass all telecommunications networks and services as well as applications that ride on them.
- More funding to support universal service: through our recommendations, more funds would be spent on the objective of universality, since all electronic communications service providers, including Internet service providers, above a revenue threshold to be set by the CRTC, would contribute proportionately to the CRTC Broadband Fund. These contributions would help support the extension of connectivity in underserved areas, particularly those in rural and remote communities. We do not believe electronic communications service providers, including Internet service providers should be required to contribute to the support of cultural policy objectives.
- Regular study of affordability by the CRTC: we recommend that the CRTC regularly examine affordability of telecommunications services and, if necessary, implement measures to improve affordability for those Canadians who may be marginalized due to intersecting factors such as race, gender, income, citizenship status, disability, sexuality or age.

We also recommend that the objectives of both the Telecommunications Act and the Broadcasting Act be amended to address accessibility by persons with disabilities. This would recognize the importance of barrier-free access to communications services, and entrench accessibility above and beyond the Accessible Canada Act.

As Canadians strive to have a connected life, privacy and the confidentiality of user information take on even greater importance. We are convinced that stronger protections and rights for users must be established. The CRTC must be empowered to assert control over the dominant online platform providers with respect to the collection and use of personal data.

To this end, we recommend that the objectives of both the *Telecommunications Act* and the *Broadcasting* Act include commitments to protecting the privacy and confidentiality of customer information. We further recommend that the federal privacy law for private-sector organizations — the Personal Information Protection and Electronic Documents Act - be updated as necessary to ensure Canada is keeping up with emerging global standards, while respecting Canadians' fundamental right to freedom of expression.

A number of our recommendations address the crisis surrounding the current model for supporting news. Traditional news outlets are losing both advertising and subscription revenues, compromising their ability to produce quality news, while Canadians are increasingly accessing news content through online social media platforms. The platforms facilitate the sharing of content produced by other news media typically without any form of compensation to the journalists and media outlets that created the content. The problem is exacerbated by the imbalance in negotiating power between the dominant platforms and the great number of creators who actually produce the news.

Canadians must have access to diverse, accurate and trusted sources of news, including local and community sources of news. A strong, financially stable, and independent news sector that delivers these sources of news to Canadians through a variety of media is essential to the health of democracy and to an engaged citizenry. To achieve this, we recommend a set of inter-related strategies:

- sustainable funding for a wide range of news sources would be generated through the contributions described earlier that would be applied to aggregators and sharers;
- regulatory intervention to ensure that creators of news are compensated for the use of their original content by online platform providers;
- the labour-based tax credit for news organizations announced by the federal government in 2018 would apply not only to print but to audio and audiovisual news delivered on all platforms; and
- the provision of national, regional and local news as well as the reflection of Canadian perspectives on international news would be explicitly added to the mandate of CBC/ Radio-Canada.

We are aware that over time the distinction we are making today between alphanumeric news content and other information made available to users – using Big Data, algorithms and AI-based processes – may blur and become difficult to draw. With this in mind, we would empower the CRTC to gather information, audit, monitor, and if appropriate regulate practices related to the delivery of news, including algorithms and AI-based processes. We would also ensure that the CRTC has appropriate powers to intervene with respect to the Big Data practices of all those under its jurisdiction, to address the interaction between Big Data and media content choices.

When it comes to the use of Big Data, we have been seized by the importance and urgency of a broad range of issues involving competition, consumer protection, privacy, public safety and taxation. These issues transcend the scope of the communications statues and go beyond the mandate of any single regulatory body. We are convinced that addressing the implications of the use of Big Data requires a multi-dimensional, holistic approach to developing an effective and comprehensive legislative framework. This is an urgent task that the federal government should act on promptly, involving all the relevant authorities including, at a minimum, Statistics Canada, the CRTC, the Office of the Privacy Commissioner, and the Competition Bureau.

When it comes to harmful content, we recommend actions by the government both here at home and in the international context. The federal government should introduce legislation with respect to liability for harmful content and conduct using communications technologies – separate and apart from any responsibilities that may be imposed through communications legislation. Since Canada is not alone in trying to grapple with issues related to harmful content, we also encourage the federal government to continue its active participation in international fora and activities to develop international best practices on harmful content.

ACCELERATING THE ROLL-OUT OF ADVANCED NETWORKS

Access to broadband connectivity for Canadians and innovation by Canadian businesses depends on the efficient roll-out of safe and secure advanced networks, including the impending implementation of 5G. Our recommendations would accelerate roll-out of advanced wireline and wireless networks in three key ways.

- Access would be granted to all forms of public property, such as lampposts and utility poles, for passive infrastructure. This measure would be accompanied by new streamlined methods of minimizing disputes and resolving those that arise among various stakeholders, including different levels of government.
- A new streamlined approach would be implemented for the approval of an expanded range of telecommunications equipment needed for 5G and other technologies in the future, while continuing to ensure that all devices adhere to security, privacy and accessibility standards.
- A more policy-oriented approach to spectrum regulation by the Minister and an expanded regulatory toolkit would include dynamic approaches for assigning spectrum.

REIMAGINING THE ROLE OF THE REGULATOR

Fundamental changes to the role of the CRTC are needed. The Commission must have a deep understanding of the markets it regulates and leverage its knowledge and insights to anticipate change and take action, in a timely and appropriate manner.

More than an administrative tribunal, a renewed CRTC would have a proactive evidence based orientation that spots market distortions and systemic challenges early on, puts consumers in a position to advocate for themselves, and conducts monitoring and measurement that minimizes the need for more invasive intervention.

A much stronger research and analytic capability needs to be put in place. Woven through this report are recommendations requiring the CRTC to prepare and publish reports and evidence-based information on key issues and trends. These resources would provide a clear basis for the substantive decisions being taken and the impact they are expected to have. They would also be of tremendous value to public interest groups, including accessibility groups as well as Indigenous Peoples, and strengthen their capacity to participate in regulatory proceedings and planning processes.

Greater participation by public interest groups is vital if Canadians are to have confidence that the institutions are working in their best interest. We are recommending improved funding for public interest participation and the creation of a Public Interest Committee, funded by the CRTC and composed of not more than 25 individuals with a wide range of backgrounds, skills and experience. These recommendations would ensure that the diverse range of public, civic, consumer and small business interests — often unorganized or unrepresented in regulatory proceedings — have their voices heard.

We recognize that more resources would be required to support a more proactive regulator, and expect those to be generated through fees paid by all those to whom the Broadcasting Act and Telecommunications *Act* apply.

To reflect these changes in role and scope, we recommend that the name of the CRTC be changed to the Canadian Communications Commission. Its current name – the Canadian Radio-television and Telecommunications Commission – is out of step in a world that has moved beyond conventional radio and television stations, and in which telecommunications now encompasses a wide range of electronic communications.

The titles of two of the statutes we are reviewing should also be updated to reflect their broader scope; specifically the title of the Broadcasting Act should be changed to the Media Communications Act, and the title of the Telecommunications Act should be changed to the Electronic Communications Act. No change is required, in our view, to the name of the Radiocommunication Act.

CALL FOR IMMEDIATE ACTION

It takes time for government to develop and enact new legislation; however, there are steps that can and must be taken now to address the most pressing and urgent issues. We call for immediate action in these key areas:

- Roll out the announced funding for expansion of broadband: we applaud those governments across the country that have made commitments in this area and call on them to move promptly and in a more coordinated fashion to release the funding to make a tangible and immediate difference in the lives of those Canadians who today lack an appropriate level of connectivity.
- Require media content curators now exempt to contribute to Canadian content: to achieve this, the federal government should require the CRTC to hold hearings and issue a new exemption order so that those media content curators that derive revenue from Canada and are now exempt from licensing, such as Netflix, are required to contribute to Canadian content through spending and discoverability requirements, consistent with our recommended legislative framework.
- End the competitive disadvantage facing Canadian companies: apply GST/HST equitably to media communications services provided by foreign online providers.

LIST OF RECOMMENDATIONS

1. RENEWING THE INSTITUTIONAL FRAMEWORK

- 1. We recommend that to better reflect the expanded role and responsibilities of the communications regulator and the broader scope of communications legislation, terminology be modernized as follows:
 - The name of the Canadian Radio-television and Telecommunications Commission be changed to the Canadian Communications Commission, and the title of the Act governing the CRTC be changed to the Canadian Communications Commission Act.
 - The title of the *Broadcasting Act* be changed to the *Media Communications Act*.
 - The title of the *Telecommunications Act* be changed to the *Electronic* Communications Act.
- 2. We recommend that to provide the CRTC with flexible powers to monitor existing markets and to develop a stronger research and strategic foresight capability, the following amendments be made:
 - The CRTC Act be amended to require the CRTC to maintain accurate market data, and conduct, commission, and publish reports and evidence-based information on key issues and trends for the benefit of all Canadians.
 - The *Broadcasting Act* be amended to include information gathering and investigatory powers similar to those set out at sections 37-39 and 70-71 of the *Telecommunications Act*.
- 3. We recommend that to ensure an open and transparent appointment process for Commissioners, section 3 of the CRTC Act be amended to require that qualified candidates be selected from applicants through an open call, guided by published, merit-based criteria.
- 4. We recommend that sections 3, 5, 6, and 10.1 of the CRTC Act be amended to reduce the maximum number of Commissioners to a Chair, a Vice-Chair, and up to seven additional Commissioners, each appointed for a single term of up to seven years. For the term of their appointment, Commissioners should reside in the National Capital Region or within a prescribed distance thereof.

- 5. We recommend that to ensure transparency, the CRTC and ISED be required to identify the classifications of those regulatory officials with whom stakeholder contacts would be required to be publicly reported.
- 6. We recommend that to facilitate the Governor in Council's use of power to issue policy directions to the CRTC, the following amendments be made:
 - Subsections 8(1–2) of the *Broadcasting Act* and 10(1) of the *Telecommunications Act* be amended to require simple publication of the proposed direction, with a 45-day comment period, to be followed by publication of all interventions.
 - Subsection 5(1.1) of the *Radiocommunication Act* be amended to provide that the Minister of Industry shall have regard, in regulating radiocommunication, not only for the objectives of the Canadian telecommunications policy, but also for any policy directions issued by the Governor in Council under that Act.
- 7. We recommend that to enhance the consistency, transparency, and predictability of the process for appeals of individual CRTC decisions to the Governor in Council, the provisions for such appeals in both the *Broadcasting Act* and *Telecommunications Act* be amended to:
 - synchronize their timelines by requiring that an application be filed within 60 days of a CRTC decision and that Governor in Council make a decision within 180 days of the date of said CRTC decision;
 - harmonize their scope, by eliminating the power to vary a decision from section 12 of the *Telecommunications Act*; and
 - provide that an appeal to which the Governor in Council does not respond within the allotted time is deemed to have been denied.
- 8. We recommend that to increase regulatory certainty, the timeline for the exercise of the CRTC's review and variance power be entrenched directly in the statute, by amending section 62 of the *Telecommunications Act* to provide that a decision to review, rescind, or vary a decision or to rehear a matter be made within 120 days of the close of the record of the proceeding.
- 9. We recommend that to ensure that the CRTC and the Competition Bureau are each able to share expertise:
 - the *Broadcasting Act* and *Competition Act* be amended to give each agency access to confidential information filed with the other, similar to the provisions set out in the *Telecommunications Act*;
 - the *Telecommunications Act* and the *Broadcasting Act* be amended to authorize the CRTC to require a party to produce information relevant to competition issues

- requested by the Commissioner of Competition in the context of an intervention pursuant to section 125 of the Competition Act;
- the agencies be encouraged to revise their Letter of Agreement to require mutual notification of all matters requiring both telecommunications or broadcasting policy and competition law expertise; and
- the agencies advise the Minister of Industry on an annual basis of those matters not notified and reasons for their exclusion, so that the Minister of Industry is able to identify any remaining barriers to mutual notification and consultation.
- 10. We recommend that the Ministers of Industry and Canadian Heritage inform the CRTC upon receiving notification of foreign investment in businesses providing Canadian communications services, in order that the CRTC have the ability to provide advice on any telecommunications or broadcasting policy issues.
- 11. We recommend that to ensure that the CRTC and ISED have the means to align their approaches with respect to embedding the privacy principles overseen by the Office of the Privacy Commissioner within communications services, technologies, and business processes, the following amendments be made:
 - The provisions in section 39 of the *Telecommunications Act* on information sharing with the Commissioner of Competition, and any similar provisions adopted under the Broadcasting Act, be extended to the Privacy Commissioner.
 - The provisions in section 23 of the Personal Information Protection and Electronic Documents Act on consultation, agreements and arrangements, and information sharing with provincial counterparts be extended to include federal institutions whose functions and duties relate to privacy within particular industry sectors.
- 12. We recommend that to promote public interest group participation in regulatory proceedings:
 - the Broadcasting Act be amended to provide the CRTC with explicit authority to award costs, similar to the authority granted under subsections 56(1) and 56(2) of the Telecommunications Act;
 - ISED establish a funding program to support participation in proceedings under the Radiocommunication Act; and
 - the provisions concerning cost awards in the *Broadcasting Act* and *Telecommunications* Act be amended to include appeals that flow from decisions so that public interest intervenors are not left behind on appeals.
- 13. We recommend that the Broadcasting Act and the Telecommunications Act be amended to include public interest participation funding in the operational funding requirements of the

CRTC, and that this be included in the expenditure plans for Broadcasting Activity and Telecommunications Activity costs recovered under the Broadcasting Licence Fee Regulations and Telecommunications Fee Regulations, respectively. We further recommend that ISED's operational funding include amounts to be directed to public interest participation.

- 14. We recommend that the CRTC convene a public consultation on establishing a transparent process for funding public interest participation regarding telecommunications or broadcasting based on the following elements:
 - to ensure transparency, the CRTC would be required to report quarterly on the status of cost claims and their disposition;
 - to ensure timeliness, the funding process would be subject to a three-month service standard with a six-month upper limit for the completion of cost awards. The CRTC would be required to report annually on compliance with this standard; and
 - to eliminate lengthy and adversarial processes, the new process would be administered either by CRTC staff directly or delegated to an independent organization modelled along the lines of the Broadcasting Participation Fund.
- 15. We recommend that the CRTC Act be amended to require the creation of a Public Interest Committee funded by the CRTC and composed of not more than 25 individuals with a wide range of backgrounds, skills, and experience representing the diversity of public, civic, consumer, and small business interests, and including Indigenous Peoples. The CRTC should be encouraged to meet with representatives of Indigenous Peoples and communities outside of the Committee structure. The Committee should also include, as an ex officio member, a representative of the Accessibility Advisory Committee called for in Recommendation 88.

AFFORDABLE ACCESS TO ADVANCED 2. TELECOMMUNICATIONS NETWORKS

- 16. We recommend that the definitions in the Telecommunications Act be amended to replace "telecommunications service" with "electronic communications service," which means a service provided by means of telecommunications facilities and, without limitation, includes:
 - the provision in whole or in part of telecommunications facilities and any related equipment by sale, lease, or otherwise;
 - connectivity service, a service whose principal feature is the conveyance of intelligence by means of telecommunications facilities; and
 - interpersonal communications service, a service that enables direct interpersonal and interactive exchange of information via telecommunications facilities between a finite

number of persons. The persons initiating or participating in the communication determine its recipients.

- 17. We recommend eliminating the terms "telecommunications common carrier," "Canadian carrier," and "telecommunications service provider" from the Telecommunications Act, with consequential amendments to refer to providers of defined functions and activities.
- 18. We recommend the following amendments to the *Telecommunications Act* to regularize a classbased approach to electronic communications regulation:
 - Amend paragraph 32(a) to broaden the CRTC's power to establish classes of service and service providers for purposes of the whole Act, not just the Act's Part III.
 - Consolidate sections 9, 24 and 24.1 to establish the CRTC's authority to establish class-based exemptions or conditions of service — like emergency services or privacy obligations — in a single provision that does not depend on the status of competition in a market but does require that the conditions be applied to a clearly defined class.
- 19. We recommend that the *Telecommunications Act* be amended to establish explicit jurisdiction over all persons and entities providing, or offering to provide, electronic communications services in Canada, even if they do not have a place of business in Canada.
- 20. We recommend that international telecommunications services licensing be replaced by CRTC-administered registration.
- 21. We recommend that instead of restrictions on acting as a "Canadian carrier", section 16 of the Telecommunications Act refer to restrictions on owning or operating a terrestrial transmission facility used to provide an electronic communications service.
- 22. We recommend that the CRTC have explicit responsibility for the administration of databases related to the functioning and location of telecommunications networks. Such databases would clarify who operates which facilities in which locations; help facilitate interoperation and deployment of new network facilities; and clarify connectivity gaps in rural and remote communities.
- 23. We recommend that the *Telecommunications Act* be amended to require market participants, in classes specified by the CRTC, to register and provide such information as the CRTC may specify, including beneficial ownership information. We further recommend that the CRTC maintain a public registry of such information that the CRTC has not found to be confidential.
- 24. We recommend that the policy objectives of the *Telecommunications Act* be amended to reflect that all Canadians, including those with disabilities, should have timely, affordable, barrier-free

- access to the advanced telecommunications necessary to fully participate in Canadian society and the global economy.
- 25. We recommend that the *Telecommunications Act* be amended to enable the CRTC to draw from an expanded range of market participants all providers of electronic communications services in designating required contributors to funds to ensure access to advanced telecommunications.
- 26. We recommend that the federal government engage with Indigenous Peoples and communities on how broadband expansion should be implemented in Indigenous communities and other related issues, such as Indigenous ownership of broadband networks.
- 27. We recommend that the *Telecommunications Act* be amended to require the Minister of Industry to submit an annual report to Parliament on the status of broadband deployment, including in rural and remote communities and with respect to Indigenous Peoples and communities.
- 28. We recommend that the telecommunications policy objectives of the *Telecommunications Act* include the following as an objective:
 - To foster a competitive market for the provision of electronic communications services primarily through reliance on market forces and, where required, through efficient and effective regulation.
- 29. We recommend that the *Telecommunications Act* be amended to explicitly require the CRTC to monitor and assess the state of competition in key electronic communications markets including the market shares of non-Canadian participants to ensure that rates are just and reasonable.
- 30. We recommend that the forbearance provisions be amended as follows:
 - The CRTC should not be permitted to forbear from the consolidated section 24/24.1 recommended above.
 - The CRTC should not be permitted to forbear from its affirmative obligation to ensure the justness and reasonableness of the rates that prevail in the market.
 - The CRTC should not be permitted to forbear from subsection 27(2) of the Act. The CRTC should have ongoing responsibility to address complaints of unjust discrimination or undue preference.
 - Eliminate the discretionary authority of the CRTC in subsection 34(1) of the Act to forbear from regulation in a market.
 - Allow the CRTC broader discretion as to when to employ regulatory tools, such as pre-approval of working agreements and of limitation of liability clauses, from which it has not forborne.

- Continue to require forbearance where the market is sufficiently competitive to protect the interests of users under subsection 34(2). The CRTC must, as a condition of forbearance from retail rate regulation, either mandate supply of related wholesale inputs or explain why it is unnecessary or inappropriate to do so.
- 31. We recommend that the CRTC's authority over tariffing be consolidated, specifying that tariffs (to be renamed "reference offers") must set out not only rates but also, at a minimum:
 - required terms and conditions;
 - details of associated operational processes; and
 - service supply and quality conditions.
- 32. We recommend that the CRTC be authorized to issue an interconnection order regarding any electronic communications service.
- 33. We recommend that direct access to numbering resources be broadened to all existing and prospective electronic communications service providers that are within the jurisdiction of the Telecommunications Act.
- 34. We recommend that to promote efficient network deployment, the *Telecommunications Act* be amended to require those providing electronic communications service to the public to grant access to their support structures at fair and reasonable rates and on a non-exclusive basis to persons who own or operate transmission facilities used to provide connectivity services to the public.
- 35. We recommend that sections 43 through 46 of the Telecommunications Act, which establish tools to support network deployment, replace references to specific entities (i.e. Canadian carriers, distribution undertakings) with persons who own or operate transmission facilities used to provide connectivity services to the public and prohibit any exclusive arrangement for the use of passive infrastructure.
- 36. The locations at which facilities must now be installed to pursue network deployment have broadened. We recommend that subject to any exclusions the CRTC may determine:
 - the CRTC's authority over passive infrastructure should clearly include access to all public property capable of supporting such facilities, such as street furniture;
 - the scope of access should include radiocommunication facilities and the telecommunications facilities necessary to operate them;
 - the scope of access should also include non-discriminatory access to the support structures of provincially regulated utilities;

- the Telecommunications Act should be amended to authorize the CRTC to mandate access to inside and in-building wire, support structures, and rooftops within and on multi-dwelling unit buildings and be available to all providers of an electronic communications service; and
- the Minister of Industry should assign operational oversight of the radio communication and broadcasting antenna siting process to the CRTC, including managing the interaction with municipalities and land-use authorities.
- 37. We recommend that the *Telecommunications Act* be amended to require the CRTC to consult with the relevant municipality or other public authority prior to exercising its discretion to grant permission to construct telecommunications facilities. We further recommend that the Act be amended to empower the CRTC to review and vary the terms and conditions of access to the support structures of provincially regulated utilities, to ensure non-discriminatory arrangements.
- 38. We recommend that to more effectively resolve disputes relating to mandatory antenna tower and site sharing, the Minister delegate the resolution of disputes relating to these or other conditions of licence to the CRTC. We further recommend that the Minister should, in existing conditions of licence, direct disputes to the CRTC rather than to commercial arbitration.
- 39. We recommend that the CRTC assume sole jurisdiction to mandate and establish terms and conditions of access to wholesale wireless services.
- 40. We recommend that the Radiocommunication Act be updated to ensure that all types of apparatus, systems, or any other thing that affect safe, secure, reliable, and interference-free radiocommunication in Canada are included in the Act's scope. We further recommend that the definitions in section 2 and the prohibitions in section 4 be reviewed as a whole to ensure that the following are included:
 - apparatus that is intended for or capable of being used for radiocommunication;
 - apparatus that unintentionally emit electromagnetic waves or frequencies for purposes other than radiocommunication;
 - apparatus that intentionally emit electromagnetic waves or frequencies for purposes other than radiocommunication; and
 - apparatus or any other system or thing that can block, interfere with, distort, or alter radiocommunication.
- 41. We recommend that to facilitate the shared use of radio spectrum, the Radiocommunication *Act* be amended to empower the Minister of Industry to:
 - establish mechanisms to facilitate trading or leasing of licences;

- administer databases or information, administrative, or operational systems that govern the use of radio spectrum under one or more classes of licences or licence exemptions; and
- delegate such administrative powers to any person.
- 42. We recommend that the Radiocommunication Act be amended to empower the Minister of Industry to establish conditions for the use of specific models of radio apparatus that have been exempted from licensing requirements in order to enable ongoing spectrum management between diffuse users of advanced technologies outside the licensed system. We further recommend that to reduce the regulatory burden associated with the introduction of new wireless technologies, the Act be amended to provide the Minister of Industry rather than the Governor in Council with the power to exempt models of radio apparatus from licensing requirements.
- 43. We recommend that the Minister of Industry be given responsibility for ensuring that communications devices and their operating systems respect security requirements, protect users' privacy, and incorporate accessibility features. Equipment standards established under the Telecommunications Act and the Radiocommunication Act should be revised to reflect those considerations.
- 44. We recommend the following amendments in order to update the communications equipment certification system:
 - amend the prohibition in 69.2 of the Telecommunications Act to include the manufacture of telecommunications apparatus;
 - expand the prohibitions in both the Telecommunications Act and the Radiocommunication Act to include "persons facilitating the importation, distribution, offer for sale, and sale of devices in Canada";
 - amend the provisions that currently empower the Minister and the Governor in Council to establish technical requirements and technical standards in relation to communications equipment, to include the power to establish standards in relation to the operating systems and software that run the devices; and
 - align the Minister of Industry's powers in relation to radio apparatus, interferencecausing equipment, and radio-sensitive equipment in order to authorize the creation of a registry system for equipment regulated under the *Radiocommunication Act* similar to that currently found under the Telecommunications Act.
- 45. We recommend that to ensure the trust and safety of users of electronic communications services, the policy objectives of the Telecommunications Act be amended to include the promotion of the security and reliability of telecommunications networks and electronic communications services.

- 46. Canada should not wait to establish security baselines that enhance trust in telecommunications markets. We recommend that the CRTC initiate a proceeding to update the *Security Best Practices for Canadian Telecommunications Service Providers* issued by the Canadian Security Telecommunications Advisory Committee and to determine to which classes of service providers these practices should apply.
- 47. We encourage the federal government and its lead agencies on national security and public safety to consider whether additional powers may be required on a coordinated or sector-specific basis to ensure that relevant electronic communications services and facilities remain safe and secure. In this review, the federal government should consider whether to replicate certain powers granted under the *Radiocommunication Act* in the *Telecommunications Act*.
- 48. We recommend that to safeguard continued access to an open Internet, which is fundamental to net neutrality:
 - The policy objectives of the *Telecommunications* Act be amended to reflect the CRTC's duty to safeguard open Internet access in Canada. This is intended to ensure that users have the right, via their Internet access service, to access and distribute lawful information and content, use and provide applications and services, and use terminal equipment of their choice, irrespective of the location, origin, or destination of the information, content, application, or service.
 - The term "Canadian carrier" in subsections 27(2) and (4) of the *Telecommunications Act* be deleted in favour of language allowing the CRTC to review unjust discrimination in the provision of any electronic communications service by any person.
- 49. We recommend that the CRTC expand its information gathering and reporting on network neutrality, including Internet traffic management practices, zero rating, and any further open Internet access provisions, including:
 - To require Internet service providers to inform users of network speeds and management practices when contracting for and providing the service, and to report annually to the CRTC on network management practices and their impacts.
 - To report annually, either as a stand-alone report or combined with other reporting, on practices that affect achievement of the open Internet access policy objective.
- 50. We recommend that the legislation governing the telecommunications sector include a provision setting out the policy objectives of the legislation in the following terms:
 - It is hereby affirmed that telecommunications perform an essential role in the maintenance of Canada's identity and sovereignty and to safeguard, enrich, and strengthen the social and economic fabric of Canada and its regions. The Canadian telecommunications policy has as its objectives:

- To promote timely, affordable, barrier-free access by all Canadians, including those with disabilities, to the advanced telecommunications necessary to fully participate in Canadian society and the global economy.
- To foster innovation and investment in high-quality, advanced connectivity in all regions of Canada, including urban, rural, and remote areas.
- To foster a competitive market for the provision of electronic communications services primarily through reliance on market forces and, where required, through efficient and effective regulation.
- To promote the security and reliability of telecommunications networks and electronic communications services.
- To contribute to the protection of the privacy and confidentiality of user information.
- To safeguard open access to the Internet.
- To promote the ownership and control of Canadian transmission facilities by Canadians.
- To promote the use of Canadian telecommunications facilities for electronic communications within Canada and between Canada and points outside Canada.

CREATION, PRODUCTION, AND 3. DISCOVERABILITY OF CANADIAN CONTENT

- 51. We recommend that the scope of the Broadcasting Act extend beyond audio and audiovisual content to include alphanumeric news content made available to the public by means of telecommunications, collectively known as media content. We further recommend that the definition of "program" in the Act be modernized and replaced by the following:
 - Media content means audio or audiovisual content or alphanumeric news content;
 - Audio or audiovisual content means sounds or moving images, or a combination of sounds and moving images, interactive or not, that are intended to inform, enlighten, or entertain and are made available to the public by means of telecommunications. However, this definition does not include such transmission when made solely for performance or display in a physical public place, or images that consist predominantly of alphanumeric text and are not accompanied by sounds;
 - Alphanumeric news content means news about current events that predominantly consists of alphanumeric text that is made available to the public by means of telecommunications.

- 52. We recommend that section 3 of the *Broadcasting Act* be amended to create a new declaration that:
 - the Canadian media communications sector, operating primarily in the English and French languages and comprising public, private, and community elements, uses interprovincial and international undertakings and facilities and provides, through its media content, a public service essential to the maintenance and enhancement of national identity, cultural sovereignty, and Canada's democracy;
 - the media communications sector serves to safeguard, enrich, and strengthen the cultural, political, social, and economic fabric of Canada.
- 53. We recommend that the policy objectives currently contained in section 3 of the Broadcasting Act be modernized to reflect the changing environment and be replaced by the following:
 - Canadians should have access to trusted, accurate, and reliable sources of news reflecting national, regional, and local perspectives from diverse sources and across all platforms.
 - Canadians should be able to find and access a wide range of media content choices, including Canadian choices, that are affordable and reflect a diversity of voices.
 - Canadians should be able to access and consume media content safely and securely and be assured that their data and privacy are respected and protected.
 - Media content undertakings should have a responsibility for the media content they provide.
 - The media communications sector should:
 - o invest in the development, creation, and distribution of high-quality Canadian content that competes at home and abroad and reflects Canadian diversity, with each undertaking making maximum use of Canadian creative and other resources in the creation and presentation of media content, taking into account its circumstances;
 - ensure the creation of and access to content by and for Indigenous Peoples, including Indigenous languages content;
 - ensure the creation of and access to content by and for official language minority communities;
 - meet the needs of Canadians with disabilities and ensure creation of and access to content by and for Canadians with disabilities;
 - consist of Canadian-owned and -controlled companies alongside foreign companies; and
 - promote the development of a strong Canadian production sector, including a robust independent production community.

- 54. We recommend that the Broadcasting Act apply to media content undertakings involved in the creation and distribution of media content. The term "media content undertaking", which would replace the term "broadcasting undertaking" in the Act, would include media curation undertakings, media aggregation undertakings, and media sharing undertakings, as follows:
 - Media curation undertaking means an undertaking whose primary purpose is to provide a service for the dissemination of media content over which it exercises editorial control. In this context, editorial control means effective control over the creation or selection of media content, including through agreements with rights holders with respect to its creation or dissemination.
 - Media aggregation undertaking means an undertaking that, in whole or in part, provides a service that aggregates and disseminates media content provided by media curation undertakings.
 - Media sharing undertaking means an undertaking that, in whole or in part, provides a service that enables users to share media content for which the provider does not have editorial control but which the provider organizes or controls.
- 55. We recommend that for greater certainty, the *Broadcasting Act* be amended to establish that the legislation applies to undertakings carried on in part within Canada, whether or not they have a place of business in Canada. This would include undertakings, persons, and entities that disseminate media content by telecommunications to Canadians or make media content available to Canadians for compensation. We further recommend that the reference to the sector as a single system that shall be owned and controlled by Canadians be removed from the Act.
- 56. We recommend that the existing licensing regime in the *Broadcasting Act* be accompanied by a registration regime. This would require a person carrying on a media content undertaking by means of the Internet to register unless otherwise exempt. Those carrying on a media content undertaking by means other than the Internet would continue to require a licence unless otherwise exempt.
- 57. We recommend that to implement the new registration regime, the *Broadcasting Act* be amended to provide that certain powers of the CRTC in section 9 with respect to licensing also apply to registration. This includes provisions that enable the CRTC to establish classes of registrants, to amend registrations, and impose requirements — whether through conditions of registration or through regulations — on registrants, including the payment of registration fees. This would also include imposing penalties for any failure to comply with the terms and conditions of registration.
- 58. We recommend that the CRTC have the power to exempt any media content undertaking or classes of media content undertakings from registration in instances in which — by virtue of

- its specialized content or format, revenues, or otherwise regulation is neither necessary nor appropriate to achieve media content policy objectives.
- 59. We recommend that subsection 5(2) of the *Broadcasting Act* be amended to provide further policy guidance to the CRTC so that the system is regulated and supervised in a flexible manner that:
 - ensures that regulation is equitable, reasonable, and proportional to the objective or outcome sought;
 - ensures that undertakings contribute in an appropriate manner to the creation, production, and discoverability of Canadian media content;
 - promotes transparency, responsibility, and accountability in the way undertakings operate; and
 - promotes public participation in regulatory proceedings.
- 60. We recommend that all media content undertakings that benefit from the Canadian media communications sector contribute to it in an equitable manner. Undertakings that carry out like activities should have like obligations, regardless of where they are located.
- 61. We recommend that the Broadcasting Act be amended to ensure that the CRTC may by regulation, condition of licence, or condition of registration:
 - impose spending requirements or levies on all media content undertakings, except those whose primary purpose is to provide a service for the dissemination of alphanumeric news content over which it exercises editorial control;
 - impose discoverability requirements on all media content undertakings, except those whose primary purpose is to provide a service for the dissemination of alphanumeric news content over which it exercises editorial control;
 - regulate economic relationships between media content undertakings and content producers, including terms of trade; and
 - resolve disputes between media content undertakings.
- 62. We recommend that in general, media curation undertakings have spending requirements rather than levies to support Canadian content. Levies should apply to media aggregation and media sharing undertakings. In circumstances in which spending requirements are inappropriate, levies should apply.
- 63. To ensure that Canadians are able to make informed choices and that Canadian content has sufficient visibility and is easy to find on the services that Canadians use, we recommend that the CRTC impose discoverability obligations on all audio or audiovisual entertainment media content undertakings, as it deems appropriate, including:

- catalogue or exhibition requirements;
- prominence obligations;
- the obligation to offer Canadian media content choices; and
- transparency requirements, notably that companies be transparent with the CRTC regarding how their algorithms operate, including audit requirements.
- 64. We recommend that the CRTC use its power to collect information and obtain consumption data from online media content undertakings and publish them in aggregated form.
- 65. We recommend that the government establish a single public institution tasked with funding the creation, production, and discoverability of Canadian productions on all screens. This institution will combine the functions of the Canada Media Fund and Telefilm Canada.
- 66. We recommend that the regulatory levy that formerly went to the Canada Media Fund be redirected to the Certified Independent Production Funds, as well as to other existing or new funds or programs approved by the CRTC.
- 67. We recommend that where media curation undertakings include new Canadian dramas and long-form documentaries in their offerings that count toward their regulatory obligations, the CRTC should set an expectation that all key creative positions be occupied by Canadians on a reasonable percentage of those programs. If the expectation is not met over time, the CRTC should consider converting it to a requirement.
- 68. We recommend that the federal government index to inflation parliamentary appropriations allocated to institutions supporting cultural media content.
- 69. We recommend that as a general principle, the government ensure that tax credits and funds are platform-agnostic and are accessible to all Canadian production companies, whether independent or broadcaster affiliated.
- 70. We recommend that the federal government ensure that the labour-based tax credit for journalism organizations announced in 2018 apply to undertakings that deliver alphanumeric, audio, or audiovisual news content on all platforms.
- 71. We recommend that the CRTC consider that some or all of the levies on media aggregation and media sharing undertakings contribute to the production of news content. These contributions would be directed to an independent, arm's length CRTC-approved fund for the production of news, including local news on all platforms. We further recommend that the CRTC consider redirecting a greater portion of the levy currently paid by broadcasting distribution undertakings to this same fund for the production of news.

- 72. We recommend that the relationship between social media platforms that share news content and the news content creators be regulated to ensure that news producers are treated fairly where there is an imbalance in negotiating power. Consistent with the earlier Recommendation 61, the CRTC should have the specific jurisdiction to regulate economic relationships between media content undertakings and content producers, including terms of trade. This would include media content undertakings that make alphanumeric news content available to the public.
- 73. We recommend that to promote the discoverability of Canadian news content, the CRTC impose the following requirements, as appropriate, on media aggregation and media sharing undertakings:
 - links to the websites of Canadian sources of accurate, trusted, and reliable sources of news with a view to ensuring a diversity of voices; and
 - prominence rules to ensure visibility and access to such sources of news.
- 74. We recommend that the *Broadcasting Act* be amended to ensure that the CRTC can by regulation, condition of licence, or condition of registration impose codes of conduct, including provisions with respect to resolution mechanisms, transparency, privacy, and accessibility regarding all media content undertakings.
- 75. We recommend that the *Broadcasting Act* be amended to give the CRTC the power to provide partial or additional relief, to issue conditional and interim decisions, and to issue *ex parte* decisions where the circumstances of the case justify it.
- 76. We recommend that the *Broadcasting Act* be amended to ensure that the CRTC can by regulation, condition of licence, or condition of registration impose reporting requirements, including with respect to financial information, consumption data, and technological processes such as algorithms, on all media content undertakings.
- 77. We recommend that to strengthen the compliance regime for both licences and registrations, the *Broadcasting Act* be amended to include provisions for Administrative Monetary Penalties, similar to the general scheme in the *Telecommunications Act*, with maximum thresholds set at a level high enough to create a deterrent for foreign undertakings.
- 78. We recommend that to address piracy, sections 9 and 10 of the *Radiocommunication Act* which state that it is an offence to decode, retransmit, or operate devices, equipment, or components to receive unlawfully decrypted subscription programs be moved to the

Broadcasting Act and be expanded to include all forms of media content, whether received through satellites or the Internet.

- 79. We recommend that to ensure the national public broadcaster is able to adapt to a more open, global, and competitive media communications environment, the *Broadcasting Act* be amended to remove the specific reference to radio and television in the mandate of CBC/Radio-Canada. This would ensure that CBC/Radio-Canada is able to provide a wide range of media content that informs, enlightens, and entertains on multiple platforms and media.
- 80. We recommend that the Broadcasting Act be amended to add the following elements to the mandate of CBC/Radio-Canada:
 - reflecting local communities and audiences;
 - providing national, regional, and local news;
 - reflecting Canadian perspectives on international news;
 - reflecting Indigenous Peoples and promoting Indigenous cultures and languages;
 - showcasing Canadian content to international audiences; and
 - taking creative risks.

We further recommend that the Act be amended to ensure that the national public broadcaster has the objects and powers it needs to deliver on its updated mandate.

- 81. We recommend that the Broadcasting Act be amended to require the federal government to enter into funding commitments of at least 5 years with CBC/Radio-Canada, based on discussions with the Corporation on its funding needs, including those required to carry out its updated mandate and taking into account inflation and projected revenues from advertising and subscriptions. We further recommend that CBC/Radio-Canada gradually eliminate advertising on all platforms over the next five years, starting with news content.
- 82. We recommend that the Broadcasting Act be amended to enshrine an open, transparent, and competency-based appointment process for Governor in Council appointments of CBC/Radio-Canada's Chair, President, and Board of Directors. This amendment should also require that the appointments process ensure diversity, gender parity, and representation from Indigenous and minority groups.
- 83. We recommend that the *Broadcasting Act* be amended to shift the CRTC's role from licensing individual services of CBC/Radio-Canada to overseeing all its content-related activities. We further recommend that the CRTC report to the Minister of Canadian Heritage annually on the status of CBC/Radio-Canada's performance of its mandate.

- 84. We recommend that while awaiting the adoption of legislative amendments, the government urgently issue directives to the CRTC, requiring that it hold a hearing and issue a new exemption order to impose obligations on Internet programming undertakings that generate a certain minimum revenue in Canada.
- 85. We recommend that the federal government require foreign media content undertakings to collect and remit the GST/HST.

IMPROVING THE RIGHTS OF CANADIANS 4. AND ENHANCING TRUST IN THE DIGITAL **ENVIRONMENT**

- 86. We recommend that the *Telecommunications Act* be amended to require the CRTC to study the affordability of telecommunications services periodically and, if necessary, to implement measures to improve affordability for marginalized Canadians from diverse social locations.
- 87. We recommend that the objectives of the Telecommunications Act and the Broadcasting Act be amended to include accessibility of services covered by the respective Acts by persons with disabilities to recognize the importance of barrier-free access to communications services, and entrench accessibility above and beyond the Accessible Canada Act.
- 88. We recommend that the CRTC Act be amended to require the CRTC to create and fund participation in an Accessibility Advisory Committee to meet, at a minimum, on an annual basis, and to publish reports on these meetings. We further recommend that a delegate of the Accessibility Advisory Committee be an ex officio member of the Public Interest Committee recommended in Recommendation 15 of this Report.
- 89. We recommend that the federal government, together with provincial and territorial authorities, develop a national digital literacy strategy to empower users of communications and digital services to make informed choices and conduct their online activities safely. We further recommend that the *Telecommunications Act* and *Broadcasting Act* be amended to grant the CRTC authority to examine and report on digital and media literacy.
- 90. We recommend that the objectives of the Telecommunications Act and the Broadcasting Act be amended to include a commitment to protecting the privacy and confidentiality of user information with respect to communications services covered by the respective Acts.
- 91. We recommend that the Personal Information Protection and Electronic Documents Act be adapted as appropriate to ensure adequacy with emerging global standards, except for any standards that may be inconsistent with Canadians' fundamental right to freedom of expression.

- 92. We recommend that Statistics Canada, the CRTC, the Competition Bureau, the Office of the Privacy Commissioner and other relevant regulatory authorities be charged by the federal government with examining the use of Big Data by dominant online platform providers and potential threats to privacy, competition, consumer protection, cultural sovereignty, democratic institutions, and taxation, and make recommendations on legislation that may be appropriate to address these matters.
- 93. We recommend that the Ministers of Canadian Heritage and of Industry direct the CRTC to gather information, audit, and intervene, if necessary, with regard to how services covered by the Broadcasting Act and the Telecommunications Act combine algorithms and artificial intelligence with Big Data, in order to respond quickly to changes in the communications services, improve transparency, and promote trust.
- 94. We recommend that the federal government introduce legislation with respect to liability of digital providers for harmful content and conduct using digital technologies, separate and apart from any responsibilities that may be imposed by communications legislation. Given that the challenges in this area are global in nature, we also encourage the federal government to continue to participate actively in international fora and activities to develop international cooperative regulatory practices on harmful content.
- 95. We recommend that the federal government regularly review the efficiency of enforcement mechanisms for monitoring and removing illegal content and conduct found online. Given the diverse range of governing frameworks for these matters in Canada, we encourage the federal government to coordinate with provincial and territorial governments.
- 96. We recommend that in order to better protect the interest of consumers, the *Telecommunications* Act and the Broadcasting Act be amended to entrench and expand the role of the Commission for Complaints for Telecom-Television Services in statute, by enabling the CRTC to:
 - create and approve the mandate and structure of an independent, industry-funded, communications consumer complaints office with the authority to investigate and resolve complaints from individual and small business retail customers of services covered by the respective Acts;
 - require the office to report publicly on its handling of complaints, periodically and no less than annually; and
 - take action on consumer issues identified by the office and report annually on measures taken to address those issues.

- 97. We recommend that the CRTC review periodically its consumer protection framework for services covered under the *Telecommunications Act* and the *Broadcasting Act*, having regard to consumer trends and habits, and systemic consumer issues identified by the independent communications consumer complaints office. We further recommend that in order to ensure consistent minimum standards with respect to consumer protection, the CRTC:
 - take into account any provincial and territorial consumer protection measures that may impact communications services when adopting consumer protection measures; and
 - provide justification in those instances in which it adopts consumer protection measures that provide for lesser protection than those in any given Canadian jurisdiction.

1. RENEWING THE INSTITUTIONAL FRAMEWORK

1.1 INTRODUCTION

In the face of constant and disruptive technological change, a modern legislative framework for Canada's communications sector must be flexible and adaptable to achieve its stated policy objectives. To this end, in this chapter, we outline our vision for a reimagined communications regulator that is proactive, forward-looking, and has the ability to anticipate and adapt to a constantly changing environment. Our recommended changes to the institutional framework would ensure that this framework is appropriately designed and equipped to operate efficiently and effectively in the best interests of Canadians.

In this chapter, we explore three main themes. First, we take an in-depth look at the approach, composition, and enforcement powers of the communications regulator, as well as the creation of a sustainable source of financial support for the Canadian Radio-television and Telecommunications Commission (CRTC or Commission). Second, we examine the appropriate allocation of responsibilities among the various government bodies involved in regulating or overseeing the communications sector, and we recommend changes that are better suited to an era of constant and rapid technological change. Finally, we look at how to encourage greater participation by public interest groups in proceedings under the statutes we are reviewing.

1.2 THE CURRENT INSTITUTIONAL FRAMEWORK

Canada's communications legislation provides for two regulatory agencies: the CRTC and Innovation, Science and Economic Development Canada (ISED).

The CRTC is established under the *Canadian Radio-television and Telecommunications Commission Act* (CRTC Act). It is also assigned broad responsibilities under both the *Broadcasting Act*, whose scope is currently audio and audiovisual content transmitted in Canada and the *Telecommunications Act*, which deals with all other electronic communications in Canada. Both statutes establish a series of policy objectives and make the CRTC responsible for ensuring that Canada's communications environment meets them.

Under the *Telecommunications Act*, the CRTC is empowered to supervise telecommunications service providers, particularly carriers that own or operate a physical communications network, in accordance

with the stated policy objectives. Currently, the CRTC's primary regulatory tools relate to the rates charged for telecommunications services, interconnection and access to carrier networks, use of rights-of-way over public land, unjust discrimination or undue preferences exercised in the marketplace, and control over content. The forbearance powers under the *Telecommunications Act* provide guidance as to when to refrain from exercising these tools. Further, the Act provides the CRTC with enforcement powers, including the ability to impose Administrative Monetary Penalties (AMPs).

Although the *Broadcasting Act* makes much use of the word "broadcasting," its statutory meaning parted ways long ago with the term's ordinary sense of one-to-many or over-the-air transmissions. The CRTC is required by the *Broadcasting Act* to regulate and supervise all aspects of the Canadian audio and audiovisual media environment, with a view to implement the policy that this Act establishes. Its primary regulatory tools consist of licensing or exempting classes of undertakings, imposing conditions of licence or of exemption, and passing regulations. Any change in control of a licensed undertaking is subject to CRTC approval. Audio and audiovisual activity on the Internet is exempt from licensing requirements.

In parallel to the CRTC, ISED houses Canada's radiocommunication regulatory functions. The *Radiocommunication Act* assigns to the Minister of Industry the responsibility to determine to whom a radio or spectrum licence may be issued and to fix the related terms and conditions. In addition, it also provides the Minister with responsibility for planning the allocation and use of the spectrum. A number of powers with respect to technical aspects of communications regulation are also assigned under both the *Radiocommunication Act* as well as the *Telecommunications Act*. In carrying out these responsibilities, the Minister of Industry may have regard for the policy objectives established in the *Telecommunications Act*.

Two different federal departments supervise regulatory functions with broad policy responsibilities for the communications sector:

- ISED has responsibility for telecommunications policy. This responsibility flows from ISED's general mandate to improve conditions for investment, enhance Canada's innovation performance, increase Canada's share of global trade, and build a fair, efficient, and competitive marketplace. It extends to more specific telecommunications policy, supervisory, and review powers under both the *Telecommunications Act* and the *Radiocommunication Act*.
- The Department of Canadian Heritage has responsibility for broadcasting policy as part
 of its general mandate to foster and promote Canadian identity and values, cultural
 development, and heritage. The CRTC submits its annual report of activities to the Minister
 of Canadian Heritage.

The Ministers of Industry and of Canadian Heritage are both members of, and advise, the Governor in Council (GiC), which is essentially the Prime Minister and Cabinet. The GiC oversees the CRTC in three key ways. First, the GiC may issue to the CRTC binding directions on broad policy matters and

on the licensing and use of broadcasting frequencies. Second, the GiC may set aside or refer back to the CRTC any decision to issue, amend, or renew a broadcasting licence, and may set aside, refer back, or simply revise all or part of any CRTC telecommunications decision. Finally, the GiC may require the CRTC to make a report on any matter within its jurisdiction under either Act.

In addition to the political oversight exercised by the Ministers of Industry and Canadian Heritage, and by the appeal avenue to the GiC, the courts provide narrower judicial oversight of communications regulatory decisions. Specifically, CRTC decisions are appealable to the Federal Court of Appeal, with leave, on questions of law or jurisdiction. Decisions made by the Minister of Industry under the Radiocommunication Act are subject to judicial review.

A REIMAGINED CRTC 1.3

1.3.1 A Proactive and Forward-Looking Style of Regulation

The communications landscape has changed dramatically as a result of technological change, and the role of the CRTC and its approach to regulation must change as well.

As a first step, the terminology in the legislative framework that sets out its responsibilities must be updated, as much of it has not kept up with changes in the digital environment. The landscape in telecommunications has become larger and now includes a broad range of electronic communications services provided over the Internet. Although the term "broadcasting" in the Broadcasting Act was redefined in 1991 to embrace wire as well as radio transmission, the name of the CRTC still dates back to the pre-Internet era. Since 1976, the full name of the Commission has been the following:

The Canadian Radio-television and Telecommunications Commission (CRTC) Le Conseil de la radiodiffusion et des télécommunications canadiennes (CRTC)

This name is now out of step in a world in which communications have moved beyond conventional radio and television stations. The word "Radio-television" might have been acceptable when "broadcasting" was defined to mean transmission using the radio spectrum only, but the term is no longer appropriate.

The title of the CRTC in the French language also raises problems. The word "radiodiffusion" is used to mean "broadcasting" and suggests that it is limited to transmission by radio.

With these considerations in mind, we propose that the name of the CRTC be changed to the following:

The Canadian Communications Commission (CCC) Le Conseil des communications canadiennes (CCC)

The word "communications" is a more inclusive word. It already appears in the names of similar regulatory agencies in other countries. Examples include the FCC in the United States, and the Australian Communications and Media Authority (ACMA) in Australia. In the United Kingdom, the regulatory authority is the Office of Communications, commonly known as Ofcom, which describes itself as the regulator for the communications services that we use and rely on each day. Use of the word "communications" in the name of the Canadian communications regulator would signal the recognition of the wider role that the Commission will be playing in the future.

The titles of certain of the statutes under review should also be modernized to reflect their wider scope. While no change is necessary to the *Radiocommunication Act*, the title of the *Broadcasting Act* should be changed to the *Media Communications Act* and the title of the *Telecommunications Act* should be changed to the *Electronic Communications Act*. These changes are reflective of the expanded scope of activity in these sectors and corresponding legislative changes that we are recommending.

Recommendation 1: We recommend that to better reflect the expanded role and responsibilities of the communications regulator and the broader scope of communications legislation, terminology be modernized as follows:

- The name of the Canadian Radio-television and Telecommunications Commission be changed to the Canadian Communications Commission, and the title of the Act governing the CRTC be changed to the Canadian Communications Commission Act.
- The title of the Broadcasting Act be changed to the Media Communications Act.
- The title of the *Telecommunications Act* be changed to the *Electronic Communications Act*.

1.3.2 An Enhanced Focus on Research and Data

Communications services will continue to change — with increasing speed, and in unforeseen ways that will raise issues of public interest. In place of a system composed of a handful of well-known players in well-defined categories, communications markets will feature rapid entry and exit, innovation from all sides, and complex new business models that will be difficult to characterize in consistent ways. The regulatory processes and practices currently in place are not necessarily well suited to address such a dynamic environment. Rapid and continuous change in the communications and broader technological environment demands adaptation and new approaches.

Looking ahead, the CRTC must shift to a more proactive and forward-looking style of regulation. Rather than an administrative tribunal that hears evidence commissioned and presented by third parties, the CRTC must be reinvented with an enhanced focus on strategic foresight and research.

This shift would not only inform the regulatory agenda but also serve as a common and important source of information for all stakeholders. In our view, the CRTC should be mandated and funded to undertake and publish third-party research reports and analyses. These would serve as a primary enabler of evidence to ensure informed participation in regulatory processes. This model is in effect in Australia through the Bureau of Communications and Arts Research; in the United Kingdom,

Ofcom is required by legislation to conduct public opinion research regarding a range of matters and has a duty to publish and take account of research. Similarly, the CRTC should publish more extensive data to enable all participants to access reliable, relevant, and consistent information on the markets in question and the issues being considered. This reimagined regulator must have the resources and expertise to analyze large data sets and release reports in machine-readable format that redress information asymmetries between providers and users.¹

To regulate in such a dynamic environment requires the CRTC to have a deep understanding of, and knowledge base related to, the markets it regulates. To this end, the CRTC should also have an increased role in monitoring market behaviour and outcomes through information gathering and analysis, and through identifying areas where action may be necessary or appropriate. A proactive, strategic CRTC will need to generate and sift through a broader base of information, much of it from non-traditional sources, to identify the most appropriate and targeted action to take.

As the principal communications regulatory body, the CRTC has much of the authority and ability to undertake this shift. Its powers have allowed it to act in an effective, efficient, and proportionate manner to authorize market entry and oversee the state of competition in certain markets, targeting intervention as necessary and appropriate. However, the CRTC does not have the explicit authority to collect information from all service providers that operate in Canada's broadcasting environment as it does under the *Telecommunications Act* where it has broad powers to obtain and, where necessary, investigate any information reasonably necessary to administer its legislation. We recommend that this power be added to the *Broadcasting Act*, recognizing that confidential information would remain protected from public disclosure where the resulting harms would outweigh the public interest in it.

Recommendation 2: We recommend that to provide the CRTC with flexible powers to monitor existing markets and to develop a stronger research and strategic foresight capability, the following amendments be made:

- The CRTC Act be amended to require the CRTC to maintain accurate market data, and conduct, commission, and publish reports and evidence-based information on key issues and trends for the benefit of all Canadians.
- The Broadcasting Act be amended to include information gathering and investigatory powers similar to those set out at sections 37-39 and 70-71 of the Telecommunications Act.

Autorité de la concurrence, AMF, Arafer, Arcep, CNIL, CRE, CSA, Nouvelles modalités de régulation – la régulation par la donnée (8 July 2019).

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1.3.3 Appointment and Role of Commissioners

Commissioners will be the individuals leading the CRTC's shift toward a future-oriented, proactive, and data-driven style of regulation built around market monitoring and enforcement. The transformation of the CRTC must extend to the competencies of its Commissioners, to the size and location of their complement, and the style of their ongoing engagement with representative groups that give voice to Canada's diversities.

It is important to note that a number of countries have seen the need to enshrine in legislation the competencies that regulatory Commissioners must possess. In Australia, for example, the *Competition and Consumer Act* requires that the Treasurer of Australia be satisfied that an appointee to the Australian Competition and Consumer Commission has knowledge of, or experience in, industry, commerce, economics, law, public administration, or consumer protection, before an appointment can be made. It has been proposed that qualifications for appointees to the technical telecommunications regulator, the Australian Communications and Media Authority, also be set out in legislation.

Canada has thus far adopted a different approach, although it has taken several important steps in formalizing the public appointments process in recent years. Job descriptions have been prepared for most Order in Council appointments, which include a statement of the qualifications that must be met. Jobs are then advertised and interested parties must apply. The government has indicated in its advertisements for CRTC Commissioners that preference may also be given to women, Indigenous Peoples, persons with disabilities, and members of visible minorities, to increase the diversity of backgrounds of those who hold public office. Recent appointments to CRTC Commissioner roles were screened against advertisements articulating required education and experience, as well as diversity. We consider that these changes have improved the appointment process and enhanced public trust and confidence in the CRTC.

With respect to size and location, the CRTC Act provides that the GiC may appoint up to 13 full-time members to the CRTC for up to five years, with the possibility of reappointment. The GiC may also direct the CRTC to establish a regional office. In this event, one of the members must be designated to reside in that region. There are currently nine members, of which only the Chair and two Vice-Chairs reside in the National Capital area: the remaining six are regional Commissioners. In contrast, comparator countries have far fewer members and none has a significant majority of members residing in different areas of the country.²

In our view, having such a large number of Commissioners spread across five different time zones can complicate and delay the decision-making process. It may also, over time, encourage Commissioners to consider themselves as advocates for a particular region, rather than a member of a collegial group

Michael H. Ryan, A Comparative Analysis of Institutional Frameworks for the Communications Sector in Canada, the United States of America, Australia, the United Kingdom, France and Germany (2019).

bringing awareness of, and sensitivity to, regional concerns. While it is essential in a federation, such as Canada, to have representation from different parts of the country, there is considerable value in informal daily exchanges and interactions among people bringing different experiences and perceptions to an issue.

We consider that a more effective approach would be to reduce the number of CRTC Commissioners and locate all of them in the National Capital area. Commissioners should be appointed for a single term of up to seven years. One should be appointed as Chair. Given the smaller number of Commissioners and the blurring lines between telecommunications and broadcasting issues, a single Vice-Chair should be appointed, with a clearly designated role to act in the Chair's stead when required, rather than be associated with a specific part of the CRTC's mandate, as it is today.

We recognize that reducing the number of Commissioners may also reduce opportunities to reflect Canada's diverse communities. Other countries have struggled with ways to ensure that the regulator's perspective is informed by a diversity of inputs and influences. In Germany, the telecommunications regulator receives input from an Advisory Council representing different levels of government that can provide input from a regional perspective. Members of both Australia's ACMA and the United Kingdom's Competition and Markets Authority (CMA) can be supplemented by Associate Members assigned to participate in certain cases or proceedings. In the United States, the FCC receives input from advisory committees providing perspectives on a broad range of issues. The United Kingdom's Ofcom receives the input of the Communications Consumer Panel as well as regionally based advisory committees.

We recommend in section 1.5.2 the creation of a Public Interest Committee to provide Commissioners with broad and varied input on a regular basis with respect to matters within the CRTC's jurisdiction. This would balance the need to improve the CRTC's decision-making process by reducing the number of members with the need to diversify the sources of input to decisions.

Recommendation 3: We recommend that to ensure an open and transparent appointment process for Commissioners, section 3 of the CRTC Act be amended to require that qualified candidates be selected from applicants through an open call, guided by published, merit-based criteria

Recommendation 4: We recommend that sections 3, 5, 6, and 10.1 of the CRTC Act be amended to reduce the maximum number of Commissioners to a Chair, a Vice-Chair, and up to seven additional Commissioners, each appointed for a single term of up to seven years. For the term of their appointment, Commissioners should reside in the National Capital Region or within a prescribed distance thereof.

1.3.4 Transparency

We attach great importance to engendering trust in the institutional framework governing communications. In order to enhance trust, we think that the communications regulator should have a greater focus on transparency — regarding its decision-making process, the goals it pursues, the evidence it takes into consideration, and who addresses which decision-makers and when. Canadians should expect that regulatory decisions are based on a record that is publicly available, not information provided through *ex parte* contacts.

At present, transparency with respect to contacts with decision-makers is assured through the *Lobbying Act*. However, only certain contacts between industry participants and Designated Public Office Holders (DPOHs) are reportable. Commissioners who are not a Chair or Vice-Chair as well as most senior CRTC and ISED regulatory staff, are not DPOHs. Moreover, communications that are not directly tied to regulatory and policy proposals, or to the award of financial benefits, are not generally reportable. This approach stands in stark contrast to, for instance, strict rules relating to *ex parte* contacts put in place by the FCC in the United States.

A full review of transparency mechanisms and their potential pitfalls, including the importance of ongoing deep engagement by the CRTC and by ISED as spectrum regulator with their stakeholders, is beyond the scope of our work. Such a review would likely require broader study with respect to the *Lobbying Act* and its intersection with regulated environments. However, measures to increase transparency within the existing broad legislative framework can be taken now, for example, by designating Commissioners currently appointed under the CRTC Act as DPOHs, with whom lobbying contacts are reportable. The CRTC should also proactively include materials from any informational meeting on the record of a subsequent relevant proceeding, and make agendas and materials left behind by stakeholders available before they become subject to an access to information request.

Recommendation 5: We recommend that to ensure transparency, the CRTC and ISED be required to identify the classifications of those regulatory officials with whom stakeholder contacts would be required to be publicly reported.

1.3.5 Oversight

The role of government is to establish broad policies. The role of regulators is to implement those policies through specific rules and in a transparent and predictable fashion. Legislation is the key instrument through which government establishes these policies. It should provide sufficient guidance to assist the CRTC in the discharge of its duties, but sufficient flexibility for it to operate independently

in deciding how to implement sector policy. To achieve this, legislative statements of policy should set out broadly framed objectives and should not be overly prescriptive.³

In our Report, we address whether and how the policies now embodied in the current legislative framework should be modified to provide guidance to the regulator. However, we are also aware that with the rapidly changing communications environment, it will be challenging to anticipate all likely outcomes in new legislation. Legislation, once implemented, is difficult to amend on a timely basis.

The statutes provide tools to the government to help further guide the regulator. As noted in section 1.2, under the Broadcasting Act or the Telecommunications Act, the GiC may require the CRTC to make a report with respect to any matter within its jurisdiction. Similarly, the GiC has the power to issue binding policy directions in furtherance of the overall objectives of the Act in question. These tools seem ideally suited to the current environment in which rapid change is occurring, and where flexibility and adaptability take on greater importance. It should be noted that the Radiocommunication Act allows the Minister of Industry in their regulatory role to have regard for Canadian telecommunications policy objectives.

However, these powers must be exercised in a manner that provides proper balance between the government's role in policymaking and the regulator's role in implementing those policies independent of government influence. The power to issue policy directions is subject to several procedural safeguards to ensure this balance and to reflect the fact that it is the executive branch rather than the legislative branch of government that is acting. The proposed direction must be published in the Canada Gazette and be presented before each House of Parliament, from which it is referred to a committee for review. There are also requirements to consult with the CRTC.

Notwithstanding these safeguards, we believe that the current approach to exercising the power of policy direction is unnecessarily cumbersome, time consuming, and has been limiting the ability of the government to fine-tune policy in light of the rapid pace of change in the communications sector. The process should encourage government to state its policy by way of policy direction on a timely basis and in a manner that reflects the full range of stakeholder interests. In these circumstances, we believe that the current process for issuing policy directions should be amended to be consistent with the process followed for the issuance of Orders in Council related to legislative matters, by simply requiring the government to publish a proposed policy direction for public comment and then to publish the comments received in response. Further, the public notice should set out how and to what extent a proposed policy direction is intended to modify or replace an earlier one.

Michael H. Ryan, A Comparative Analysis of Institutional Frameworks for the Communications Sector in Canada, the United States of America, Australia, the United Kingdom, France and Germany (2019).

Subsection 5(1.1) of the *Radiocommunication Act* currently provides that the Minister of Industry may have regard to the objectives of the Canadian telecommunications policy set out in section 7 of the *Telecommunications Act*. In our view, this subsection should be amended to state that the Minister shall have regard to these objectives. Further, the Minister should have regard for any policy directions made with respect to the *Telecommunications Act* when exercising their authorities.

Recommendation 6: We recommend that to facilitate the Governor in Council's use of power to issue policy directions to the CRTC, the following amendments be made:

- Subsections 8(1-2) of the *Broadcasting Act* and 10(1) of the *Telecommunications Act* be amended to require simple publication of the proposed direction, with a 45-day comment period, to be followed by publication of all interventions.
- Subsection 5(1.1) of the *Radiocommunication Act* be amended to provide that the Minister of Industry shall have regard, in regulating radiocommunication, not only for the objectives of the Canadian telecommunications policy, but also for any policy directions issued by the Governor in Council under that Act.

We have concerns regarding the powers to review CRTC decisions. Like Canada's, the legislation in some other jurisdictions empowers the executive branch of government to issue policy directions. But none couples this power with the ability to review a sector regulator's decision: Canada is alone among comparator jurisdictions in allowing the government both to direct the CRTC and to review its subsequent decisions. In fact, a substantial body of literature calls for the reform or abolition of GiC reviews, particularly where there is the power to issue policy directions.⁴

While the GiC has rarely exercised its power to review,⁵ private parties have nonetheless made frequent requests when they are dissatisfied with a CRTC decision. The possibility of an appeal to the GiC does provide an important safety valve in cases in which the CRTC's decision deviates from the government's policy view. However, the existing framework has inconsistent timeframes, results in delay and uncertainty, and may exclude consumer and other non-profit groups that cannot afford to participate. We recommend that the current framework for GiC appeals be modified in three ways.

First, the timelines set out in the two Acts should be harmonized to require applications within 60 days of a decision, rather than 45 days (in the *Broadcasting Act*) or 90 days (in the *Telecommunications Act*), reducing confusion and easing administrative burden. The GiC's response would be due within 180 days of the date of the CRTC decision, rather than 90 days (in the *Broadcasting Act*) or a year (in the *Telecommunications Act*).

⁴ Michael H. Ryan, A Comparative Analysis of Institutional Frameworks for the Communications Sector in Canada, the United States of America, Australia, the United Kingdom, France and Germany (2019), footnote 150.

Michael H. Ryan, A Comparative Analysis of Institutional Frameworks for the Communications Sector in Canada, the United States of America, Australia, the United Kingdom, France and Germany (2019), para 178.

Second, the government's options for responding to the GiC appeal of a telecommunications decision, under section 12 of the *Telecommunications Act*, should be limited to rescinding the decision or referring it back to the CRTC as in the case of GiC appeals of broadcasting decisions to issue, amend or renew a licence. It should not include the ability to vary the decision in question.

Third, both Acts should be modified to provide that an appeal that the GiC has not responded to within the allotted time is deemed to have been denied.

Recommendation 7: We recommend that to enhance the consistency, transparency, and predictability of the process for appeals of individual CRTC decisions to the Governor in Council, the provisions for such appeals in both the Broadcasting Act and Telecommunications Act be amended to:

- synchronize their timelines by requiring that an application be filed within 60 days of a CRTC decision and that Governor in Council make a decision within 180 days of the date of said CRTC decision;
- harmonize their scope, by eliminating the power to vary a decision from section 12 of the Telecommunications Act; and
- provide that an appeal to which the Governor in Council does not respond within the allotted time is deemed to have been denied.

We also looked at the CRTC's powers to review and vary decisions.

Courts have determined that when an administrative body uses the powers delegated to it by statute to make a decision, that decision can "be revisited because the tribunal has changed its mind, made an error within jurisdiction or because there has been a change of circumstance" only if the statute expressly provides such a review power.

Section 62 of the *Telecommunications Act* provides such a review power. The CRTC issues guidelines from time to time on how it will exercise the power. These guidelines describe what distinguishes review of a past decision from an application for a new one. They also set out the timeframe during which the review must be filed.⁷ In the past, the CRTC was willing to accept such applications within six months of the original decision.8 In 2010, it shortened this timeframe to 90 days, which may be extended if the CRTC "is of the opinion that it is just and equitable to do so."9

⁶ Chandler v. Alberta Association of Architects [1989] 2 SCR 848, p 861.

Telecom Information Bulletin CRTC 2011–214, Revised guidelines for review and vary applications (25 March 2011).

⁸ Telecom Public Notice CRTC 98-6, Guidelines for review and vary applications (20 March 1998).

CRTC Rules of Practice and Procedure, SOR/2010-277; Telecom Information Bulletin CRTC 2011-214, Revised guidelines for review and vary applications (25 March 2011), para 8.

Like the GiC review power, the CRTC's review and vary power is an important safety valve but consumes significant staff resources and may be used as a delay tactic, leading to uncertainty for those impacted by a CRTC decision. To increase regulatory certainty, we recommend that the timeline for exercise of the CRTC's review and variance power be entrenched directly in the statute.

Recommendation 8: We recommend that to increase regulatory certainty, the timeline for the exercise of the CRTC's review and variance power be entrenched directly in the statute, by amending section 62 of the *Telecommunications Act* to provide that a decision to review, rescind, or vary a decision or to rehear a matter be made within 120 days of the close of the record of the proceeding.

1.4 ENHANCING INSTITUTIONAL COOPERATION

As a sector-specific regulatory agency, the CRTC is mandated to implement legislation intended to resolve and balance competing policy objectives. This may require it to apply a multidisciplinary or polycentric lens to supervising the communications sector. In doing so, the CRTC must often work with other agencies that, in contrast, focus on a particular discipline or function across sectors, rather than taking a broad lens to activity in one particular sector. For example:

- The Commissioner of Competition acts under the *Competition Act* to review mergers and acquisitions, including those affecting the communications sector; and to assess any anticompetitive behaviour of firms, such as telecommunications carriers, with market power. This review may, for instance, look at predatory pricing, access to essential facilities, and refusal to deal.¹⁰
- The Director of Investments reviews non-Canadians' new investments into Canada and acquisitions of control in Canadian businesses, provided they clear certain thresholds. These reviews, undertaken under the *Investment Canada Act*, include most foreign takeovers of Canadian telecommunications companies.
- The Office of the Privacy Commissioner oversees the collection, use, and disclosure of personal information in the course of commercial activity, including activity in the communications sector.

Different approaches may be used to manage these complementary responsibilities. One approach is to partner in transposing broad single-disciplinary guidance into binding industry-specific rules. Another is to establish a protocol for dividing up this detailed work between the agencies in a way that meets

the policy goals of both. It takes thoughtful coordination to manage complementary authority in a way that applies the most appropriate tools to solving each problem and avoids regulatory uncertainty.

In our view, the current allocation of responsibilities creates the potential for overlap. The Competition Act grants explicit jurisdiction to the Competition Bureau to look into allegations that a dominant firm has engaged in a practice of anti-competitive acts, with the result that competition has been prevented or lessened substantially in a market. This could include allegations related to predatory pricing, a refusal to supply access to facilities, margin squeezing, and other issues that arise in the context of telecommunications services. The Competition Bureau also has an explicit mandate to investigate anti-competitive agreements. At the same time, both the Telecommunications Act and regulations adopted under the Broadcasting Act grant to the CRTC broad jurisdiction over similar behaviour through provisions aimed at preventing a Canadian carrier or broadcasting undertaking from unjustly discriminating against or giving an undue preference toward any person, including itself.

Other countries have struggled with finding the appropriate balance in assigning and coordinating responsibility for redressing anti-competitive behaviour that engages non-economic policy objectives set out in sector-specific legislation. In the United Kingdom, for example, Ofcom and the Competition and Markets Authority exercise some competition powers concurrently. In order to avoid confusion about which agency will act in a particular case, the regulators are required to consult each other whenever one receives an application that raises competition law issues. In Germany, the competition regulator must consult the telecommunications regulator before taking decisions in cases relating to prohibited conduct by dominant telecommunications undertakings.

Transactions and behaviour that affect fulfillment of the Canadian telecommunications and broadcasting policies, the analysis of which requires economic expertise, regularly come before both the CRTC and Competition Bureau. It is noteworthy that the CRTC and the Competition Bureau have, on their own motion, entered into several agreements related to mutual notification and exchange of information regarding matters of overlapping jurisdiction.¹¹ The Letter of Agreement between them commits that each will notify the other, but only on matters "of significant public importance," where the matter being reviewed "could be carried out by the other Party under its mandate," and "where possible and subject to their respective confidentiality obligations." Further, there is no requirement for the CRTC and the Competition Bureau to consult one another on a matter requiring both telecommunications or broadcasting policy and competition law expertise.

There is also inconsistency between the *Telecommunications Act* and the *Broadcasting Act* with respect to the sharing of confidential information submitted to the CRTC. Section 39 of the Telecommunications

Letter of agreement between the Chairman and Chief Executive Officer of the Canadian Radio-television and Telecommunications Commission and the Commissioner of Competition of the Competition Bureau (23 September 2013), p 2; CRTC/Competition Bureau Interface (2001).

Act sets out rules regarding the designation and disclosure of confidential information submitted to the CRTC: where certain information has been designated as confidential by a person who submits it to the CRTC, it may not be disclosed if disclosure would likely allow a person to benefit from or use the information in a way that prejudices any person to whom it relates. Exceptions to this limitation permit the CRTC to disclose designated information where it determines that disclosure is in the public interest. The CRTC may also, upon request, disclose information relevant to competition issues to the Commissioner of Competition. Additional rules impose confidentiality obligations on the Commissioner of Competition and Bureau officials regarding designated information so disclosed. There is no such regime for disclosure of confidential information to the Commissioner of Competition in the Broadcasting Act.

The Competition Bureau has a long-standing record of intervening before the CRTC with regard to both telecommunications and broadcasting matters that raise significant competition issues. However, analyses on such matters as market definition and market power often require access to comprehensive data sets that may not be available on the public record. Furthermore, there are situations where the CRTC may not be in possession of the types of data required for a robust analysis. Accordingly, where the Competition Bureau intervenes in a proceeding before the CRTC — and requires access to relevant data that is not in the possession of the CRTC — the Commission should be authorized to require this information from the party in possession of the information and provide the Competition Bureau with access.

Recommendation 9: We recommend that to ensure that the CRTC and the Competition Bureau are each able to share expertise:

- the *Broadcasting Act* and *Competition Act* be amended to give each agency access to confidential information filed with the other, similar to the provisions set out in the *Telecommunications Act*;
- the *Telecommunications Act* and the *Broadcasting Act* be amended to authorize the CRTC to require a party to produce information relevant to competition issues requested by the Commissioner of Competition in the context of an intervention pursuant to section 125 of the *Competition Act*;
- the agencies be encouraged to revise their Letter of Agreement to require mutual notification of all matters requiring both telecommunications or broadcasting policy and competition law expertise; and
- the agencies advise the Minister of Industry on an annual basis of those matters not notified and reasons for their exclusion, so that the Minister of Industry is able to identify any remaining barriers to mutual notification and consultation.

It is also critical to ensure coordination regarding the review of foreign investment in the communications sector. Currently, substantial foreign investment is reviewed under the Investment Canada Act, by either the Director of Investments appointed by the Minister of Industry, in respect of most businesses, or by the Minister of Canadian Heritage with the advice of the department's Cultural Sector Investment Review Office, in respect of cultural businesses.

For a number of years, Canadian telecommunications and broadcasting markets were dominated by domestic providers. That is changing. In the telecommunications sector, where non-Canadians were always permitted under certain conditions to act as telecommunications service providers, restrictions on owning or operating an underlying physical network have been lifted for all but the largest telecommunications companies. In the broadcasting sector, Canadians subscribe increasingly to audio and audiovisual media services programmed and transmitted by providers outside Canada: only the traditional broadcasting sector transmitted over the air or through dedicated networks is subject to Canadian ownership and control.

Although foreign ownership and control within the communications sectors may impact the policy objectives that the CRTC is charged with implementing, there is no requirement that the Director of Investments or Cultural Sector Investment Review Office consult with the CRTC in the course of their review of foreign investments' net benefit to Canada. We believe that formalized coordination would enhance the outcomes of the review of foreign investments.

Recommendation 10: We recommend that the Ministers of Industry and Canadian Heritage inform the CRTC upon receiving notification of foreign investment in businesses providing Canadian communications services, in order that the CRTC have the ability to provide advice on any telecommunications or broadcasting policy issues.

Like the Competition Bureau, Director of Investments, and Cultural Sector Investment Review Office, the Office of the Privacy Commissioner (OPC) has oversight responsibility for a functional area that cuts across a broad, and growing, range of industry sectors.

The OPC administers the *Personal Information Protection and Electronic Documents Act* (PIPEDA), the federal, private-sector privacy legislation, which grants it explicit jurisdiction to look into allegations that a firm's collection, use, or disclosure of personal information is not in keeping with the principles set out in that statute. The OPC has frequently acted to address the behaviour of companies regulated by the CRTC with respect to privacy. At the same time, the Telecommunications Act and, indirectly, the Radiocommunication Act include the protection of the privacy of persons as a key policy objective. In chapter 4 of this Report, we call for a parallel policy objective to be added to the *Broadcasting* Act. These statutory provisions provide important safeguards but also create the potential for overlap between the CRTC and OPC.

Steps should be taken to convert this potential overlap into productive collaboration. The relationship between and the information sharing provisions applying to the CRTC and the Commissioner of Competition provide a valuable model that should be put in place with the Privacy Commissioner.

Recommendation 11: We recommend that to ensure that the CRTC and ISED have the means to align their approaches with respect to embedding the privacy principles overseen by the Office of the Privacy Commissioner within communications services, technologies, and business processes, the following amendments be made:

- The provisions in section 39 of the *Telecommunications Act* on information sharing with the Commissioner of Competition, and any similar provisions adopted under the *Broadcasting Act*, be extended to the Privacy Commissioner.
- The provisions in section 23 of the *Personal Information Protection and Electronic Documents Act* on consultation, agreements and arrangements, and information sharing with provincial counterparts be extended to include federal institutions whose functions and duties relate to privacy within particular industry sectors.

1.5 ENABLING BROAD PARTICIPATION

CRTC proceedings and, increasingly, ISED-initiated processes involve multi-stakeholder consultations. This ensures that regulatory processes are forward-looking and informed and that a broad and diverse range of voices and perspectives is heard and taken into consideration in the decision-making process. This approach is essential to creating public trust in the integrity of the regulatory process and enhancing both the quality and the credibility of the outcomes. Our Recommendation 2 in section 1.3.2 of this Report, to disclose more research and data to the public are intended to help support proactive stakeholder engagement, identify emerging issues and concerns, or provide advice on the formulation of potential solutions.

Funding mechanisms have been put in place to facilitate public interest group participation in CRTC processedings, as follows:

• With respect to telecommunications proceedings, the CRTC exercises its broad powers under the *Telecommunications Act* to award interim or final costs. Applicants who have participated responsibly and contributed to a better understanding of the issues may apply for reimbursement of costs that correspond to a cost schedule developed by the CRTC. Other parties, such as telecommunications service providers and industry organizations, that participated in the proceeding are required to pay these costs, which they may also contest through a further process.

• For broadcasting proceedings, the CRTC has created an independent Broadcasting Participation Fund (BPF)¹² using tangible benefits funding from broadcast licence transfers. The BPF has identified fund depletion as a key risk, in view of already high ownership concentration and the resulting decrease in potential tangible benefits.

No provision has been made to support public interest participation in proceedings under the Radiocommunication Act.

Notwithstanding the mechanisms that are in place, public interest groups face several challenges, including resource constraints that limit the effectiveness of their participation and their contribution to the overall quality of the proceeding in question. There is a significant disparity in the resources available to these groups relative to industry participants in CRTC proceedings. This affects the public interest groups' ability to undertake research, retain experts, and develop in-house expertise. This situation is exacerbated by the uncertainty associated with cost awards, whose claimants do not know how much of their claim will be approved when their participation decisions must be made.

The administration of telecommunications cost awards and the BPF awards are not aligned in terms of process, source of funds, timeliness, administrative burden, or legislative basis. Neither process provides funding of cost awards outside the context of CRTC proceedings, including GiC and court appeals of CRTC decisions. There are also challenges related to the timeliness of payments. The cost award process in telecommunications proceedings has become lengthy, resulting in increased delays in the adjudication of cost claims and negatively impacting public interest participation. More focus and attention must be brought to this issue, along with a streamlined reimbursement process. Similar concerns do not appear to exist within the process administered by the BPF regarding broadcasting proceedings.

The process to obtain funding is also adversarial and cumbersome. Current CRTC practice is to conduct a process in which the industry participants in the proceeding can challenge the claimant's expenses, contributing to conflict and delay. The cost award process should be administered by dedicated staff with expertise in this area in order to ensure consistent claims determinations.

1.5.1 Stable, Predictable Funding

As a matter of principle, we believe there must be recognition of and support for the role of public interest groups in communications regulatory proceedings as a critical element in ensuring the credibility of and trust in the regulatory process. Such support is particularly urgent at present: the administrative procedure involved in cost awards in telecommunications proceedings is becoming unwieldy, and funding for cost awards in broadcasting proceedings is dwindling. Further, the impact

Broadcasting Regulatory Policy CRTC 2012-181, Broadcasting Participation Fund (26 March 2012), para 24.

of the lack of cost awards under the *Radiocommunication Act* will increase as the spectrum and device regulatory framework for future 5G, machine-to-machine communication, and the Internet of Things is developed.

It is essential to find a means for ensuring stable, predictable, and long-term funding for public interest groups. This funding should support participation in proceedings, development of in-house expertise by public interest groups, and involvement in broader public consultation processes. It should also create a uniform model for telecommunications and broadcasting proceedings, with a parallel approach to radiocommunication proceedings.

A number of models have been proposed to assure such funding. One model proposes a multi-year commitment by government rather than costs imposed on telecommunications service providers. We are concerned that this may be unrealistic and could be subject to budgetary uncertainty. Another approach explored in the United Kingdom is the creation of an operationally independent "consumer advocate". This approach is funded directly by government, whose mandate could include conducting research, promoting the consumer interest, advocating on behalf of consumers in key policy and regulatory proceedings, and advising industry on achieving improved consumer outcomes. While we propose a new Public Interest Committee in Recommendation 15 below, which would help inform the CRTC in advance of formal proceedings, there are concerns with an approach that establishes a single public interest advocate to participate in the proceedings themselves. Funding a single entity to advocate on behalf of consumers might narrow the diverse views that would be put forward relative to funding for independent public interest groups that represent a variety of perspectives. Moreover, such an advocate reliant on a single source of government funding may be constrained in its operational independence.

Public interest funding that supports multi-stakeholder involvement in proceedings should be considered an essential element of regulatory operations. To ensure a proper and consistent statutory requirement for funding, cost award powers similar to those set out at subsections 56(1) and 56(2) of the *Telecommunications Act* should be added to the *Broadcasting Act*. Similarly, under the *Radiocommunication Act*, participation in consultations held by ISED should be supported with departmental funding. To this end, ISED should establish a program to assess and grant requests for funds from public interest groups that participate in proceedings under that Act.

Recommendation 12: We recommend that to promote public interest group participation in regulatory proceedings:

- the Broadcasting Act be amended to provide the CRTC with explicit authority to award costs, similar to the authority granted under subsections 56(1) and 56(2) of the Telecommunications Act;
- ISED establish a funding program to support participation in proceedings under the Radiocommunication Act; and
- the provisions concerning cost awards in the Broadcasting Act and Telecommunications Act be amended to include appeals that flow from decisions so that public interest intervenors are not left behind on appeals.

To further entrench public interest funding in regulatory operations, it should be included in the regulators' operational funding assessments and funded from current sources. In telecommunications and broadcasting, the CRTC's costs of regulatory operations are borne by market participants as regulatory fees calculated based on proportion of industry revenue. To fund radiocommunication regulatory operations, ISED draws directly from the Treasury Board, with licensing and spectrum fees similarly finding their way back to general government revenues.

Recommendation 13: We recommend that the Broadcasting Act and the Telecommunications Act be amended to include public interest participation funding in the operational funding requirements of the CRTC, and that this be included in the expenditure plans for Broadcasting Activity and Telecommunications Activity costs recovered under the Broadcasting Licence Fee Regulations and Telecommunications Fee Regulations, respectively. We further recommend that ISED's operational funding include amounts to be directed to public interest participation.

Finally, in order to address the timeliness and predictability challenges created by the way in which funding is distributed, the CRTC should design a transparent, non-adversarial process with clear service standards and broader scope for participation.

Recommendation 14: We recommend that the CRTC convene a public consultation on establishing a transparent process for funding public interest participation regarding telecommunications or broadcasting based on the following elements:

- to ensure transparency, the CRTC would be required to report quarterly on the status of cost claims and their disposition;
- to ensure timeliness, the funding process would be subject to a three-month service standard with a six-month upper limit for the completion of cost awards. The CRTC would be required to report annually on compliance with this standard; and
- to eliminate lengthy and adversarial processes, the new process would be administered either by CRTC staff directly or delegated to an independent organization modelled along the lines of the Broadcasting Participation Fund.

1.5.2 Equitable Opportunities for Consultation

Unlike regulated market participants, who have both the incentive and ability to sustain regular contact, the diverse range of public, consumer, and small business interests often remain unorganized or unrepresented before the CRTC. We believe there must be institutional practices to formalize the opportunity for public interest groups to provide advice as part of the decision-making process.

We considered the option of informal interaction with public interest groups to understand their concerns and perspectives before initiating a formal consultation process. This would mitigate the asymmetry that currently exists between public interest groups and private industry participants in terms of their ability to interact regularly with the CRTC on an informal basis. However, we think that a better model is to legislate the establishment of and formal engagement with a Public Interest Committee. This Committee would represent the interests of consumers, with inclusion of public interest representatives from diverse perspectives including marginalized consumers.

This Committee would work directly with the CRTC to promote understanding of public interest issues and to provide advice in advance or as part of the decision-making process. In turn, the CRTC would provide the Committee with regular updates with respect to its proposed work plan. These updates would enable public interest groups to anticipate upcoming proceedings and better prepare for their participation. The model expressed in the United Kingdom's *Communications Act 2003* is an appropriate benchmark.¹³

Our Recommendation 2 to mandate the CRTC to undertake and publish third-party research reports and analysis will also help ensure informed participation in regulatory processes and enable all

¹³ United Kingdom, Communications Act 2003, c 21, ss 16-19.

participants to access reliable, relevant, and consistent information on the markets in question and the issues being considered.

Recommendation 15: We recommend that the CRTC Act be amended to require the creation of a Public Interest Committee funded by the CRTC and composed of not more than 25 individuals with a wide range of backgrounds, skills, and experience representing the diversity of public, civic, consumer, and small business interests, and including Indigenous Peoples. The CRTC should be encouraged to meet with representatives of Indigenous Peoples and communities outside of the Committee structure. The Committee should also include, as an ex officio member, a representative of the Accessibility Advisory Committee called for in Recommendation 88.

2. AFFORDABLE ACCESS TO ADVANCED TELECOMMUNICATIONS NETWORKS

2.1 INTRODUCTION

Canadians rely on advanced telecommunications services to connect, communicate, innovate, consume, study, work, and participate in Canadian society, in economic, social and cultural networks, and in an increasingly global digital economy. Economic prosperity depends more and more on investment in high-quality telecommunications networks throughout Canada. Telecommunications legislation must foster innovation and the efficient roll-out of new and upgradable infrastructure to increase network functionality and capacity to meet the needs of individual Canadians for safe, secure, high-quality and ubiquitous telecommunications services and to permit businesses, governments, and not-for-profit organizations to adapt their business models and grow and compete domestically and internationally.

Canadians' growing reliance on advanced telecommunications services to participate fully in the economy and society has raised questions about access to and pricing of underlying broadband connectivity, both wireless and wireline. The ability to navigate a connected society requires advanced telecommunications infrastructure that is available at affordable rates in all regions of Canada and barrier-free to all Canadians, including those living with disabilities.

Meanwhile this growing reliance on communications services also raises issues related to the safety and security of Canada's telecommunications infrastructure. Inadequate network security can affect the capacity of governments and of service providers to respond effectively to new threats and can undermine the trust Canadians have historically placed in their telecommunications system. Canadians are also raising questions about how adequately privacy issues are addressed when they use applications provided over telecommunications facilities.

Two of the key legislative pillars in Canada for addressing these issues are the *Telecommunications Act* and the *Radiocommunication Act*. However, these pieces of legislation were developed almost three decades ago at a time when Canadians were used to receiving a limited suite of telecommunications services — telephony, fax, and limited video and data transmission — from a few regional monopolies.

In this chapter, we will explore four main themes. Section 2.2 examines the ways in which the telecommunications ecosystem has fundamentally evolved since the current legislative framework was first crafted and the implications of these changes, particularly for the definitions and scope of

the *Telecommunications Act* and for the framework relating to Canadian ownership and control of telecommunications networks. It also addresses what, if any, information is needed to help understand how these core legislative provisions should apply in the future.

Second, section 2.3 reviews what is needed to bring broadband Internet connectivity and the consequent benefits to all Canadians, by examining both where and why this connectivity is unevenly deployed and what is needed to close the gaps. As part of this review, a number of studies that have commented on the state of competition in wireless and wireline telecommunications markets are looked at. Barriers to competition from a legislative and regulatory perspective are also identified and addressed.

Third, section 2.4 looks at what is needed to unlock the advanced networks of tomorrow with the deployment of 5G technology and beyond. New network architecture will have implications for the regulatory framework, with features that range from the proliferation of physical infrastructure, to the evolution of spectrum management and the equipment and devices that will connect users and objects.

Finally, section 2.5 examines what is needed to ensure fair and secure access to services, reviewing the implications of technological change for network security and the core principles of network neutrality.

2.2 REDEFINING THE TELECOMMUNICATIONS ECOSYSTEM

The current *Telecommunications Act* came into force in 1993, barely a year after the CRTC opened up the long-distance market to competition in Canada. At that time, the telecommunications industry was controlled by a handful of Canadian-owned and -controlled regional monopolies, offering traditional telecommunications services. The implications of the CRTC's decision were enormous: over the next decades, new players entered the telecommunications market, challenging the dominance of the telephone companies and seeking access to their networks and services. Canadians saw growth not only in long-distance telephone competition but also in competition based on wireless and broadband technologies.

A critical element in these changes was the rapid adoption of Internet Protocol (IP)-based networks, which provided new ways to transmit telecommunications and led to the creation of the World Wide Web, an ubiquitous, global, user-friendly network of networks. This shift to IP has facilitated the development of less costly networks and spawned a proliferation of new services often riding on top of these new networks. It has opened the door to a global market where distance is no longer a limiting factor in people's ability to communicate.

These developments allowed new, international players to offer cross-border business and wholesale services that competed with regional monopolies and with their upstream suppliers, often at

substantially lower rates, outside the purview of regulatory oversight. All these rapid changes to the services, providers, and economics of the telecommunications industry show no signs of slowing down. Now, Canadians' reliance on their local providers is limited to obtaining connectivity to a fast-evolving, international marketplace for applications and functionalities. An intensely competitive environment for communications applications and services provides options that range from voice to email, messaging, video chat, social media, and many more.

These changes have significant implications for the current approach in the *Telecommunications Act* in establishing the scope of the CRTC's activities and specifically in defining which providers and services are subject to its jurisdiction. They also underline the need for the proactive approach to regulation of telecommunications and broadcasting identified in this Report's previous section 1.3.

2.2.1 Scope of the Legislation

Service providers are defined in the Telecommunications Act with the assumption that most communications services will be provided by "carriers" using network infrastructure that they own or operate, as was the case when the current Telecommunications Act was drafted. The bulk of the Telecommunications Act's regulatory tools are therefore applicable to "Canadian carriers." A more limited set of powers is defined in respect of services provided by those that do not own or operate transmission facilities.

The rise of IP-based networks has challenged this regulatory asymmetry. They have facilitated communications services that use, but do not require control of, telecommunications networks that can be deployed more easily than ever before. They have also facilitated the development of social media. Operators of related network facilities may continue to provide vertically integrated services. However, as long as network neutrality is respected, services that communicate over top of the connectivity the Internet provides can compete on nearly equal footing with them.

In order to ensure that like activities are treated in a technologically and competitively neutral manner, the scope of regulation should be framed according to the activity in question, rather than the user or provider performing it. While it will remain necessary to continue to define the rights and responsibilities of those involved in facilitating, providing and using telecommunications services, it is time to move away from regulation based on whether or not a provider owns and operates transmission facilities.

As such, the current range of services can be thought of in terms of distinct categories of electronic communications activities:

The establishment and maintenance of telecommunications facilities that may be used to provide telecommunications. These facilities include the wires, cables, wireless radios, and other systems for the transmission of intelligence between network termination points, but

- exclude the "exempt transmission apparatus" that establish logical connections atop the physical facilities.
- The provision of connectivity whose principal feature is the conveyance of intelligence by means of telecommunications facilities, like Internet access or local exchange services. In offering this functionality, which is synonymous with what is today referred to as a "basic telecommunications service", the provider transmits the user's information in a manner that is virtually transparent in terms of interaction with endpoint-supplied intelligence.
- Services delivered over top of the connectivity referred to above, whether facilitating interpersonal communications between particular users, like voice conversations, broader social media interaction, or other types of communications.

A single undertaking may choose to simultaneously engage in more than one of the foregoing activities. However, there is a need to allow for regulation of each of the forgoing as distinct activities and while providing flexibility for the development of emerging services.

The *Telecommunications Act* should be amended to replace "telecommunications service" with a new term, "electronic communications service." This service will include connectivity services and interpersonal communications services. Identifying three distinct categories of electronic communications services without limiting the generality of the existing definitions, will clarify the scope of activity subject to regulatory oversight, including over-the-top providers operating as interpersonal communications services. The categories will also facilitate the CRTC's applying specific regulatory requirements to each as it finds appropriate.

It should be noted that these definitions will not apply to activities governed exclusively by the *Broadcasting Act*. In this regard, section 4 of the *Telecommunications Act*, which excludes broadcasting, should be retained.

Recommendation 16: We recommend that the definitions in the *Telecommunications Act* be amended to replace "telecommunications service" with "electronic communications service," which means a service provided by means of telecommunications facilities and, without limitation, includes:

- the provision in whole or in part of telecommunications facilities and any related equipment by sale, lease, or otherwise;
- connectivity service, a service whose principal feature is the conveyance of intelligence by means of telecommunications facilities; and
- interpersonal communications service, a service that enables direct interpersonal and interactive exchange of information via telecommunications facilities between a finite number of persons. The persons initiating or participating in the communication determine its recipients.

This is not, however, a wholesale rewrite of the Telecommunications Act's definitions, many of which will continue to play a critical role. The Act would retain and continue to build on the term "telecommunications," promoting consistency. Similarly, policy objectives will continue to apply to telecommunications as a broad activity, rather than to specific categories of electronic communications services. However, it would abandon the term "telecommunications service" as a term of art in order to align Canada more closely with other jurisdictions that either ascribe narrower definitions to "telecommunications," as in the United States, or use "electronic communications" as the broader umbrella term, as in the European Union. This will also help avoid the confusion that could result from giving old terms new meanings.

In the same way, the current *Telecommunications Act* incorporates an elegant scheme for distinguishing the transmission facilities that establish networks between locations, from other telecommunications facilities like switches and routers, used to move traffic through these networks. As more network functions become encapsulated in software, a growing proportion of the investment required to deliver the most advanced services will shift toward this networking technology.

The shift toward defining the activity being performed will be facilitated by carrying forward the current Telecommunications Act's definition of a telecommunications service (but under the new term "electronic communications services"). To ensure an approach that focuses on the functions and activities that fall within the scope of the legislation and refers instead to providers of the defined functions and activities, it is time to eliminate terms like "telecommunications common carrier", "Canadian carrier", and "telecommunications service provider."

This will require consequential amendments to numerous sections of the legislation, many of which we have indicated in the recommendations that follow. For instance, while substantive changes to the current provisions on ownership and control set out at section 16 of the Act are not recommended, wording changes will be required in order to focus on the ownership or control of transmission facilities, rather than on "Canadian carriers." In the same way, retaining the exclusion of broadcasting activities from the Act will require the definitional updates suggested both by these changes and those outlined in the following chapter 3 on media content (which captures our recommendations for regulation of the sector traditionally referred to as broadcasting).

Recommendation 17: Werecommendeliminating the terms "telecommunications common carrier," "Canadian carrier," and "telecommunications service provider" from the Telecommunications Act, with consequential amendments to refer to providers of defined functions and activities.

There are two important limitations on the scope of the Telecommunications Act. The numerous regulatory powers that the Telecommunications Act establishes over the telecommunications activities of "telecommunications common carriers" are limited to those which own or operate the transmission

facilities that carry telecommunications services that are provided (a) to the public and (b) for compensation.

The recommended elimination of the definition of "telecommunications common carrier" and "Canadian carrier" will cause these two limitations to disappear. In our view, this elimination is appropriate in a modern context. Considerations like privacy, customer confidentiality, and network security are so important that the CRTC should be able to enforce them irrespective of whether a network or service is provided to the public. With communications services now supplied routinely in exchange for personal data provided knowingly, or automatically generated information harvested without full and informed consent, drawing lines between services provided for direct, indirect, or no compensation is increasingly irrelevant.

Not all forms of regulation should apply to all types of electronic communications services. However, in place of the blanket limitations that were embedded in the definition of "telecommunications common carrier," which are no longer appropriate, the legislation should give the CRTC authority to tailor any limitations to specific regulatory powers. In that context, the Commission's ability to establish classes of services and service providers subject to class-wide terms and conditions will become increasingly important. By establishing and addressing such classes, the Commission can respond to changing circumstances and apply regulation purposefully to achieve specific policy objectives and address specific types of harm to the public. At the same time, by requiring the CRTC to establish broad conditions of service by way of class, the Telecommunications Act will promote regulatory consistency and accountability.

Recommendation 18: We recommend the following amendments to the *Telecommunications Act* to regularize a class-based approach to electronic communications regulation:

- Amend paragraph 32(a) to broaden the CRTC's power to establish classes of service and service providers for purposes of the whole Act, not just the Act's Part III.
- Consolidate sections 9, 24 and 24.1 to establish the CRTC's authority to establish class-based exemptions or conditions of service — like emergency services or privacy obligations — in a single provision that does not depend on the status of competition in a market but does require that the conditions be applied to a clearly defined class.

A growing number of over-the-top communications services that do not have a physical presence in Canada actively target, advertise, and provide services to Canadians who in turn rely increasingly, for interpersonal communications and other communications services, on these services.

Subsection 3(3) of the Radiocommunication Act identifies circumstances in which it applies to radiocommunication activity undertaken outside Canada's contiguous territory, such as onboard Canadian ships, vessels, spacecrafts, and on structures affixed to Canada's continental shelf. More broadly, courts have been willing, on careful consideration, to expand their understanding of what constitutes a real and substantial connection to include the carrying on of a business of providing goods or services to residents of a given jurisdiction.¹⁴

The Minister of Industry's toolkit for cross-border radiocommunication coordination has proven adequate thus far, and the Radiocommunication Act's territorial approach comports with that of peer jurisdictions. Although it will be important that ISED maintain a watching brief to ensure continued fit for purpose, changes to the Radiocommunication Act regarding territoriality are not recommended at this time. However, the same cannot be said for services accessed and delivered over the Internet in a way that actively markets to and arranges their service for Canadian markets. It is no longer efficient to leave this question to case-by-case court decision-making. The Telecommunications Act's jurisdiction over these services should be clarified.

Recommendation 19: We recommend that the Telecommunications Act be amended to establish explicit jurisdiction over all persons and entities providing, or offering to provide, electronic communications services in Canada, even if they do not have a place of business in Canada.

The international telecommunications services licensing power was created to address concerns that there would be information gaps as services moved outside a monopoly regime in international telecommunications traffic.

Many of the CRTC's counterparts have moved to replace more heavy-handed licensing requirements with lighter-touch registration regimes. A similar change to the Canadian telecommunications legislation would achieve two purposes: modernizing the approach to licensing and regularizing the CRTC's ability to maintain a registry of electronic communications service providers as part of a broader scheme for market monitoring.

However, to be clear, we are not recommending changes to the second licensing power, with respect to international submarine cables, delegated to the Minister of Industry to facilitate international coordination and address domestic security concerns.

Recommendation 20: We recommend that international telecommunications services licensing be replaced by CRTC-administered registration.

Equustek Solutions Inc. v. Jack, 2015 BCCA 265, affirmed in Google Inc. v. Equustek Solutions Inc., 2017 SCC 34; South Dakota v. Wayfair, Inc., 585 US ____(2018).

2.2.2 Foreign Ownership

Foreign investment is an important source of competitive intensity and economic efficiency. At the same time, Canada's largest telecommunications companies are deeply integrated into our economy. Their head offices call for skilled employment and sophisticated external business services. Their securities listings help drive domestic financial markets. Their accessibility creates avenues for addressing growing concerns regarding data sovereignty and security.

It was not until 1993 that statutory restrictions on non-Canadian ownership and control over transmission facilities — a key element in providing telecommunications services — were introduced.

These restrictions have been gradually relaxed in subsequent years. Major amendments adopted in 2012 and 2014 implemented the recommendations of Parliamentary committees and of telecommunications and competition policy panels by eliminating restrictions on all but the largest telecommunications companies.¹⁵ Since that time, it has been open to non-Canadians to acquire Canadian wireless spectrum, buy or build Canadian fibre networks and wireless towers, and generally, to compete openly in our markets. Only terrestrial network facilities whose owners earned more than 10 per cent of Canadian telecom service revenues in a year have been subject to restrictions. In practice, this has meant that only the foreign takeover of Bell, Rogers, or TELUS remain restricted non-Canadian investment activities under the *Telecommunications Act*. 16

The balance struck by these 2012 revisions to the *Telecommunications Act* and 2014 revisions to the Radiocommunication Regulations should be maintained. However, we are concerned that perceptions of broader foreign investment restrictions than those in existence — may dampen actual inbound investment. We are surprised, for instance, that the CRTC's monitoring activities have not extended to establishing baseline figures regarding the volume of foreign investment in telecommunications markets and facilities before and after the 2012 and 2014 amendments.

To address this, and in line with this Report's other recommendations for modernizing the Telecommunications Act, the Act's section 16 establishing these restrictions should be simplified. Instead of restrictions on operating as a "Canadian carrier," section 16 should frame its restrictions as ones on owning or operating a terrestrial transmission facility — that is, a system for the transmission of intelligence between terrestrial network termination points in Canada.

Recommendation 21: We recommend that instead of restrictions on acting as a "Canadian carrier", section 16 of the Telecommunications Act refer to restrictions on owning or operating a terrestrial transmission facility used to provide an electronic communications service.

Jobs, Growth and Long-Term Prosperity Act, SC 2012, c 19, ss 595-601 (amending the Telecommunications Act); Regulations amending the Radiocommunication Regulations, SOR/2014-34.

CRTC, Communications Monitoring Report (2018); Figure 3.1 (total telecommunications services revenues).

2.2.3 Better Information on Network and Network Ownership

We have recommended throughout this Report that the CRTC adopt a proactive orientation that spots market distortions and systemic challenges early on, puts users in a position to advocate for themselves, and leads a monitoring and measurement ecosystem that minimizes the need for more invasive intervention. This orientation will require increased economic and survey research, catalyzing crowdsourced data, analyzing large data sets, and issuance of machine-readable market information that redresses information asymmetries between providers and users.

These responsibilities must be accompanied by the appropriate powers and toolkit needed to enforce and remediate when necessary. The CRTC has the power to compel information from anyone if it is necessary for the administration of the Telecommunications Act. But it lacks broad-based tools, such as a registration scheme, that would facilitate regular monitoring and measurement obligations. Instead, the CRTC relies on other powers—including the information-gathering power and a selfstanding power to compel those providing international telecommunications services to hold a CRTC licence. This has been addressed in Recommendation 20.

Registration and a registry of basic market participant information is a first step to the dataoriented, proactive approach we believe future-oriented regulation requires. In addition, the CRTC must also maintain detailed information to resolve gaps in broadband deployment, with a holistic understanding of where networks have been deployed and who is providing service. Similarly, to understand where competitive markets in transport facilities and services have been sustained on specified routes requires the following: an inventory detailing where facilities have been deployed and where service-based competition is feasible given the locations at which market entrants have reasonable access.

The Telecommunications Act already grants the CRTC all the powers it needs to collect this information; to assess and maintain confidentiality; and, where needed, to appoint an investigator to round out its data set. In keeping with the expanded market oversight role of the CRTC recommended elsewhere in this Report, the CRTC should exercise these powers to assume responsibility for data collection and the creation of databases on network deployment and the location of services.

We recommend revising section 46.1 of the *Telecommunications Act* in this light. The CRTC should ensure the necessary security and confidentiality regarding such a database given its importance as an ongoing resource in relation to the CRTC's activities, and its potential to enhance market transparency. For instance, certain geographic data sets could facilitate competition through careful, considered disclosure of relevant information.

Recommendation 22: We recommend that the CRTC have explicit responsibility for the administration of databases related to the functioning and location of telecommunications networks. Such databases would clarify who operates which facilities in which locations; help facilitate interoperation and deployment of new network facilities; and clarify connectivity gaps in rural and remote communities.

Recommendation 23: We recommend that the *Telecommunications Act* be amended to require market participants, in classes specified by the CRTC, to register and provide such information as the CRTC may specify, including beneficial ownership information. We further recommend that the CRTC maintain a public registry of such information that the CRTC has not found to be confidential.

The data analysis and research capacity described above, and earlier in this Report, are not a radical departure for the CRTC. This approach would amplify and augment existing activity and move this work from the periphery of how the CRTC conducts its work to the centre. For some years, the CRTC has made use of its existing powers to publish an annual Communications Monitoring Report. Some of the report's charts and figures are made available as open data, providing baseline information on market shares and on network deployment. Augmenting this capacity and deepening the CRTC's knowledge base of the state of network deployment will further the achievement of objectives outlined below in this Report with respect to broadband deployment and enhancing affordability.

We are cognizant that in assigning to the CRTC clearer responsibility for information collection, spatial and crowdsourced data processing, and economic analysis, the CRTC will have to carefully review its capacity and skills to deliver. This is consistent with the shift that is required for a future-oriented regulator. It is increasingly common for communications regulatory authorities to maintain data analysis and economics expertise, including the establishment of research and strategic foresight divisions and of digital enforcement teams. We encourage the government to ensure the CRTC has sufficient resources to fill these gaps.

2.3 REALIZING AFFORDABLE ACCESS TO BROADBAND SERVICES TODAY

Canadians have access to some of the most reliable and high-quality fixed and mobile networks and services in the world. Canada has high penetration levels for fixed-line broadband, and a significant proportion of Canadians live in areas served by LTE-Advanced networks.¹⁷ Canadians have access to

¹⁷ CRTC, Communications Monitoring Report (2018), Table 5.1.

reliable and high-quality networks and services that are globally competitive, as measured by download speeds for both fixed-line Internet and mobile wireless services. 18

Canadians are avid users of the Internet and engage with each other and the world using innovative Internet-based applications and platforms. Canadians increasingly are opting for mobile service over landline telephone service, and, as of 2016, almost a third of Canadians subscribed to mobile service only.¹⁹

These are all signs that market forces have incented Canadian providers of transmission facilities and connectivity to invest in new technologies: fibre to the node, fibre to the premise, multi-protocol switching, 4G, LTE, and beyond. Fixed and mobile service are increasingly converging, connecting an increasing number of cognitized devices that are part of an interconnected mesh. The trend toward ubiquitous and always-on connectivity to broadband networks is likely to accelerate. While there has been demonstrable progress in the reliability, quality, and availability of telecommunications networks and services, there are two areas where gaps remain.

First, significant disparities divide urban from rural and remote regions of Canada in terms of fixedline broadband and mobile wireless penetration. As technological advances are deployed in both wireline and wireless networks serving Canada's urban dwellers, decisive steps must be taken to ensure that the current gap does not grow. As discussed in section 2.3.1 below, the longer that these gaps continue, the further behind those living in northern and remote geographies become in terms of the communications infrastructure required to flourish in the 21st century. The question is one of nation-building.

Lawmakers cannot always content themselves to rely on market forces alone to ensure that the user can choose from a range of varied and affordable electronic communications offers. As outlined in greater detail in section 2.3.2 below, there are concerns about the level of prices and profitability in telecommunications markets, particularly in the fastest-growing segments: residential and business fixed-line Internet access and mobile wireless services. Facilities-based entry into the fixed wireline broadband and mobile wireless markets has been limited and is reflected in relatively constant market share retention by the largest competitors. Both the CRTC and the CCTS report that consumer complaints about Internet services have been steadily increasing, more than any other category of service.20

These challenges and the inherent characteristics of telecommunications networks and markets that explain the persistence of these challenges are not unique to the Canadian context and are certainly not new. We have considered these long-standing issues. It is proposed, in the sections below, legislative

Ookla, Speedtest Global Index [accessed 1 December 2019].

CRTC, Communications Monitoring Report (2018). 19

Telecom Notice of Consultation CRTC 2018-422, Call for comments - Proceeding to establish a mandatory code for Internet services (9 November 2018). CCTS, Annual Report 2018-2019, s 7 [accessed 4 December 2019].

72

0%

Urban Households

reforms and other measures designed to hasten investments in broadband infrastructure in rural and remote communities and to fuel competition, while continuing to incent investment in support of sustainable entry, greater choice, and affordability.

2.3.1 Broadband Deployment in Rural and Remote Communities

98% 100% 90% 80% 76% 70% 50% 42% 40% 35% 30% 20% 20% 15% 13% 10% 0%

Figure 2-1 Broadband Penetration in Canada from 2014–2018 (50/10 Mbps)

Rural Households

2014 Served (50/10 Mbps)

Source: ISED

First Nation Households

Canadians should have affordable, barrier-free access to high-quality, safe, secure networks where they live or work.

Remote Households

■ 2018 Served (50/10 Mbps)

Access to broadband Internet is a necessity for full participation in the digital society and economy. In a society so intensely marked by the omnipresence of instant communication, the effective ability of everyone to truly participate in social and economic life and benefit from the opportunities inherent in the digital society and economy is dependent on the ability to access broadband connectivity. Connectivity is now one of the conditions for the effective exercise of expressive freedoms. At the international level, calls for the recognition of a right to broadband connectivity are increasing. In a

recent joint statement on the challenges of protecting freedom of expression in the next decade, four United Nations rapporteurs on freedom of media called for the recognition of a right to access the Internet as an essential condition for the effective exercise of freedom of expression.²¹

Enshrining the objective of universal high-speed access within the *Telecommunications Act* is necessary. This signals the importance of allowing Canadians to fully participate in society and the digital economy.

Recommendation 24: We recommend that the policy objectives of the Telecommunications Act be amended to reflect that all Canadians, including those with disabilities, should have timely, affordable, barrier-free access to the advanced telecommunications necessary to fully participate in Canadian society and the global economy.

Today, what constitutes the basic service objective for telecommunications services has changed, as well as the approach to funding. Over time, high-speed Internet access has supplanted local telephone service as the standard for the goal of universal access. In particular, since 2016, the CRTC has indicated that Canadians should have access to broadband speeds of at least 50 Mbps for downloads and 10 Mbps for uploads as well as access to mobile wireless services on major transportation roads.

As shown in Figure 2-1 above, there has been a persistent coverage gap in rural and remote regions, including in Indigenous communities. Market forces, however, have consistently provided access to advanced networks in urban areas in Canada.

Public investments in broadband deployment have had important impacts on rural Canadians' ability to access broadband. Figure 2-2 illustrates that approximately half the increase in connectivity from 2014–2018 was due to public sector funding.

Organisation for Security and Co-operation in Europe. Twentieth Anniversary Joint Declaration on Challenges to Freedom of Expression in the Next Decade (10 July 2019).

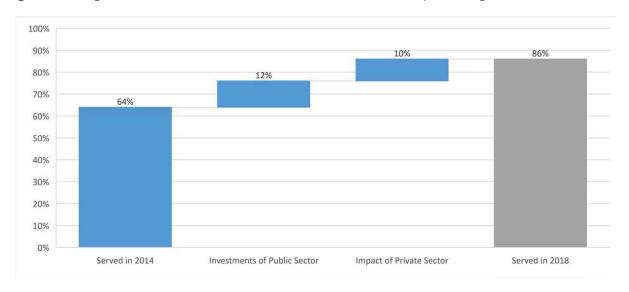


Figure 2-2 Impact of Investments on Rural Households Served by 5/1Mbps (2014 & 2018)

Source: ISED

In terms of funding to address these gaps in coverage, the CRTC has modified its approach to contribution in a manner consistent with the evolution of the objective itself. Whereas historically the goal of basic local telephone service was financially supported by telephone companies, the new goal of broadband access is supported by all providers of broadband access, including Internet service providers.

Further, the CRTC established a new Broadband Fund toward achieving this objective. In transitioning to this program, the CRTC decided that Internet access revenues should be included in assessing contributions to broadband roll-out and that a wider variety of providers should be eligible for funding.

We applaud the CRTC's efforts to remake its local service subsidy regime into a broadband funding regime that is provider-neutral for both the contributors and the funding recipients. The CRTC should maintain and accelerate this approach to extending connectivity everywhere in Canada, particularly to Indigenous Peoples and to rural and remote communities. Rapid implementation of Recommendation 22 regarding the CRTC's maintenance of a centralized database on geographic network information will assist the CRTC with this objective. These efforts reflect an important principle: that revenues from the provision of electronic communications services should contribute to broadband connectivity. This principle should be maintained on the understanding that electronic communications revenues should contribute to connectivity, not the support of Canadian content.

At the same time, use of the expression "basic telecommunications services" in section 46.5 of the *Telecommunications Act* lends itself to multiple meanings. Recommendation 25 proposes to redress this and to update the section's reference to contributions from a wider range of participants, including those that provide any type of electronic communications service.

The approach adopted in Recommendation 25 ensures that the CRTC retains broad scope as to who must contribute to its Broadband Fund. However, we encourage the CRTC to further clarify which electronic communications services making use of telecommunications will be contribution eligible. It is our view that all those who provide electronic communications services to the public could potentially contribute to this fundamental objective of the *Telecommunications Act*.

Recommendation 25: We recommend that the *Telecommunications Act* be amended to enable the CRTC to draw from an expanded range of market participants — all providers of electronic communications services — in designating required contributors to funds to ensure access to advanced telecommunications.

When working toward universal connectivity, Indigenous communities noted to us that they have specific concerns around governance of broadband networks. They are looking for a more inclusive consultation process in the development of any fund to support broadband buildout with more constant, stable, and accessible funding.

From 2014 to 2018, broadband penetration rates improved across Canada. Figure 2-2 illustrates that government investments allowed rural households to catch up to the connectivity rates of urban households. However, once the standard improves, First Nations connectivity rates fall behind.

Indigenous groups indicated they are looking for greater control over the telecommunications service within their communities for the purposes of self-determination and economic development. This means having equitable access for Indigenous Peoples to jobs, leadership positions, and professional development opportunities within the organizations that own and operate telecommunications networks in their communities.

Throughout this review, the gap in connectivity between Indigenous and non-Indigenous communities has been made clear. However, the solutions proposed in this Report do not purport to meet the needs of Indigenous communities. This requires meaningful engagement on how best to close the gap and meet the needs of Indigenous communities. Such engagement would advance the relationship with Indigenous Peoples, and would assist in proactively identifying any potential adverse effects that might arise from broadband expansion to and in Indigenous communities.

Recommendation 26: We recommend that the federal government engage with Indigenous Peoples and communities on how broadband expansion should be implemented in Indigenous communities and other related issues, such as Indigenous ownership of broadband networks.

In addition to the CRTC's Broadband Fund, there are a number of different programs and funds addressing gaps in broadband coverage at the federal, provincial, and municipal level. At the federal level, there is potential duplication of effort among the CRTC, ISED, and other government departments.

Further, despite the many programs working toward the goal of universal connectivity at the federal level, no Minister is specifically accountable to Parliament for the achievement of this objective.

Since 2001, ISED has provided approximately \$1.05 billion in direct funding for broadband deployment. In that time, funding initiatives have been managed by other departments: select broadband projects by Infrastructure Canada (INFC), Indigenous Services Canada (ISC), regional development agencies (RDAs), as well as provinces and territories have totalled \$4.98 billion. These government funding programs have helped expand broadband infrastructure to areas underserved by the private sector. Federal broadband programs have been designed to be competitively neutral and avoid displacing or duplicating private-sector investment. Historically, the preferred approach has been to provide one-time contributions toward capital costs to build networks or the leasing of satellite capacity to serve remote communities. Initiatives by the government are ongoing such as the Connect to Innovate program currently underway, which will install over 19,500 km of fibre.²² That is approximately the distance from St John's to Vancouver, through Whitehorse, Yellowknife, Iqaluit, Labrador City, and back to St John's. These projects are intended to improve connectivity for more than 900 communities, 190 of which are Indigenous. In 2019, the government announced a rural connectivity strategy to mobilize up to \$6 billion toward universal connectivity.²³

Currently, ISED creates and publishes maps showing broadband coverage in Canada, based on information that is not collected in a systematic fashion and may not portray a complete picture. The information supplied to ISED is based on applications for public funds during prior broadband expansion programs. In order to create a common baseline, Recommendation 22 called for an amendment to the *Telecommunications Act* with respect to the CRTC's maintenance of a database containing detailed information on network facilities.

We recommend that the *Telecommunications Act* increase the Minister of Industry's accountability to achieve universal service objectives in line with the policy objective described in Recommendation 24. To do so, the *Telecommunications Act* should assign to the Minister responsibility for reviewing and reporting annually to Parliament on the state of broadband connectivity in Canada. Annual reporting, informed by the baseline data to be maintained by the CRTC, would help to ensure the coordination of program design and public spending on broadband expansion and would keep a spotlight on the state of broadband deployment.

Recommendation 27: We recommend that the *Telecommunications Act* be amended to require the Minister of Industry to submit an annual report to Parliament on the status of broadband deployment, including in rural and remote communities and with respect to Indigenous Peoples and communities.

²² ISED, Connect to Innovate – Frequently asked questions (2019) [accessed 1 December 2019].

²³ ISED, High-Speed Access for All: Canada's Connectivity Strategy (2019) [accessed 1 December 2019].

2.3.2 Fostering a Competitive Market

Legislation governing the provision of electronic communications networks and services typically pursues economic, social, and technical objectives. From an economic perspective, legislation seeks to ensure that users have a choice of affordable options.

This section considers if legislative changes are warranted to better promote competition, innovation, and affordability.

Government intervention to shape competitive market outcomes, remedy market power, and fully achieve the benefits of competition in telecommunications markets requires careful consideration. Persistent market power could jeopardize the very objectives in terms of affordability and choice that the government seeks to achieve through competition. This calls for active regulatory monitoring and an effective regulatory toolkit to intervene and address instances of market power that may arise whose exercise undermines the achievement of the government's policy objectives. However, governments must also consider the cost of regulatory intervention and balance these against the expected benefits.

One such form of regulatory intervention is whether and how to mandate wholesale access to telecommunications facilities, which requires a delicate balancing of incentives to invest in networks with the beneficial market outcomes expected from greater service-based competition. Where required, such a balancing is best done by a regulator proceeding on an evidence-based approach and on a market-by-market basis with a view to current and evolving circumstances.

The recommendations that follow will, in our view, better promote competition in Canada's telecommunications markets. They include clarification of the role of competition as a telecommunications policy objective, the imposition of a requirement on the CRTC to monitor and assess the state of competition in telecommunications markets, and measures to bring flexibility to the forbearance framework. In addition, we are recommending measures that would better facilitate service-based competition by improving the CRTC's regulation of wholesale rates and terms of service, and the regulation of interconnection and numbering resources.

For much of the twentieth century, including for some time after passage of the current Telecommunications Act, the CRTC and its predecessor regulators were mandated to ensure that every rate charged by a Canadian carrier (a telephone company) was just and reasonable. To do so, the CRTC employed various forms of rate base, rate-of-return regulation, price cap regulation, and various rate structure policies.

After passage of the Telecommunications Act, the CRTC began to apply the new forbearance power set out in section 34, which authorized the Commission to refrain from exercising many of its powers including that under section 27(1) to set just and reasonable rates where doing so would be "consistent with the Canadian telecommunications policy objectives" or where "competition [would be] sufficient to protect the interests of users..."

As has happened in the European Union, the United States, and other comparator jurisdictions, the CRTC has moved away from regulating rates in most retail markets in favour of relying on market forces. This includes wholesale regulation on a case-by-case basis. This regulation would promote access by competitors to the facilities and services of large, vertically integrated communications providers. These providers have the power to limit entry and competition in a retail market through their control of hard-to-reproduce inputs and services that less-established competitors need in order to compete in that retail market.

Today, as a result of CRTC forbearance orders, no widely used retail telecommunications services remain subject to rate regulation outside remote regions. The CRTC has estimated that, since 2013, 96 per cent of telecommunications revenues were generated from forborne services. ²⁴ However, several wholesale network elements and services continue to be regulated by the Commission to promote competition, as part of a policy of mandating access to the networks of incumbent carriers by resellers and other competitors.

We heard from several parties that competition in Canada's telecommunications markets has evolved to the point where an *ex post* approach to regulation is appropriate. Others argued that *ex ante* economic regulation of certain telecommunications markets is still required, disagreeing with the premise that complete reliance on the operation of market forces is sufficient to achieve Canada's telecommunications policy objectives.

In this regard, a number of submissions identified issues with monitoring reports and long-run studies commissioned by the federal government. These reports and studies have considered price levels in certain Canadian wireline and wireless markets and, in some cases, compared them to price levels in peer jurisdictions.

Price is a key competitive variable, and pricing of telecommunications services is often at the forefront of many Canadians' minds. Assessing telecommunications prices and comparing them across different jurisdictions presents many challenges and complexities, and we are not aware of a methodological approach that is free from limitations. With this in mind, we believe certain observations regarding Canada's telecommunications prices may reasonably be made.

A number of reports have found that prices are generally higher in Canada than in comparator jurisdictions.²⁵ For example, a 2018 pricing report prepared for ISED comparing telecommunications prices in Canada with those in certain comparator jurisdictions found that average Canadian mobile wireless service prices were consistently at the upper end of the group of surveyed countries. Moreover,

²⁴ CRTC, Communications Monitoring Report (2018).

Wall Communications Inc., Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions (Prepared for ISED, 29 August, 2018); OECD, Broadband Statistics (November 2019), Tables 4.2, 4.4, 4.6, 4.6, 4.10; Federal Communications Commission, International Broadband Data Report (Sixth) (2018).

average Canadian prices for medium- and high-use fixed broadband Internet services tended to be higher than in most other surveyed countries.

Although it is the norm in international price comparisons, the "price basket" approach used in the ISED pricing report has also been challenged.²⁶ It has been argued that country-specific costs are not accounted for and that a price basket is a hypothetical demand profile that is not necessarily consistent with actual consumer usage profiles.

A study commissioned by TELUS and conducted by NERA Economic Consulting critiques the ISED approach and finds that prices for communications services in Canada are cheaper than the prices that foreign providers would charge for the same plans.²⁷ We note that concerns have been raised regarding the NERA study, suggesting errors in the data used and that the data were not generally representative of service plans actually used by Canadians.²⁸ In terms of mobile wireless prices, we note that prices for ISED's price baskets have generally tended downwards since 2008,²⁹ and that prices for four CRTC price baskets have declined over the 2016–2018 period.³⁰

Prices for mobile wireless telecommunications services differ across Canada, and market structure appears to play a role in explaining these differences. The 2018 ISED pricing report finds that regional mobile wireless carriers such as SaskTel, Eastlink, Freedom, and Vidéotron offered mobile wireless service prices that were significantly lower than those of the incumbent wireless carriers Bell, Rogers, and TELUS. The 2018 ISED pricing report also showed that Saskatchewan and Quebec, two provinces with a strong regional competitor, had lower mobile wireless service prices across all but one mobile wireless price basket, sometimes significantly so. Although as noted earlier, there have been criticisms of the methodology used in the ISED pricing report, these concerns are lessened when using price baskets to compare prices within Canada offered by the same providers. This observation regarding regional price differences in Canada is consistent with past findings of the Competition Bureau.³¹

Price comparisons do not always reflect the full scope of economic forces that are at play in the markets for telecommunications services. In this regard, the passage of time and technological advances have not altered fundamental features of markets for telecommunications networks in Canada:

Jeffrey Church and Andrew Wilkins, Wireless Competition in Canada: An Assessment (September 2013) 27:6 SPPP Research Papers; Christian Dippon, An Accurate Price Comparison of Communications Services in Canada and Select Foreign Jurisdictions (NERA Economic Consulting, 19 October 2018).

Christian Dippon, An Accurate Price Comparison of Communications Services in Canada and Select Foreign Jurisdictions (NERA Economic Consulting, 19 October 2018).

Competition Bureau of Canada, Comments on Telecom Notice of Consultation CRTC 2019-57, Review of Mobile Wireless 28 Services (15 May 2019), paras 50-52.

Wall Communications Inc., Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions (Prepared for ISED, 29 August, 2018).

CRTC, Communications Monitoring Report (2019).

Competition Bureau, Competition Bureau statement regarding Bell's acquisition of MTS (17 February 2015).

- Total telecommunications revenue in Canada in 2017 was \$50.3 billion.³² According to the CRTC's Communications Monitoring Report 2018, the only two sectors of the Canadian telecommunications industry in which revenues grew in 2016–17 were the fixed Internet and mobile wireless communications sectors. Fixed Internet revenues stood at \$11.5 billion and mobile wireless revenues stood at \$25.8 billion in 2017 and grew by 7 per cent and 5.4 per cent respectively between 2016–17.³³ Revenues in all other sectors local and access, long distance, data, and private line fell in 2016-17.³⁴
- High-quality telecommunications networks require ongoing investments for maintenance and upgrading. Telecommunications network investments include expenditures to build out fibre in fixed broadband access networks; to upgrade wireless network components to the latest generation; and to build out backhaul capacity that connects these access networks. In Canada, capital intensity (the ratio of capital expenditures to revenues) in the telecommunications industry stood at approximately 40 per cent in 2017, second only to the utilities industry at 79.2 per cent.³⁵ Total Canadian telecommunications investment remains high and compares very favourably on a per capita basis with investment in other OECD countries.³⁶ Canada's wireless capital intensity compares less favourably, with the three major Canadian mobile carriers below the average capital intensity of a 74 wireless carrier sample in OECD countries.³⁷
- For Canadian telecommunications service providers with at least 80 per cent of total revenues represented by telecommunications services, profitability measured by earnings before interest, taxes, depreciation, and amortization (EBITDA) margin in relation to revenues remained high in 2017 at 37 per cent for wireline service and 39.5 per cent for wireless service.³⁸ By this measure, the telecommunications industry in Canada is more than 2.5 times more profitable than other industries, the average EBITDA margin of which stood at 15.1 per cent for 2017.³⁹ Service providers such as resellers and facilities-based service providers associated with neither incumbents nor cable carriers, had significantly lower EBITDA margins of 20.7 per cent in 2017.⁴⁰

³² CRTC, Communications Monitoring Report (2018), Figure 3.1.

³³ CRTC, Communications Monitoring Report (2018), Infographic 4.1.

³⁴ CRTC, Communications Monitoring Report (2018), Infographic 4.1.

³⁵ CRTC, Communications Monitoring Report (2018), Infographic 4.6.

OECD, Key ICT Indicators; United Nations World Population Prospects 2019 [accessed 1 December 2019]; CRTC Communications Monitoring Report (2018), "Capital expenditures and capital intensity".

³⁷ Bank of America Merrill Lynch, Wireless Matrix (April 2019), based on a 2018 three-year moving average.

³⁸ CRTC, Communications Monitoring Report (2018 Figure 4.7.

Statistics Canada, Table: 33-10-0007-01, EBITDA margin calculated as (profit before income tax + interest expense, operating + depreciation, depletion and amortization) / (operating revenue).

⁴⁰ CRTC, Communications Monitoring Report (2018), Figure 3.8. This includes broadcasting and telecommunications revenues.

Using a variety of measures, Canada's telecommunications markets are highly concentrated. For example, in 2017:

- the large incumbent telephone companies at 58 per cent, and cable companies at 34 per cent, together controlled 92 per cent of all telecommunications revenues.⁴¹
- the five largest telecommunications service providers and their affiliates controlled 87 per cent of total telecommunications revenues.⁴²
- the three largest wireless service providers have a commanding presence in Canada's mobile wireless markets, with a combined share of 92 per cent of total retail mobile wireless revenues. 43
- in Canada's fixed-line Internet services markets, residential access services accounted for an 80 per cent share of all Internet connectivity revenues in 2017. 44 Most Canadian households receive service over one of two access lines to their home, owned respectively by a telephone and cable incumbent, which together controlled 87.6 per cent of revenues from the provision of residential Internet access services. 45 Incumbent telephone companies represented 39.1 per cent of residential Internet access service revenues while cable companies took up almost half, 48.5 per cent. 46 With their affiliates, the five largest of these had a revenue share of 74.3 per cent of residential Internet access service revenues.⁴⁷

The relative economic importance of Canada's telecommunications industry in the overall economy, and the high levels of investment and capital intensity required to participate in it, are not unique.

Nor is the Canadian telecommunications industry unique in that it is characterized by, among other things, high fixed and sunk costs; network effects that increase a network's value as it grows; and in some cases, scarce critical inputs such as spectrum. These factors tend to limit entry, resulting in either: 1) uneven investment in networks where certain populations within Canada remain perpetually underserved due to delayed — or absent — deployment; or 2) oligopolistic or limited player market structures even where entry and investment are prioritized by providers, which if left unchecked, may lead to market power — the ability to profitably maintain price and other variables of competition above competitive levels for a considerable period of time. Where markets are not sufficiently competitive or are inherently prone to market forces that perpetuate concentrated market structures, regulation is sometimes imposed to achieve the same objectives that would be achieved in a competitive marketplace.

Making determinations as to the presence or absence of market power must ultimately be undertaken based on a strong evidentiary record and for clearly defined product and geographic markets. The

CRTC, Communications Monitoring Report (2018), Infographic 4.2. 41

⁴² CRTC, Communications Monitoring Report (2018).

⁴³ CRTC, Communications Monitoring Report (2018).

⁴⁴ CRTC, Communications Monitoring Report (2018), Infographic 5.1.

⁴⁵ CRTC, Communications Monitoring Report (2018), Figure 5.8.

⁴⁶ CRTC, Communications Monitoring Report (2018), Figure 5.8.

⁴⁷ CRTC, Communications Monitoring Report (2018).

focus has decisively shifted from local and long-distance voice markets in which the user interest has been well served by technological innovation and market forces under the guiding hand of the regulator, to the fastest-growing and important segments of the industry, namely the fixed broadband and mobile wireless services markets. In the future, there will continue to be other new products and services that will need to be addressed. The experience of the past 40 years — since markets for telecommunications networks and services were first opened up to competition — has not convinced us that the economic forces at work have changed so significantly that a fundamental change to the regime for *ex ante* oversight to address systemic barriers to competition in the industry is warranted.

Our recommendations throughout this chapter reflect the ongoing importance of competition in achieving Canadian telecommunications policy objectives. While references to competition are not absent from Canada's telecommunications legislation, there is relatively little by way of precise policy guidance regarding reliance on competition. The *Telecommunications Act* lists enhancing competitiveness among its policy objectives, and the *Radiocommunication Act* allows the Minister of Industry to have regard to those objectives. Based on this, and in the absence of specific guidance, both federal regulators of the telecommunications sector, the Minister of Industry, and the CRTC have pursued initiatives to promote competition, affordability, and innovation.

Policy directions issued by the Governor in Council under section 8 of the *Telecommunications Act* in 2006 and 2019 have provided guidance to the CRTC related to market forces and competition. While these two policy directions place different emphasis on the role of market forces and competition, the need for such directions is indicative of a lack of guidance in the legislation.

A forward-looking legislative framework should emphasize the importance of relying on market forces in the communications sector, and that the broad economic regulatory powers of both the Minister and CRTC should be guided and constrained by this objective. To that end, creating an explicit policy objective in the legislation would signal unequivocally to the regulator the importance of relying on market forces to foster a competitive market.

Recommendation 28: We recommend that the telecommunications policy objectives of the *Telecommunications Act* include the following as an objective:

To foster a competitive market for the provision of electronic communications services
primarily through reliance on market forces and, where required, through efficient and
effective regulation.

2.3.3 Identifying and Addressing Barriers to Competition

As set out earlier, active monitoring of the telecommunications industry should be closely linked to an effective toolkit to intervene and address instances of market power thereby detected. Further, such interventions call for a careful evidence-based approach and should be conducted on a market-bymarket basis with a view to current and evolving circumstances. While the CRTC currently publishes its Communications Monitoring Report on an annual basis, it is not required to do so.

Recommendation 29: We recommend that the *Telecommunications Act* be amended to explicitly require the CRTC to monitor and assess the state of competition in key electronic communications markets — including the market shares of non-Canadian participants — to ensure that rates are just and reasonable.

Three provisions in the Telecommunications Act allow the CRTC to forbear from exercising several regulatory powers and obligations set out in sections 24, 25, 27, 29, and 31:

- Subsection 34(1) provides a discretionary power to the CRTC to forbear where it finds that doing so would further the Canadian telecommunications policy objectives.
- Subsections 34(2) and (3) establish mandatory obligations to forbear, to the extent the CRTC deems appropriate, where it finds that competition exists at levels sufficient to protect the interests of users, but not to forbear where refraining would impair a competitive market.

In either case, the CRTC may determine which of the economic regulation tools that the legislation creates will be forborne, as well as any conditions that will apply to the forbearance.

Certain of the CRTC's regulatory powers and obligations should be decoupled from economic regulation altogether. The regulator requires the ability to impose terms and conditions of service to defined classes of service or of service providers to achieve social or technical objectives, whether privacy and customer confidentiality requirements, emergency services, or basic quality of service support - like giving dependent subscribers work-around instructions if their networks go down or are compromised by cyber-attack. For this reason, the Act should no longer authorize the CRTC to forbear from the consolidated section 24/24.1 we have described in Recommendation 18.

For the remaining regulatory provisions, forbearance from the exercise of rate regulation and other regulatory tools is appropriate in markets where there is sufficient competition to protect the interests of users. However, in the absence of such competition, we believe that the CRTC should not be permitted to forbear completely from regulation. As such, the discretionary authority provided to the CRTC in 34(1) of the *Telecommunications Act* should be eliminated, and the forbearance test in 34(2) and (3) be maintained.

The monitoring obligations of the CRTC recommended above will allow the Commission to maintain continuous awareness regarding the state of competition in markets for electronic communications services and indicate when it should consider or review the application of appropriate economic tools. In keeping with our recommendations to adopt a more proactive style of regulation, the CRTC should continually monitor market conditions, even in forborne markets. In this regard, the CRTC

has estimated that by 2017, 96 per cent of Canadian telecommunications revenues were generated by services "forborne" or exempted, from tariff requirements. Broken out by service segment, this ranged from 83 per cent of revenues for local telephone and related public switched telephone network (PSTN) access, to 97 per cent of fixed Internet, and 100 per cent of mobile service revenues.⁴⁸

As noted earlier, the CRTC should be engaging in more active monitoring of the telecommunications industry and we have recommended that the *Telecommunications Act* be amended to create an affirmative obligation on the CRTC to ensure the justness and the reasonableness of the rates that prevail in the market. This obligation would require the CRTC, despite retail forbearance orders, to maintain awareness of rates and market conditions in order to be apprised as to whether, and when, further action is necessary or appropriate. Thus, while the CRTC may forbear from regulating specific rates stipulated in a forbearance order, it would be precluded from forbearing from the new provision of the *Telecommunications Act* that imposes an affirmative obligation to ensure the ongoing justness and reasonableness of rates. Similarly, the Act should no longer include within the scope of forbearance the ability to forbear from the obligation at section 27(2) to address instances of unjust discrimination or undue or unreasonable preferences. Parties should always be in a position to challenge such actions, even in a fully competitive market.

Once the CRTC has decided to forbear from exercising a given regulatory tool, the legislation currently precludes the CRTC from using that tool in any specific instance where an intervention might be warranted, unless it reverses its decision. For example, in the service segments canvassed earlier in this chapter, the CRTC has found that market power exists in relation to both the mobile wireless sectors and Internet access sectors.⁴⁹ Yet these findings exist alongside CRTC forbearance decisions disengaging from the application, in these sectors, of the CRTC's regulatory tools relating to tariffing (section 25), just and reasonable rates (subsections 27(1), (5), (6)), inter-carrier agreement review (section 29), and pre-approval of limitation of liability clauses (section 31).⁵⁰

Instead, the CRTC has relied on mandating tariffed wholesale supply of inputs to essential services like access lines and wireless roaming to stimulate competition, rather than regulating the behaviour of retail firms with market power directly. Unlike the retail markets downstream from these essential services, the CRTC has not forborne from regulating the wholesale inputs to which it applies these tariffs. Without regulating these wholesale inputs, it is unclear that sufficient competition would exist

⁴⁸ CRTC, Communications Monitoring Report (2018), Table 4.1 and accompanying text (Data are for 2017).

⁴⁹ For instance, Telecom Regulatory Policy CRTC 2015-177, Regulatory framework for wholesale mobile wireless services (5 May 2015), paras 33–39, 55–74, 81–88; Telecom Regulatory Policy CRTC 2015-326, Review of wholesale wireline services and associated policies (22 July 2015), paras 121–130.

In relation to wireless services, see Telecom Notice of Consultation CRTC 2012-206, Decision on whether the conditions in the mobile wireless market have changed sufficiently to warrant Commission intervention with respect to mobile wireless services (4 April 2012), footnote 2, canvassing relevant decisions. In relation to Internet access services see, for instance, Telecom Order CRTC 99–592, Forbearance From Retail Internet Services (25 June 1999), paras 25, 28, and 37.

to allow the CRTC to forbear, under subsections 34(2) and (3), from regulation of the related retail fixed Internet and mobile wireless markets.

We recommend that the *Telecommunications Act* be revised such that, as a condition of forbearance from rate regulation, the CRTC must either mandate supply of related wholesale inputs or explain why it is unnecessary or inappropriate to do so. In implementing a revised Act, the CRTC should also review its existing forbearance decisions with a view to fulfilling similar conditions.

At the same time, the CRTC should be permitted to use the regulatory tools it applies to non-forborne markets, such as approval requirements for agreements, as it deems necessary. These changes would remove the requirement for the CRTC to reverse a forbearance decision in order to apply the relevant regulatory tools in appropriate circumstances based on market conditions.

Recommendation 30: We recommend that the forbearance provisions be amended as follows:

- The CRTC should not be permitted to forbear from the consolidated section 24/24.1 recommended above.
- The CRTC should not be permitted to forbear from its affirmative obligation to ensure the justness and reasonableness of the rates that prevail in the market.
- The CRTC should not be permitted to forbear from subsection 27(2) of the Act. The CRTC should have ongoing responsibility to address complaints of unjust discrimination or undue preference.
- Eliminate the discretionary authority of the CRTC in subsection 34(1) of the Act to forbear from regulation in a market.
- Allow the CRTC broader discretion as to when to employ regulatory tools, such as preapproval of working agreements and of limitation of liability clauses, from which it has not forborne.
- Continue to require forbearance where the market is sufficiently competitive to protect the interests of users under subsection 34(2). The CRTC must, as a condition of forbearance from retail rate regulation, either mandate supply of related wholesale inputs or explain why it is unnecessary or inappropriate to do so.

Where the CRTC currently regulates rates, it does so via the imposition of company-specific tariffs that establish both the rate at which an individual carrier will provide the service specified in the tariff, and some related terms and conditions. These tariffs are established following a proceeding held by the CRTC in which, to the extent engaged by the proposed tariff, interested parties may make submissions concerning appropriate costing methodologies, among other matters.

At one time, separate provisions of the legislation provided a guide on how the CRTC ought to set conditions of service for these tariffs (section 24) and their rates (section 25). Over time, the use of these provisions has evolved. Section 24 is relied on increasingly to set general conditions of service for a competitive sector, like the Wireless Code: the legislature recognized this by adding a paired section 24.1 that the CRTC applies to non-carriers. Section 25, in contrast, is relied on increasingly to establish the rates and terms and conditions of a provider's tariff. In our view, this drift should be arrested in favour of clearly codified legislative terms.

In Recommendation 18, we recommend that sections 24 and 24.1 be consolidated into a new, combined provision. This would require the CRTC to identify classes of service and service providers, set broad conditions of service, and determine to which classes the conditions apply, promoting regulatory consistency in regulation. Section 25 could then be revised to function as a stand-alone provision that should be modernized to operate more efficiently and effectively.

First, the current process to establish a wholesale tariff is lengthy, resulting in a regulatory delay in the introduction of new services by providers requesting wholesale access. In the most contentious tariff proceedings, the process may involve disputes regarding the appropriate costing methodology as well as competing evidence as to the appropriate rate once the costing methodology is established. This is compounded by the current provider-by-provider, paper-based approach to cataloguing established wholesale tariffs.

Secondly, wholesale tariffs have become unduly focused on rates, with insufficient emphasis on the terms and conditions of service that are critical to the feasibility of using the wholesale input. Specifying these terms and conditions is an important element in establishing wholesale rates.

It is our view that the CRTC should make better use of its rate-setting authority to establish class of service standards and costing methodologies for wholesale access. Once established, these standards and methodologies would be applied in establishing a carrier-specific offer that permits access by service providers to the class of service specified in the offer. The *Telecommunications Act* should be amended to refer to such a reference offer rather than a tariff and require that each reference offer include all applicable terms and conditions of service. In transitioning from a tariff approach to a reference offer approach, the CRTC should consider updating and renaming the CRTC Tariff Regulations (1979) in favour of Reference Offer Regulations requiring that reference offers be uploaded, using a well-specified digital format, to a publicly available online registry maintained by the CRTC. The CRTC would link together different providers' reference offers that are within the same class of service and, for wholesale reference offers, identify the retail service to which they relate.

Recommendation 31: We recommend that the CRTC's authority over tariffing be consolidated, specifying that tariffs (to be renamed "reference offers") must set out not only rates but also, at a minimum:

- required terms and conditions;
- details of associated operational processes; and
- service supply and quality conditions.

The regulatory authority to order interconnection is among the longest-standing tools for competition. It assures, for the regulator, the residual power to prevent entrenched players from refusing to deal with new upstarts in a federated system. On very rare occasions, as in the CRTC's early decisions to mandate telephone competition, mandated interconnection can be used to create federated systems that replace monopolies.

The importance of this power ties back to network effects: the fact that the value of communications networks increases as subscribers use them to communicate with more correspondents. Interconnection increases each connecting network's value accordingly. Networks without the ability to interconnect on reasonable terms, and at an acceptable quality of service, may have difficulty competing. Mandated interconnection is a way to ensure that entrants are not barred from participating as a result of network effects that would otherwise create barriers to entry.

At present, the interconnection power set out in section 40 of the *Telecommunications Act* is restricted to ordering interconnection between Canadian carriers with respect to telecommunications facilities. It is difficult to predict the evolution of communications networks and the development of new services for which interconnection may be required, particularly given the complexity of defining interfaces where none existed previously. A modern communications regulator requires the ability to mandate interconnection across the full range of electronic communications services available in the marketplace.

Recommendation 32: We recommend that the CRTC be authorized to issue an interconnection order regarding any electronic communications service.

Access to telephone numbers, and to related numbering and addressing resources, remains a surprisingly important competitive resource. Many over-the-top applications continue to rely on phone numbers and centrally coordinated address codes to compete and interact. However, access to them remains restricted to local exchange and wireless carriers that interconnect with the PSTN.

As machine-to-machine and Internet of Things applications proliferate, it is anticipated that access to numbering and addressing resources will become more important. A competitively neutral marketplace, over which the CRTC maintains clear regulatory authority regardless of service providers' domicile, will enhance innovation and improve competition, including service-based competition. It is therefore time to unlink access to numbering and addressing resources with the status of a local exchange carrier. The CRTC should review how to do so in a manner that ensures technological and competitive neutrality.

Recommendation 33: We recommend that direct access to numbering resources be broadened to all existing and prospective electronic communications service providers that are within the jurisdiction of the Telecommunications Act.

2.4 UNLOCKING THE ADVANCED NETWORKS **OF TOMORROW**

Facilities-based telecommunications carriers must be able to efficiently roll out new infrastructure to increase the functionality, capacity, and reach of their networks to address demand, particularly for an increasing range of domestic and foreign online services and applications. The proliferation of devices, operators, and users that will emerge in the era of 5G wireless networks — and beyond requires a legislative framework that is able to ensure access to passive infrastructure (e.g. poles, ducts, conduits and rights-of-way); provision of adequate spectrum for advanced services; and safe and efficient equipment required to accommodate the advanced and ubiquitous networks of tomorrow.

In a hyper-connected world, the expression ambient intelligence speaks to an expected state of continuous interface with an interconnected world of things capable of sensing and responding to human needs and desires. These devices and networks must integrate harmoniously into physical places that serve a plurality of purposes. Their deployment must therefore be considered along with other land planning processes in the context of a broader logic of collaboration and consultation among all stakeholders.

This section will examine what new or enhanced regulatory approaches will be required to unlock the advanced networks of tomorrow for the benefit of all Canadians.

2.4.1 Network Deployment and Investment

For Canadians to benefit from continued advances in communications, telecommunications network operators must be able to invest in network deployment efficiently and predictably. This depends in large part on their access to passive infrastructure.

The scope of passive infrastructure to which the *Telecommunications Act* enables access to facilitate network deployment requires modernization and clarified jurisdiction, particularly as antennae for wireless services, wireline access lines, and backhaul facilities proliferate.

Passive infrastructure encompasses the civil engineering and non-electrical structures along which networks and their components are mounted, strung, built, and otherwise supported. It includes support structures like poles, ducts, conduits, and towers; inside wiring and rooftops in and on multi-unit buildings, or multi-dwelling units (MDUs); rights-of-way; and street furniture like light standards, transit shelters, and mail boxes. Passive infrastructure's owners range from telecommunications carriers, energy distribution companies, railways, Canada Post, and other regulated utilities, to municipalities and to private property owners, whether for private use or as part of public procurement.

Investing in telecommunications networks confidently and deploying them efficiently requires timely, predictable, and competitively neutral access to passive infrastructure at reasonable rates. Facilitating this access serves public and consumer welfare by promoting efficient cost structures, reducing disruption and public inconvenience, and preventing the kinds of exclusivity or bottlenecks that raise entry barriers to establishing network facilities.

At the same time, regulation of passive infrastructure ensures conformity with standards related to engineering and construction, and may be used to address environmental, aesthetic, and health concerns. Land-use policies related to planning and development are an important policy element in the overall governance of passive infrastructure and must be appropriately balanced with the need for orderly and efficient deployment of telecommunications networks.

Consistent with Canada's federal structure, governance for passive infrastructure is therefore shared across multiple bodies and levels of government. These bodies include the CRTC, ISED, the Canadian Transportation Agency with respect to railway rights-of-way, provincial and territorial utility regulators and municipalities. These bodies each have distinct and legitimate policy concerns regarding passive infrastructure. The result is a regulatory framework that requires careful analysis in considering potential changes.

Within this framework, subsection 43(5) of the *Telecommunications Act* grants broad CRTC authority over access to passive infrastructure, including ordering the construction of telecommunications facilities on appropriate conditions, and granting access to communications providers' support structures. However, courts have held that this authority does not extend to the support structures of electricity distribution companies⁵¹ and is uncertain with respect to MDUs.⁵²

The need to clarify the CRTC's jurisdiction, and to improve coordination between the CRTC and other bodies pursuing public policy purposes, will increase as network connections and devices proliferate. Devices connected through an Internet of Things are expected to embed wired and wireless objects throughout our lives. Network connections, particularly 5G wireless ones, are expected to become denser and more ubiquitous: they will occupy space on buildings, bus shelters, and other parts of the everyday streetscape. At the same time, vertically integrated global media platforms may fuel demand for passive infrastructure access for the purposes of providing connectivity only to affiliate services, rather than offering it to the public for compensation.

As access requests increase, entities such as utilities and municipalities will increasingly seek to create orderly frameworks to respond to these requests, and disputes will arise as to how and if these frameworks frustrate network deployment. Clarifying Canada's regime for passive infrastructure access for communications services will help streamline network deployment in ways that deliver higher-quality services and innovation platforms to Canadians.

The CRTC currently mandates access to the poles, conduit, and other support structures of former monopoly local exchange carriers. These terms of access are set out in tariffs. Our recommendations are intended to level the playing field by focusing on activities, not actors. This would suggest mandating similar access to telecommunications network support structures, regardless of ownership.

We support this approach but are of the view that revisions to the *Telecommunications Act* are required to enable it. Incumbent telecommunications carriers' services were initially tariffed by default, and the CRTC has found it neither in the public interest, nor consistent with sustaining competition in related markets, to forbear: they are a public good.⁵³ The CRTC's power under subsection 43(5) to grant access to the supporting structure of a transmission line to anyone who provides services to the public may be exercised only when that person cannot gain access on terms acceptable to them.

Further, the access provisions in sections 43 through 46 of the *Telecommunications Act* grant rights and remedies to different classes of undertaking. In most cases, a remedy is granted to a Canadian carrier or broadcasting distribution undertaking, or else to their public authority counterparty. In one case, the remedy is granted instead to any person who provides services to the public.

⁵¹ Barrie Public Utilities v. Canadian Cable Television Association, 2003 SCC 28.

⁵² Canadian Institute of Public and Private Real Estate Co. v. Bell Canada, 2004 FCA 243.

Telecom Decision CRTC 2008-17, Revised regulatory framework for wholesale services and definition of essential service (3 March 2008), para 93.

Therefore, the *Telecommunications Act* should be amended to grant the CRTC authority to order any person providing electronic communications services to the public to provide access to any support structure that person controls. However, this access would be limited to persons who own or operate fibre, wireless, and other transmission facilities to provide Internet access, 5G wireless, or any other connectivity services to the public.

This would allow the CRTC to grant access to the networks, towers, and other real estate of providers of electronic communications services. But it would exclude vertically integrated media platforms seeking access assistance solely to self-supply connectivity to a related platform. More fundamentally, it would prevent the access seeker from obtaining exclusive use of the support structure. Such an approach is broadly in line with the policy reasons for mandating access to passive infrastructure: reduce public disruption and inefficient duplication; and promote efficient cost structures.

This approach would form a *de facto* exclusion from the kinds of competition-based forbearance tests currently set in the Telecommunications Act. Incidental statutory changes would therefore be required to provide for the use of class conditions of service and, where necessary, individual reference offers as the instrument by which the terms of this support structure access be established.

Recommendation 34: We recommend that to promote efficient network deployment, the Telecommunications Act be amended to require those providing electronic communications service to the public to grant access to their support structures at fair and reasonable rates and on a non-exclusive basis to persons who own or operate transmission facilities used to provide connectivity services to the public.

Recommendation 35: We recommend that sections 43 through 46 of the Telecommunications Act, which establish tools to support network deployment, replace references to specific entities (i.e. Canadian carriers, distribution undertakings) with persons who own or operate transmission facilities used to provide connectivity services to the public and prohibit any exclusive arrangement for the use of passive infrastructure.

Courts have held the CRTC's authority over support structures in section 43 of the *Telecommunications* Act does not extend to support structures owned by electricity distribution companies.⁵⁴ This has created many different access regimes across the country for such support structures and a wide variation in access rates. Most of these rates are significantly higher than CRTC-set rates for access to similar support structures.⁵⁵ Courts have, however, been clear that the siting of telecommunications

Barrie Public Utilities v. Canadian Cable Television Association, 2003 SCC 28. 54

EB-2015-0304 Report of the Ontario Energy Board Wireline Pole Attachment Charges (March 2018); Telecom Decision CRTC 2010-900, Review of the large incumbent local exchange carriers' support structure service rates (2 December 2010).

infrastructure and of radiocommunication antenna systems is at the core of federal powers over telecommunications and radiocommunication.⁵⁶

The CRTC has long acted under the *Telecommunications Act* and *Broadcasting Act* to prevent inbuilding exclusivity by mandating competitor access to the inside or in-building wire of MDUs. In the case of access to MDUs to deploy telecommunications networks, the CRTC has successfully ensured access to buildings and inside wire for service providers through its power under section 24 to set conditions of service.

In our view, parties would benefit from the modernization of this scheme. This includes statutory clarification of the CRTC's jurisdiction over access to residential and commercial MDU buildings. It extends to unifying the two, platform-specific telecommunications and broadcasting regimes to a single, technology-neutral framework that would be available to those providing electronic communications services to the public, as well as broadcasting distribution undertakings (as is currently the case). Such a unified framework would apply in respect of wireline and wireless telecommunications equipment. In devising a unified framework, the CRTC should consider how to reduce the administrative burden of those arranging rooftop antenna access and access to inbuilding wire both to serve residents and tenants, as well as for antenna backhaul.

Expansion of the scope of access to property (as described above) to include access to deploy radiocommunication facilities such as radio antennae would give the CRTC authority to order access to antenna sites, subject to any conditions that the CRTC determines. This grant of authority requires careful consideration in light of the Minister of Industry's broad power over antennae in paragraph 5(1)(f) of the *Radiocommunication Act*. As discussed in Section 2.4.2 of the Report, the Minister should continue to regulate the installation of antenna towers and their support structures in order to manage the overall spectrum environment. An authority granted to the CRTC to order access to property to support the expansion of specific networks as outlined above may be exercised in tandem with the Minister's broad power over antennae and their siting.

The ISED-administered Antenna Tower Siting Procedures contain several touch points with ISED that, in our view, would be better realigned with the CRTC's role in resolving support structure access disputes. These include the default public consultation process that fills the gap for municipalities that lack them. This dovetails closely with the CRTC's larger role working to provide guidance and, where necessary, resolving disputes with municipalities as to network access.

Constitution Act, 1867, 30 & 31 Vict, c 3, ss 91(29), 92(10)(a); Bell Canada Inc v The City of Calgary, 2018 ABQB 865; Vidéotron v Ville de Gatineau, 2017 QCCA 3571; Rogers Communications Inc. v. Châteauguay (City), 2016 SCC 23, Toronto Corporation v. Bell Telephone Co. of Canada [1905] A.C. 52.

Recommendation 36: The locations at which facilities must now be installed to pursue network deployment have broadened. We recommend that subject to any exclusions the CRTC may determine:

- the CRTC's authority over passive infrastructure should clearly include access to all public property capable of supporting such facilities, such as street furniture;
- the scope of access should include radiocommunication facilities and the telecommunications facilities necessary to operate them;
- the scope of access should also include non-discriminatory access to the support structures of provincially regulated utilities;
- the Telecommunications Act should be amended to authorize the CRTC to mandate access to inside and in-building wire, support structures, and rooftops within and on multidwelling unit buildings and be available to all providers of an electronic communications service; and
- the Minister of Industry should assign operational oversight of the radiocommunication and broadcasting antenna siting process to the CRTC, including managing the interaction with municipalities and land-use authorities.

The Telecommunications Act's provisions on passive infrastructure, set out in sections 43 and 44, create a "comprehensive and exclusive code for regulating carriers' access to public places for the purposes of constructing, maintaining and operating transmission lines."57 With section 45, they establish the CRTC as an authority for resolving disputes relating to network deployment. They provide for the CRTC to overrule a municipality in order to grant access to a "highway or other public place," and to grant access to the supporting structures of a transmission facility on a highway or other public place. But they do not instruct the CRTC as to how to coordinate its activity with that of municipalities, building managers, or other persons.

Municipalities and other public authorities pursue legitimate and important public interests in managing land use and physical assets. The CRTC's ability to modify their decisions is conditioned explicitly on having due regard to others' use and enjoyment of the highway or other public place. The Commission has established principles and a model access agreement to assist carriers and municipalities in reaching terms on which to access municipal rights-of-way and other property for network deployment.⁵⁸ Many municipal access agreements have been negotiated between carriers and municipalities without any need for further CRTC intervention.

City of Edmonton v. 360Networks Canada Ltd, 2007 FCA 106, para 52.

Telecom Decision CRTC 2013-618, CISC Model Municipal Access Working Group - Report on a Model Municipal Access Agreement (21 November 2013); Decision CRTC 2001-23, Ledcor/Vancouver - Construction, operation and maintenance of transmission lines in Vancouver (25 January 2001).

Additional safeguards are required to ensure that as networks proliferate and the potential for intersection between the CRTC and other public authorities deepens, an enabling environment for cooperation be in place through three measures.

First, consistent with our view of a more proactive regulatory approach, the CRTC should enhance its standard-setting role to provide predictability and certainty to service providers. The CRTC should continue to issue and revise guidelines and consider the issuance of binding regulations that provide stakeholders with clear notice as to the kinds of arrangements the CRTC views as appropriate. The Antenna Tower Siting Procedures that ISED promulgates by way of spectrum conditions of licence, for instance:

- require that an applicant demonstrate efforts to access shared antenna support structures before constructing a new one;
- set out a default public consultation process that may be used when the municipality lacks one, helping municipalities know what features are expected of their own processes; and
- establish the dispute resolution process to be followed in the case of disagreement.

Developing broader guidelines and regulations for use of its authority to modify the decisions of other public authorities would, in our view, provide the CRTC with an appropriate forum to consider similar rules.

Second, the expansion of the scope of access to include support structures of provincially regulated utilities, as recommended above, should not detract from the important regulatory role provided by provincial and territorial public authorities. CRTC oversight should be limited to a review and vary power aimed at preventing unduly preferential or unjustly discriminatory arrangements.

Third, in addition to having due regard for use and enjoyment, the CRTC should be required to consult with the relevant municipality, utility regulator, or other public authority before exercising its discretion to modify their decision.

Recommendation 37: We recommend that the *Telecommunications Act* be amended to require the CRTC to consult with the relevant municipality or other public authority prior to exercising its discretion to grant permission to construct telecommunications facilities. We further recommend that the Act be amended to empower the CRTC to review and vary the terms and conditions of access to the support structures of provincially regulated utilities, to ensure non-discriminatory arrangements.

2.4.2 Spectrum Management

Efficient and effective spectrum management will continue to be needed to facilitate the development and adoption of advanced wireless communications and the connected technologies that rely on them. The mobility of communications enables innovative technologies such as wirelessly connected infrastructure, robotics, vehicles, and the Internet of Things. The adoption of these technologies has and will continue to bring benefits to diverse sectors of the economy, including developments in remote education and health care.

Their adoption has implications in several regulatory areas outside communications, including transport and health. As such, effective regulation of wireless communication will involve continued coordination with other regulators, such as Transport Canada and Health Canada.

Wireless technologies play a key role in achieving Canada's telecommunications policy objectives. For example, advancements in wireless technologies, including satellite technologies, hold the promise of providing access to advanced communications in even the most remote parts of Canada. Further, in competitive environments, spectrum management practices can support efforts to promote affordability and choice, through measures such as spectrum set-asides.

Canada's ability to fully realize these benefits depends on the spectrum regulator's capabilities and toolkit. The toolkit will continue to manage a competitive environment with licence conditions. However, technological advances continually expand the scope of uses and users of spectrum interacting with one another in a diffuse and dynamic environment. To continue to facilitate innovation both within and beyond the communications sector, spectrum management practices and regulation must be efficient and adaptable to these changes. Canada is not alone in considering these types of changes to spectrum regulation: Australia, for example, is also proposing to amend its legislation for similar purposes.⁵⁹

Our recommendations with respect to spectrum management aim to clarify roles and responsibilities between the Minister of Industry as the wireless communications regulator and the CRTC as the regulator of the larger telecommunications sector. The separate mandates of the regulators open the possibility for confusion among regulated parties as to their various obligations and responsibilities. Additionally, separate regulation can result in regulatory inefficiency, which imposes unnecessary administrative burden on the sector.

We are not recommending a transfer or merger of the spectrum regulation function with the telecommunications regulation function. As noted in the survey of the legislative frameworks governing spectrum management across five peer jurisdictions (Australia, France, New Zealand, the United States, and the United Kingdom), whether spectrum management is overseen by a government

Australian Government, Consultation on new spectrum legislation (2017) [accessed 1 December 2019].

ministry or an independent statutory body does not appear to materially affect the extent to which spectrum is effectively managed.⁶⁰ Furthermore, in jurisdictions where an independent statutory body is responsible for some portion of spectrum management, other statutory authorities retain the power to issue policy directions (e.g. United Kingdom),⁶¹ hold authority over certain spectrum bands (e.g. bands allocated to government (federal) uses in the United States), or share authority with various agencies and ministries (e.g. France).⁶²

However, the potential for confusion among regulated parties could be reduced by clarifying the role of the spectrum regulator. In addition, regulatory efficiency could be improved in the resolution of disputes relating to wireless communications.

Our recommendations also aim to update the spectrum regulator's toolkit to make it more flexible and able to manage spectrum dynamically for both licensed and licence-exempt spectrum uses.

The Minister's responsibilities for spectrum management provide the foundation for wireless communications in Canada and are critical in ensuring the effective allocation and assignment of this scarce and important resource. The Minister's key powers regarding the management of spectrum are set out in section 5 of the Radiocommunication Act.

We believe that the broad economic regulatory powers of both the Minister and the CRTC should be guided and constrained in a similar way with respect to the Telecommunications Act policy objectives. A forward-looking legislative agenda should provide for a single, coherent set of policy objectives that inform the regulation of electronic communications services in Canada.

The wireless sector is the fastest-growing segment of the communications sector. Given our recommendation that the Minister retain significant powers under section 5 to licence entry and competition for this increasingly significant sector, it is more important than ever for these responsibilities to be guided in a manner consistent with the CRTC's responsibilities set out in the Telecommunications Act. This is reflected in Recommendation 6 with respect to the relationship between the policy objectives set out in the *Telecommunications Act* and the exercise of the Minister's powers in the Radiocommunication Act.

With the aim of supporting competition in the wireless sector, the Minister has established mandatory requirements for licensees to enter into roaming agreements and to share antenna towers and site locations as outlined in the Revised Frameworks for Mandatory Roaming and Antenna Tower and

Janette Stewart and Jay Lee, Comparative Analysis of Spectrum Policy and Regulation (Analysys Mason, 2019), p 8.

United Kingdom, Digital Economy Act, 2017 c.30, s 98, cited in Janette Stewart and Jay Lee, Comparative Analysis of Spectrum Policy and Regulation (Analysys Mason, 2019), p 7.

Janette Stewart and Jay Lee, Comparative Analysis of Spectrum Policy and Regulation (Analysys Mason, 2019), p 8.

Site Sharing (the Frameworks).63 Licensees are required to adhere to the terms of the Frameworks pursuant to conditions of licence.

The Frameworks require parties to negotiate roaming and sharing agreements in good faith. Where the parties are unable to come to a negotiated arrangement, they may pursue private arbitration in accordance with guidelines established by the Minister.

Reliance on private arbitration to resolve competitive disputes has several limitations. Most importantly, such a process is not transparent and fails to establish any sort of precedent that would inform and guide parties in future disputes.

Similarly, the Minister of Industry, as a member of the government, is likely not best placed to resolve commercial disputes between network operators with respect to roaming and sharing.

The CRTC, however, is well placed to resolve such disputes given its expertise in dispute resolution in matters of telecom policy and operational issues. Further, CRTC regulatory practice with respect to the conduct of its proceedings would enhance the transparency associated with the resolution of competitive disputes.

Providing the CRTC with authority to resolve disputes relating to conditions of licence established by the Minister that support competition will also complement the regime recommended elsewhere in this Report in section 2.4.1.

Recommendation 38: We recommend that to more effectively resolve disputes relating to mandatory antenna tower and site sharing, the Minister delegate the resolution of disputes relating to these or other conditions of licence to the CRTC. We further recommend that the Minister should, in existing conditions of licence, direct disputes to the CRTC rather than to commercial arbitration.

Recommendation 39: We recommend that the CRTC assume sole jurisdiction to mandate and establish terms and conditions of access to wholesale wireless services.

ISED, Revised Frameworks for Mandatory Roaming and Antenna Tower and Site Sharing (March 2013).

The *Radiocommunication Act* currently recognizes four types of equipment that may have an impact on, or be affected by, spectrum: (i) radio apparatus, defined as intentional radiocommunication emitters and receivers that enable communications (ii) interference-causing equipment, which emit electromagnetic energy and may cause interference incidentally in the performance of some function other than communication; (iii) radio-sensitive equipment, which does not cause interference but may be impacted by radio signals; and (iv) jammers, which emit electromagnetic energy and cause interference but serve no communications or other function.

There are new technologies being introduced in the spectrum environment that have the potential to block, enhance, or otherwise affect the use of spectrum but do not fit into any of these categories. For example, technically engineered wallpaper has been developed, which can either block or enhance transmissions on specified frequency ranges. This type of physical object would arguably not be captured under any of the current equipment definitions in the *Radiocommunication Act*.

To allow for continued management of the spectrum environment, the regulator should have authority over all things that may be used to impact spectrum use, whether or not they are emitting electromagnetic energy. The Minister of Industry should have the authority to set conditions of use, to limit the use of, or prohibit some technologies if their use would unduly impact the use of spectrum.

Expanding the definition of interference-causing equipment and providing greater authority over the use of that equipment would make the definition of a "jammer" in the Act redundant, suggesting that it should be removed.

Recommendation 40: We recommend that the *Radiocommunication Act* be updated to ensure that all types of apparatus, systems, or any other thing that affect safe, secure, reliable, and interference-free radiocommunication in Canada are included in the Act's scope. We further recommend that the definitions in section 2 and the prohibitions in section 4 be reviewed as a whole to ensure that the following are included:

- apparatus that is intended for or capable of being used for radiocommunication;
- apparatus that unintentionally emit electromagnetic waves or frequencies for purposes other than radiocommunication;
- apparatus that intentionally emit electromagnetic waves or frequencies for purposes other than radiocommunication; and
- apparatus or any other system or thing that can block, interfere with, distort, or alter radiocommunication.

The regulatory tools set out in the *Radiocommunication Act* largely rely on licensing to predictably manage spectrum. We are of the view that licensing will continue to be an important way to manage

the spectrum resource between users and prevent interference for the foreseeable future. As such, as part of any legislative reform, it is appropriate for the government to review a number of issues relating to licensing. In particular, the government should review the various fee regimes established under the Radiocommunication Act and the Department of Industry Act with a view to replacing out-dated and inconsistent bases for fees with a system that is competitively neutral and, where appropriate, provides value to Canadians for the use of the spectrum resource.

Software developments have allowed for shared spectrum access on a non-exclusive basis (e.g. whitespace devices, which share spectrum with TV broadcasting).⁶⁴ It is expected that expanded use of techniques to dynamically identify and make use of spectrum will soon be needed to accommodate localized networks that will support 5G-enabled technologies. 65 Allowing for dynamic spectrum access would require the adoption of new databases or similar administrative tools that provide up-to-date information as to spectrum availability. It may also be the case that it would be preferable to designate a third party as the operator of such a system, which would require a wider range of actors to be authorized to manage spectrum.

Similarly, parties may be able to better share their rights to access spectrum than the regulator. The role of the regulator as compared to the role of spectrum users in exploiting sharing opportunities can vary depending on the chosen spectrum assignment scheme, including dynamic ones. We encourage the government to continue to address these questions as it develops parameters for dynamic, nonexclusive spectrum access.

Recommendation 41: We recommend that to facilitate the shared use of radio spectrum, the Radiocommunication Act be amended to empower the Minister of Industry to:

- establish mechanisms to facilitate trading or leasing of licences;
- administer databases or information, administrative, or operational systems that govern the use of radio spectrum under one or more classes of licences or licence exemptions; and
- delegate such administrative powers to any person.

Non-exclusive use of spectrum is growing rapidly — most consumer devices operate using licenceexempt protocols such as Wi-Fi and Bluetooth.

ISED, Framework for the Use of Certain Non-broadcasting Applications in the Television Broadcasting Bands Below 698 MHz, SMSE-02-12 (31 October 2012, updated April 2013); ISED, Decision on the Technical and Policy Framework for White Space Devices, SMSE-003-19 (March 2019).

Marja Matinmikko et al., On regulations for 5G: Micro licensing for locally operated networks (2018) 42:8 Telecommunications Policy 622.

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In contrast with licensed use of spectrum, the Minister of Industry does not currently have the authority to impose terms and conditions on the use of unlicensed spectrum, provided that the device complies with relevant technical standards.

With the growth in the numbers and the importance of licence-exempt devices to Canadian users, including but not limited to the Internet of Things, there is a need to ensure that spectrum can continue to be managed effectively in a densified environment.

Licensing each device or user of such devices would be inefficient, unnecessary, and infeasible. Instead, the spectrum regulator should have the ability to impose conditions of use on devices, with enforcement measures for non-compliant use of licence-exempt devices. The scope of such conditions of use may include:

- physical installation requirements to minimize interference with other services;
- software protocols that allow for more efficient sharing, mandatory security features, mandatory privacy features, or the like; or
- requirements to use a database to verify spectrum availability prior to use.

Given how quickly technology is developing in this environment, the spectrum regulator should be given the ability to promulgate and impose terms and conditions of use of unlicensed spectrum directly on end users, as opposed to merely on device manufacturers.

Similarly, the licence-exempt radio apparatus regime is currently not agile and scalable to the degree that may be required. The power to exempt devices from licensing requirements is delegated to the Governor in Council, not the Minister of Industry. This means that section 15 of the *Radiocommunication Regulations* must be amended each time a change is made or a new apparatus is added to the list of standards in order to give effect to the exemption. The process of making or amending regulations by the GiC takes an average of 18 months to complete, while standards for new equipment and updates to existing standards are developed on a continual basis. Further, the pace at which the licence-exempt device list may need to be updated in the future will likely accelerate.

Recommendation 42: We recommend that the *Radiocommunication Act* be amended to empower the Minister of Industry to establish conditions for the use of specific models of radio apparatus that have been exempted from licensing requirements in order to enable ongoing spectrum management between diffuse users of advanced technologies outside the licensed system. We further recommend that to reduce the regulatory burden associated with the introduction of new wireless technologies, the Act be amended to provide the Minister of Industry rather than the Governor in Council with the power to exempt models of radio apparatus from licensing requirements.

2.4.3 Communications Equipment

Under the *Telecommunications Act* and *Radiocommunication Act*, the Certification and Engineering Bureau of ISED has established standards applicable to certain classes of communications devices. Generally speaking, these standards are concerned with a) managing the risk to the integrity, reliability, and safety of subscriber equipment that is intended to connect to the wireline networks of the carriers; b) managing the risk of interference to radiocommunication services by imposing frequency and power emission requirements on radio apparatus that operate in shared bands; c) managing the risk of interference to radiocommunication services from non-intentional emitting devices, and; d) ensuring the limits Health Canada establishes for exposure to radiofrequency (RF) energy are respected.

It is anticipated that over the coming years, the number of devices connected to wireline and wireless telecommunications networks will more than double. Some have estimated that the number of devices connected to telecommunications networks worldwide will number 29 billion by 2022, 18 billion of which will relate to the Internet of Things.⁶⁶

These devices are increasingly forming key parts of control over other systems, such as those in the transport or energy sectors or, for users, in "smart homes." This development raises concerns as to the security of the devices given the far-reaching impacts if they are compromised. As a 2019 report noted:67

"Moreover, the scale and vulnerability of these consumer devices pose risks beyond the enterprises, businesses, and homes in which they are found. Large groups of compromised devices have been used together to attack and disable Internet-facing services by forging large volumes of traffic. The most publicized case is the then-record-setting Mirai IoT botnet. In 2016, Mirai exploited unsecure closed-circuit television cameras (CCTVs) whose default passwords had not been changed. The scale of such attacks continues to increase."

As importantly, the devices are increasingly integrated into the daily lives of users. This integration raises new concerns regarding the privacy of users as the devices collect data that may be provided to third parties as part of the operation of the device. Once data are received, they may be used, misused, or compromised in unpredictable ways. More positively, innovations in these devices bring improvements to the lives of those with accessibility needs. It is important to ensure that devices can meet those needs.

The changing nature of communications equipment suggests both the need for the equipment regulator to take on a broadened role and the need for an improved regulatory toolkit. Through the course of our work, we heard about the importance of the issues of security, privacy, and

Ericsson, Internet of Things forecast [accessed 1 December 2019] 66

Internet Society, Enhancing IoT Security: Final Outcomes and Recommendations Report (2019), p 20.

accessibility with respect to communications devices. However, it is not currently clear who should bear responsibility for taking any needed regulatory action to address risks in these areas.

We are of the view that the Minister of Industry, in exercising the authority to establish equipment standards and regulate the distribution of devices in Canada, should be responsible for setting and enforcing requirements relating to security, privacy, and accessibility of communications devices. In exercising this authority, the Minister of Industry should take the needs of users into account. For example, we would encourage the Minister to require that device manufacturers provide users with a right to repair their devices and to inform them of this right in equipment labelling.

Recommendation 43: We recommend that the Minister of Industry be given responsibility for ensuring that communications devices and their operating systems respect security requirements, protect users' privacy, and incorporate accessibility features. Equipment standards established under the Telecommunications Act and the Radiocommunication Act should be revised to reflect those considerations.

The regime for equipment regulation must adapt to an environment of connected devices and address any uncertified equipment that does not meet Canadian standards and is brought into Canada through online purchases or by other means.

Additionally, the operation of these connected devices is often controlled by software installed on the device, with updates provided over the Internet. These operating systems represent a key element in regulating the performance of the device, including standards for security, privacy, and accessibility. However, these systems are not clearly within the legislative scope of the Radiocommunication Act and Telecommunications Act.

To allow for comprehensive regulation of communications devices, the Minister of Industry should be given authority to establish and enforce standards with respect to operating systems and software on communications devices.

Further, the Minister of Industry's authority over equipment regulation should extend to all parties involved in the distribution of communications equipment in Canada, including online players.

Both the Radiocommunication Act and the Telecommunications Act should mirror one another with respect to prohibited conduct. While the manufacture of prohibited radio apparatus is captured in the prohibitions, the manufacture of telecommunications equipment is not but should be.

Further, alignment is desirable with respect to the regulatory mechanism to approve equipment for distribution in Canada. While the Telecommunications Act provides for a registry of approved telecommunications equipment, a more cumbersome system is found in the Radiocommunication Act. This system relies largely on the issuance of technical acceptance certificates.

A registry is a more flexible, dynamic, and adaptable method to establish equipment that is approved for use in Canada. A registry can be more scalable to accommodate the large numbers of devices that will need to be approved for distribution in Canada. It also allows for deregistration once equipment should no longer be distributed.

Recommendation 44: We recommend the following amendments in order to update the communications equipment certification system:

- amend the prohibition in 69.2 of the Telecommunications Act to include the manufacture of telecommunications apparatus;
- expand the prohibitions in both the Telecommunications Act and the Radiocommunication Act to include "persons facilitating the importation, distribution, offer for sale, and sale of devices in Canada";
- amend the provisions that currently empower the Minister and the Governor in Council to establish technical requirements and technical standards in relation to communications equipment, to include the power to establish standards in relation to the operating systems and software that run the devices; and
- align the Minister of Industry's powers in relation to radio apparatus, interferencecausing equipment, and radio-sensitive equipment in order to authorize the creation of a registry system for equipment regulated under the Radiocommunication Act similar to that currently found under the Telecommunications Act.

ENSURING FAIR AND SECURE ACCESS

Digital transformation also poses new challenges to the safety and security of Canada's telecommunications infrastructure. Lack of adequate network security undermines the capacity of both the government and the industry to respond effectively to new threats as they arise, as well as the trust that Canadians have historically placed in their telecommunications system. While openness and net neutrality — a concept related to the long-standing principle of common carriage — will continue as key elements of Canada's legislative and regulatory frameworks, there may be other principles that should be applied to balance the need for an open Internet with security in the digital context.

2.5.1 Network Security and Reliability

Canadians rely on communications services they purchase to interact with others, to participate in society, and to do business online.

Digital and media literacy are an important part of staying safe and secure online. Safe and secure electronic communications services require the ability to:

- access and communicate the legal content of one's choice without the fear of surveillance, manipulation, abuse, or harassment;
- access emergency and first responder services reliably and effectively;
- use service that is safe from threats to human health and safety; and
- use devices that avoid being recruited as entry points for network-wide threats.

National security and public safety threat coordination falls to security agencies that lead wholeof-government efforts to protect systems critical to Canada's cybersecurity.⁶⁸ The Communications Security Establishment (CSE) has the central role in computer network security and foreign signals intelligence (SIGINT) that transit Canadian telecommunications networks.⁶⁹ The Communications Security Establishment Act assigning its responsibilities was revised to clarify and expand the CSE's powers as part of a broader legislative initiative completed during the course of our deliberations. The same initiative included revisions to or enactment of statutes including the Criminal Code, as well as the Canadian Security Intelligence Service Act (CSIS Act), National Security and Intelligence Review Agency Act, Intelligence Commissioner Act, and Security of Canada Information Disclosure Act.

However, network security and reliability are also part of the core infrastructure that is fundamental to how we live, work, play, and participate in society. Canadians' trust and confidence in electronic communications services are enhanced when a baseline level of network security can be ensured and

Public Safety Canada, National Cyber Security Strategy: Canada's Vision for Security and Prosperity in the Digital Age (2018).

Communications Security Establishment, What We Do and Why We Do It [accessed 1 December 2019].

enforced. There is an important role for the communications regulator to register, collect information, and establish standards for telecommunications market participants in relation to this issue.

Canada's communications laws do not include a security objective. This stands in contrast to the United States Communications Act, which assigns to the FCC purposes including "national defence" and "promoting safety of life and property through the use of wire and radio communications," 70 and the German Telekommunikationsgesetz (TKG) of 1996, which establishes early on the aim "to safeguard the interests of users in the fields of telecommunications and radiocommunications as well as maintain telecommunications secrecy."71

Other jurisdictions address network security in the context of telecommunications regulation in a more specific manner, rather than through a purpose or object clause. The European Electronic Communications Code includes a title, Security of Networks and Services.⁷² The United Kingdom's communications statutes simply make security part of Ofcom's general duty to carry out Secretary of State directions in the interests of national security or public safety.⁷³ Australia leaves security out of its Telecommunications Act 1997's objects and regulatory policy sections in favour of assigning national security assistance to the Australian Communications and Media Authority (ACMA).⁷⁴ New Zealand sets up a self-standing regulatory body, through its Telecommunications (Interception Capability and Security) Act 2013, to address these matters.⁷⁵

In few cases, however, is responsibility for establishing baseline network security standards for telecommunications market participants separated from the regulatory function. In our view, to ensure user trust in telecommunications networks and services, network security should be added to the *Telecommunications Act* as a telecommunications policy objective.

Recommendation 45: We recommend that to ensure the trust and safety of users of electronic communications services, the policy objectives of the Telecommunications Act be amended to include the promotion of the security and reliability of telecommunications networks and electronic communications services.

United States of America, Telecommunications Act, 47 USC § 151. The USC also ensures "systems security and integrity," which is described as communications free from unlawful interceptions; not only telecommunications carriers are held to that standard, so are equipment manufacturers and providers of telecommunications support services (Communications Assistance for Law Enforcement Act, 47 USC § 1004-1006).

Germany, Telekommunikationsgesetz (2004), s 2(2).

European Union, Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast) Text with EEA relevance, Title V.

⁷³ United Kingdom, Communications Act 2003, c 21, ss 5(2), (3)(a), (d).

Australia, Telecommunications Act 1997, no. 47, 1997, 55.3, 4 and 312.

New-Zealand, Telecommunications (Interception Capability and Security) Act, no 91, 2013, ss 72-76 sets out statutory purposes and principles relating to interception capability and network security, in contrast to distinct and non-overlapping broad purpose clauses in New-Zealand's general Telecommunications Act.; New-Zealand, Telecommunications Act, 2001/103, ss 3, 18, 69A, 69W, 155ZR, 156AC, 156AT, 162, 174 and 233.

Network security and reliability threats are present and growing. Network security is important to telecommunications providers from a reputational standpoint, to mitigate private liability and insurance requirements and, in many cases, to satisfy the needs of business customers. However, there is not a uniform regime within the interconnected Canadian telecommunications environment.

We think that this is straightforward to remedy and should be addressed by the CRTC building on efforts to date and existing policy requirements. Voluntary committees involving some of Canada's service providers have already assembled network security hygiene guidelines, like the Canadian Security Telecommunications Advisory Committee (CSTAC)'s Security Best Practices for Telecommunications Service Providers (TSPs).⁷⁶ CRTC policy requires local voice service providers to report annually on 9-1-1 network outages.⁷⁷ However, no security breach reporting obligation is attached to the provision of telecommunications services. Establishing a code of security practices would provide a path to mandate broader cooperation with shared resources like the CSE's Canadian Centre for Cyber Security (CCCS), which currently participates with the not-for-profit Canadian Cyber Threat Exchange (CCTX) clearinghouse.

We therefore urge the CRTC to convene a proceeding on the extent to which the CSTAC security best practices should be updated and made obligatory. The proceeding should pay special attention to the importance of maintaining low barriers to entry. Any additional burden placed on small and new service providers should be justified by a security and safety improvement that outweighs it.

Recommendation 46: Canada should not wait to establish security baselines that enhance trust in telecommunications markets. We recommend that the CRTC initiate a proceeding to update the Security Best Practices for Canadian Telecommunications Service Providers issued by the Canadian Security Telecommunications Advisory Committee and to determine to which classes of service providers these practices should apply.

Legislation in some jurisdictions requires communications regulators to conduct service provider review as part of the licensing or registration processes. Canadian regulatory agencies have the authority but not the responsibility to institute similar requirements in some circumstances. For instance, the CRTC's procedures for reviewing applications to its Broadband Fund provide for the disclosure of confidential applicant information to CSE's Security Review Program.⁷⁸ We encourage the CRTC and

ISED, Canadian Security Telecommunications Advisory Committee (CSTAC) [accessed 1 December 2019]; ISED, Canadian Security Telecommunications Advisory Committee, Security Best Practices for Canadian Telecommunications Service Providers (TSPs) (31 October 2013), ss 1.2-1.4.

Telecom Regulatory Policy CRTC 2017-182, Next-generation 9-1-1 – Modernizing 9-1-1 networks to meet the public safety needs of Canadians (1 June 2017), paras 126-128.

Telecom Regulatory Policy CRTC 2019-190, Broadband Fund – Modifications to the Application Guide (3 June 2019) paras 23-28.

ISED to continue to consider the role of security review and transparency in implementation in their ongoing activities to enhance network security.

With respect to information disclosure, provisions in the Radiocommunication Act, the Telecommunications Act, and Security of Canada Information Disclosure Act⁷⁹ provide a broad basis for the CRTC and ISED to disclose information to designated agencies in relation to securityundermining communications interference. However, neither ISED nor the CRTC are among the recipient Government of Canada institutions identified in the latter legislation. The functions that an agency like the CRTC will have to take on as a proactive agency, including functions set out in our recommendations, will make it important to review the role of communications regulatory agencies within a whole-of-government cybersecurity coordination.

Recommendation 47: We encourage the federal government and its lead agencies on national security and public safety to consider whether additional powers may be required on a coordinated or sector-specific basis to ensure that relevant electronic communications services and facilities remain safe and secure. In this review, the federal government should consider whether to replicate certain powers granted under the Radiocommunication Act in the Telecommunications Act.

2.5.2 Net Neutrality

During the review we considered whether current legislative provisions are well positioned to protect net neutrality principles in the future. As part of that examination, we considered the varied meanings and approaches to network neutrality, beginning with the CRTC's Internet Traffic Management Practices ("ITMP") and Differential Pricing Practices ("DPP") frameworks, approaches to network neutrality in peer jurisdictions, and the emerging and rapidly evolving challenges to these principles. We believe that new legislation should enshrine users' right to engage in the lawful activities of their choosing via their Internet access service.

Network neutrality is a design principle that holds that allowing the "network to carry every form of information and support every kind of application"80 will maximize the social and economic benefits that can be derived from a public network. Thus, "absent evidence of harm to the local network or the interests of other users, broadband carriers should not discriminate in how they treat traffic on their broadband network on the basis of inter-network criteria."81

Radiocommunication Act, section 5.1; Telecommunications Act, paragraphs 39(4)(a) and 39(5)(a), as applied in Telecom Regulatory Policy CRTC 2019-190, Broadband Fund - Modifications to the Application Guide (3 June 2019), paras 25-26 contra 32-33; Security of Canada Information Disclosure Act, S.C. 2015, c. 20, ss 5.

Tim Wu, Network Neutrality FAQ [accessed 1 December 2019].

Tim Wu, Network neutrality, broadband discrimination (2003) 2:1 Journal of Telecommunications and High Technology Law 141, p 171.

Justifications for legislative and regulatory regimes for net neutrality have included consumer protection, 82 incentivizing investment in infrastructure, 83 promoting innovation, 84 spurring social and cultural development,85 ensuring a competitive market for retail customers86 and; under a human rights perspective, facilitating free expression, 87 access to information rights, 88 safeguarding online privacy,89 and political freedoms.90 In the latter regard, the Government of Canada has indicated that Open Internet principles are directly connected to freedom of expression, innovation, and user rights.91

The Canadian regulatory approach to net neutrality is outlined in CRTC decisions on ITMPs in 2009 and DPP (or "zero rating") in 2017⁹². The approach focuses on transparency and a framework test to be applied at the enforcement stage, as opposed to bright-line rules as to which types of ITMPs are acceptable. 93 Many jurisdictions have taken a similar approach to Canada. In the past decade, India, Brazil, Mexico, the European Union, and the United States⁹⁴ have all enacted net neutrality frameworks based on a general non-discrimination principle animated by more detailed prohibitions and obligations. The prohibitions generally include blocking or slowing access tocontent

Federal Communications Commission, Re Protecting and Promoting the Open Internet, 30 FCC Rcd 5601 (7) (12 March 2015), para 141.

Regulatory Policy CRTC 2009-657, Review of the Internet traffic management practices of Internet service providers (21 83 October 2009), para 36.

⁸⁴ Tim Wu, Network neutrality, broadband discrimination (2003) 2:1 Journal of Telecommunications and High Technology Law 141, pp 145–147.

Brazil, Marco Civil da Internet, 2014, c 1, art 4(II). 85

Telecom Regulatory Policy CRTC 2009-657, Review of the Internet traffic management practices of Internet service providers (21 October 2009), para 69.

See e.g. Telecom Regulatory Authority of India, Net Neutrality Recommendations (2017), para 2.19; Brazil, Marco Civil da Internet 2014, c 1, art 3(I).

Arturo J Carrillo, Are There Universal Standards for Network Neutrality? (2019) 80:4 University of Pittsburgh Law Review 88

Mexico, Federal Telecommunications and Broadcasting Law, 2014, ch VI, art 145(III). See also Telecom Regulatory Authority of India, Net Neutrality Recommendations (2017), para 1.8; Brazil, Marco Civil da Internet, 2014, c 1, art 3(II).

Federal Communications Commission, Re Protecting and Promoting the Open Internet, 30 FCC Rcd 5601 (7) (12 March 2015), para 137.

ISED, Statement - Minister Bains comments on the Federal Communications Commission vote on net neutrality (14 December 2017).

Telecom Regulatory Policy CRTC 2009-657, Review of the Internet traffic management practices of Internet service providers 92 (21 October 2009), applied to mobile wireless services in Decision CRTC 2010-445, Modifications to forbearance framework for mobile wireless data services, Telecom (30 June 2010); Telecom Regulatory Policy CRTC 2017-104, Framework for assessing the differential pricing practices of Internet service providers (20 April 2017).

⁹³ Telecom Regulatory Policy CRTC 2009-657, Review of the Internet traffic management practices of Internet service providers (21 October 2009), para 37.

The FCC 2015 Open Internet Order was repealed in 2018 when the FCC revised its position on net neutrality. There are 94 currently no enforced net neutrality provisions in the U.S.

or services,95 with an exception for traffic management deemed necessary for the functioning of the network. 6 Generally speaking, each regime also has transparency obligations under which ISPs must proactively disclose traffic management procedures to end users, other customers, and regulatory bodies.⁹⁷

Others have argued that competition and market solutions should form the primary approach to achieving policy goals that further consumer welfare in the electronic communications sector, including in relation to network neutrality.98 Competition enabled by interventionist wholesale regulation in Australia⁹⁹ and New Zealand¹⁰⁰ appears to have achieved some network neutrality goals without the need for such rules. While it falls to the regulator to determine how to achieve network neutrality goals, a market outcome that did not protect and maintain users' rights to an open Internet would constitute market failure.

There are certain emerging practices and technologies which, while not necessarily incompatible with neutrality or open access principles, suggest the need for a flexible regulatory toolkit and an expanded view of the intermediaries that could limit, influence, or preclude open access to the Internet by Canadians.

Zero rating, or differential pricing, is the practice of discounting some retail Internet traffic, such as exempting traffic associated with certain applications from a user's monthly bandwidth cap. Some incarnations of this practice inherently create discrimination — for example, zero rating selected applications or in exchange for edge-provider payment. 101 In peer jurisdictions, there is broad agreement that certain types of zero rating can be harmful, but of those canvassed, only India's regulator has placed an ex ante ban on discriminatory tariffs for data services "on the basis

See e.g. Mexico, Federal Telecommunications and Broadcasting Law, 2014, ch VI, art 145(II); European Union, Regulation 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the

See e.g. European Union, Regulation 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union; Brazil, Marco Civil da Internet, 2014, c 3, Section I, art 9, ss 1(I-II).

See e.g. Mexico Federal Telecommunications and Broadcasting Law, 2014, ch VI,, art 145(IV), Telecom Regulatory Authority of India, Net Neutrality Recommendations (2017), para 5.12.

Christopher Yoo, Beyond network neutrality (2005) 19:1 Harvard Journal of Law & Technology 1.

Angela Daly, Net Neutrality in Australia: An Emerging Debate in Primavera De Filippi, ed., 2nd Report of the UN IGF Dynamic Coalition on Network Neutrality (September 2014), p 5.

Vodafone Europe B.V. and Sky Network Television Limited [2017] NZCC 1, para 86–90.

Barbara van Schewick, Network Neutrality and Zero-rating (February 2015), p 9.

of content."102 This approach underscores the important role of national regulators in assessing violations under an ex post regime, like Canada's, in concert with a framework made clear ex ante. 103

IP-based "specialized services," which do not purport to provide Internet access at all, but do consume limited network resources (for example, some set-top boxes or security systems), are addressed in regulation by the European Union, 104 India, 105 and the now-defunct United States Open Internet Order. 106 Network slicing — running multiple virtual networks on a single physical infrastructure — is a feature of next-generation wireless broadband, which provides for optimizing slices of the network for different service requirements on key metrics like speed, bandwidth, and latency. The provision of Internet and non-Internet services with specific quality or technical requirements will not necessarily amount to a violation of net neutrality. However, there are foreseeable instances in which these could impact the speed, quality, or provision of public Internet services and therefore their development and use must be able to be addressed in the regulatory regime governing net neutrality.

Other emerging issues that go beyond classical Internet access have much in common with the goals of net neutrality. Increasingly, end users access the Internet through specialized devices, including smartphones, tablets, set-top boxes, and smart devices. Internet use on these devices is largely facilitated by apps. The ability of device manufacturers, of operating system publishers, and of the app stores integrated into these operating systems to impose requirements on application developers creates a new class of gatekeepers with a disproportionate amount of bargaining power and the ability to dictate technical requirements or financial arrangements. 107 Other jurisdictions are beginning to grapple with whether and how to regulate devices' and operating systems' ability to interfere with an open Internet. 108

Telecom Regulatory Authority of India, Prohibition of Discriminatory Tariffs for Data Services Regulations, No. 2 of 2016, c

¹⁰³ Telecom Regulatory Policy CRTC 2017-104, Framework for assessing the differential pricing practices of Internet service providers (20 April 2017), para 126-129.

European Union, Regulation 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, recitals 16–17.

¹⁰⁵ Telecom Regulatory Authority of India, Net Neutrality Recommendations (2017), para 3.3.

Federal Communications Commission, Re Protecting and Promoting the Open Internet, 30 FCC Rcd 5601 (7) (12 March 2015), para 35.

¹⁰⁷ Netherlands Authority for Consumers & Markets, Market study into mobile app stores (11 April 2019), p 5.

ARCEP, Smartphones, tablets, voice assistants... Devices, the Weak Link in Achieving an Open Internet: Report on their limitations and proposals for corrective measures (February 2018); Body of European Regulators for Electronic Communications, BEREC report on the impact of premium content on ECS markets and the effect of devices on the open use of the Internet (8 March 2019).

Additional challenges arise as over-the-top providers of electronic communications services currently have no or fewer regulatory obligations but are competing head-on with traditional service providers who do. The European Commission's expert report on Competition in Digital Markets¹⁰⁹ and the Body of European Regulators for Electronic Communications' (BEREC) Report on OTT Services¹¹⁰ have suggested that Open Internet principles of transparency and accountability may be a useful lens through which to consider the practices of new and emerging services.

With the rapid pace of technological change, a legislative framework that ensures regulatory flexibility to continue to craft guidance as this area evolves is paramount. Subsection 27(2) and section 36 of the Telecommunications Act have proven to be sufficiently flexible and adaptable to allow the CRTC to address various forms of gatekeeping by ISPs and are well suited to allow the CRTC to address future forms of Internet gatekeeping.

However, subsection 27(2) and section 36 do not require an ongoing regulatory commitment to an open Internet in order to achieve their ends and currently apply directly only to Internet access when it is provided by Canadian carriers. It is essential to carry forward, in an increasingly global economy, the continued innovation and free exchange of ideas enabled by open Internet access. While it is not known which intermediaries will in the future act to limit, influence, or preclude open access to the Internet, at a legislative level, Parliament must ensure that the communications regulator is properly mandated and equipped to respond to Internet gatekeeping from new or novel quarters.

To do so, a policy objective should be added to the Telecommunications Act to guide the CRTC in the exercise of its statutory powers. The objective should be framed as a user right, similar to those previously adopted in the United States, the European Union, and other peer jurisdictions.

Recommendation 48: We recommend that to safeguard continued access to an open Internet, which is fundamental to net neutrality:

- The policy objectives of the *Telecommunications Act* be amended to reflect the CRTC's duty to safeguard open Internet access in Canada. This is intended to ensure that users have the right, via their Internet access service, to access and distribute lawful information and content, use and provide applications and services, and use terminal equipment of their choice, irrespective of the location, origin, or destination of the information, content, application, or service.
- The term "Canadian carrier" in subsections 27(2) and (4) of the Telecommunications Act be deleted in favour of language allowing the CRTC to review unjust discrimination in the provision of any electronic communications service by any person.

¹⁰⁹ Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, Competition Policy for the Digital Era (European

¹¹⁰ Body of European Regulators for Electronic Communications, Report on OTT services (29 January 2016), pp 25-26.

While the rapid pace of change in communications technologies advises against enshrining overly prescriptive rules in statutory form, it also dictates that regulatory authorities anticipate and not merely react to emerging issues in overseeing business and technological practices that may affect the achievement of the communications policy objectives.

Communications regulatory authorities, in particular, play a key role in ensuring open Internet access. The European Union's Regulation on the Open Internet, for one, requires the national regulatory authorities of the European Union's member states to "closely monitor and ensure compliance" by providers of Internet access services and providers of electronic communications to the public under the Regulation, and to publish and provide a report to BEREC on an annual basis regarding this monitoring and the relevant findings.¹¹¹

Currently, the CRTC reports quarterly on the number of complaints received under its ITMP framework. 112 However, as communications technologies evolve, the need to map potential challenges to an open Internet is critically important and the national communications regulator must lead in this area. The CRTC is responsible for identifying, investigating, and enforcing net neutrality rules. It must therefore keep abreast of business and technological practices and develop the institutional capacity and expertise to deal with these in real time. Consideration of network slicing models and the role of platforms, app stores, and device manufacturers are prime examples of work that Canada's national communications regulator must continue to undertake. The regulator may also be required to work closely with other institutions in government to address concerns about anti-competitive behaviour. Our recommendations on this issue are addressed elsewhere in this Report.

Recommendation 49: We recommend that the CRTC expand its information gathering and reporting on network neutrality, including Internet traffic management practices, zero rating, and any further open Internet access provisions, including:

- To require Internet service providers to inform users of network speeds and management practices when contracting for and providing the service, and to report annually to the CRTC on network management practices and their impacts.
- To report annually, either as a stand-alone report or combined with other reporting, on practices that affect achievement of the open Internet access policy objective.

¹¹¹ European Union, Regulation 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, art 5(1).

¹¹² CRTC, Internet Traffic Management Practices [accessed 1 December 2019]. ("Every three months, the Commission will publish a summary of the number and types of complaints it has received on its website, including the number of active and resolved complaints.").

2.6 A NEW SET OF POLICY OBJECTIVES FOR THE TELECOMMUNICATIONS ACT

The previous discussion has explored a wide range of issues relating to profound changes in the telecommunications sector. These changes have led us to conclude that a new set of policy objectives is required for the Telecommunications Act, in order to provide a forward-looking framework for regulation. The reasons behind this new set of objectives are articulated in the Report and the full list is set out here for ease of reference.

Recommendation 50: We recommend that the legislation governing the telecommunications sector include a provision setting out the policy objectives of the legislation in the following terms:

- It is hereby affirmed that telecommunications perform an essential role in the maintenance of Canada's identity and sovereignty and to safeguard, enrich, and strengthen the social and economic fabric of Canada and its regions. The Canadian telecommunications policy has as its objectives:
 - To promote timely, affordable, barrier-free access by all Canadians, including those with disabilities, to the advanced telecommunications necessary to fully participate in Canadian society and the global economy.
 - To foster innovation and investment in high-quality, advanced connectivity in all regions of Canada, including urban, rural, and remote areas.
 - To foster a competitive market for the provision of electronic communications services primarily through reliance on market forces and, where required, through efficient and effective regulation.
 - To promote the security and reliability of telecommunications networks and electronic communications services.
 - To contribute to the protection of the privacy and confidentiality of user information.
 - To safeguard open access to the Internet.
 - To promote the ownership and control of Canadian transmission facilities by Canadians.
 - To promote the use of Canadian telecommunications facilities for electronic communications within Canada and between Canada and points outside Canada.

3. CREATION, PRODUCTION, AND DISCOVERABILITY OF CANADIAN CONTENT

3.1 INTRODUCTION

From the 1930s onwards, governments have acted at key junctures, spurred by the technology of the time, to promote Canada's cultural sovereignty. Working with industry, creators, and citizens to harness the promise of technology and the creativity of Canadians, governments have aimed to ensure that, whatever the medium, Canadians could see and hear their own stories, express their values and share their experiences. These efforts also ensured an opportunity for Canadians to interpret the events of the day from a Canadian perspective and to debate matters of public concern. In this way, promotion of Canada's cultural sovereignty also supported a healthy democracy.

The *Broadcasting Act* has been an important part of those efforts, aimed at ensuring the creation, production, and discoverability of Canadian content. However, the world has changed since the enactment of the 1991 *Broadcasting Act*. The Internet and mobile and digital media devices have resulted in new ways to consume media and cultural products. Canadians now live in a new and expanding cultural ecosystem in which radio, television, and online offerings from Canadian companies compete with content from global online platforms.

In this chapter, we consider how the legislative framework should be modified so that Canadians can be assured that this new ecosystem will effectively support the creation, production, and distribution of Canadian content. We take into account trends that have become increasingly evident since 1991. These include the unprecedented abundance of content in a global and competitive market, the growing presence and importance of foreign companies, the shift by Canadians to consuming content online, the growing role of Big Data, and its implications for business models in the sector.

These trends raise questions concerning every aspect of the traditional framework for the Canadian broadcasting system. For example, while the abundance of content arising from the global nature of the Internet offers both more choice to consumers and greater export opportunities to creators, it also reduces the capacity of the traditional sector to contribute to the production of Canadian content. Advertising revenues are moving to the Internet, and subscription revenues from cable and satellite services, which support Canadian production, are declining.

The discovery of Canadian content is also becoming a greater challenge as Canadians shift to new forms of content, from user-generated to short video and gaming, as well as subscription services with huge volumes of entertainment content provided by foreign platform providers. Foreign companies have been present in Canada for many years. However, their ability to collect and use consumer data through the application of artificial intelligence and algorithmic processes, to customize their offerings and be responsive to changing consumer demands creates a competitive challenge for existing Canadian companies.

Canada itself has changed since the 1991 Broadcasting Act. It is a more urban¹¹³, educated¹¹⁴, and culturally diverse society¹¹⁵. Canadians expect transparency and accountability, particularly when it comes to their public institutions. Reconciliation with Indigenous Peoples has become a national priority and is inextricably linked to the promotion of Indigenous cultures and languages. The question of how the legislative framework can best ensure these voices are nurtured and supported is critical. It is also important that the needs and expectations of younger Canadians are addressed. The relevance of the media sector in Canada will rest in no small part on how effective it is in responding to these diverse voices and expectations.

These shifts, broadly speaking, have informed our examination of the entire framework for the creation, production, and discoverability of Canadian content. In this chapter, we look at the policy objectives that will allow Canada to assert its cultural sovereignty; how best to define the actors and activities related to the creation and distribution of Canadian content; the legislative and regulatory tools that can be applied to allow Canadians to embrace the global market; a new support model for the creation, production, and discoverability of Canadian content; support for democracy and democratic institutions through news content from a Canadian perspective; and finally, how to strengthen the national public broadcaster in this new environment.

Our recommendations set out new policy objectives adapted to the needs of Canadians; a redefinition of the activities and actors subject to regulation that is technologically neutral and forward looking; a sustainable model for the creation, production, and discoverability of Canadian content with all actors contributing in an appropriate manner; a wide range of trusted, accurate, and reliable sources of news; and a national public media institution that is relevant, accountable, and distinctive, supported by an appropriate funding and accountability regime.

¹¹³ Statistics Canada, Canada goes urban (2018); Statistics Canada, Population centre (POPCTR) (2019).

¹¹⁴ Statistics Canada, Table 37-10-0130-01 (formerly CANSIM 477-0135).

Statistics Canada, Number and proportion of visible minority population in Canada, 1981 to 2036 (2017).

ASSERTING CULTURAL SOVEREIGNTY THROUGH MEDIA COMMUNICATIONS

We begin with the scope and objectives of the legislation as the starting point for ensuring that Canada is able to continue to assert its cultural sovereignty and Canadians can continue to express their identity and culture through content.

3.2.1 Broadening Our Horizons—Types of Content and Platforms

From user-generated videos lasting just a few seconds to full-length feature films and everything in between — blogs, vlogs, news, podcasts, music, webisodes, mobisodes, video games, and series — Canadians create and consume more types of content than ever before (see Figures 3-1 and 3-2 below). They do so in a wide variety of ways, including through online social media, streaming platforms, digital distribution stores, and voice-controlled personal assistants.

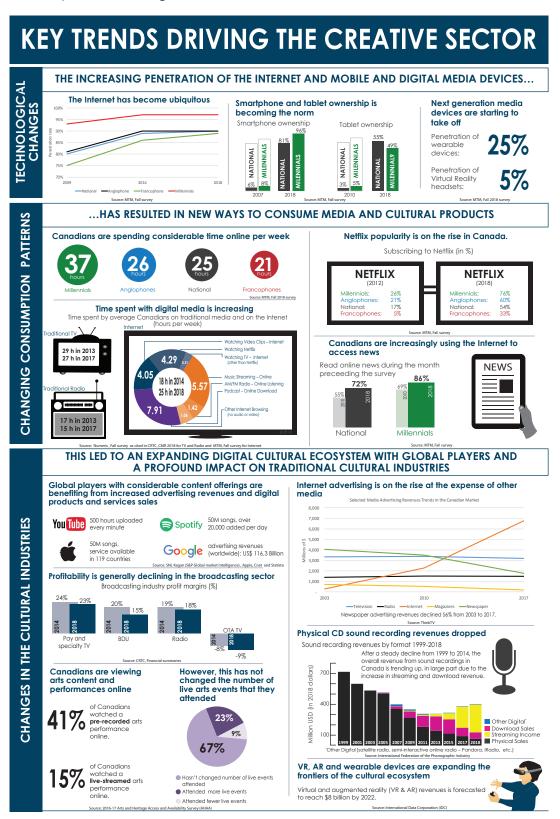
This growing consumption of content online is facilitated by the ubiquity of various devices. Smartphones are becoming the norm, and the ownership of smart TV's and wearables are rapidly increasing in all segments of the population, particularly in the 18–34 age group. 116

¹¹⁶ Media Technology Monitor, Fall Survey 2013–2018 (Smart TV Ownership), and 2015-2018 (Wearable Devices Ownership).

Figure 3-1 Audiovisual in a Global Marketplace

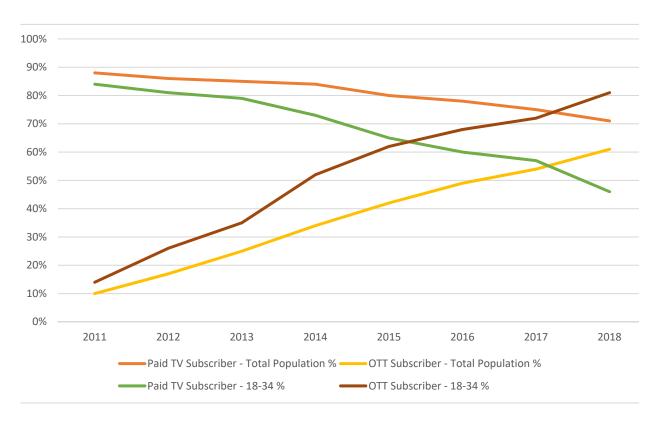
	Audiovisua	Conten	nt in a Glo	bai worid	
	Reach	Global Revenues (USD)		Content	
Movies	People in North America	2018 Box Office 41.1B Source: Movie Picture Association of America			
	that are moviegoers 75%			758 movies released in theatres in North America in 2018.	
	Source: Movie Picture Association of America			Source: Movie Picture Association of America	
YouTube	User logins every month in 2019 1.9B	2017 7.8B Source: Statista		500 hours of content uploaded every minut A study in 2018 showed that its 6 min 12 s was the median length of YouTube videos watched by its participants. Popular Content: E-Sports, How-To, Vlogs and Personalities, Music Videos Source: Statista; Exploring Online Video Watching behaviours	
	Source: Youtube				
TV Content	Households who watched TV in 2017 1.6B	2018 Trad. TV: 196.7B OTT 68.7B	389 427 500 389 427 400 33 49 300 148 150 200 34 37 100 174 186 0 Basic C	750 90 117 160 146 153 146 36 42 45 183 175 144	
VR	Users in 2018 171M	2018 8B		Used for Games, Immersive Entertainment, Show rooms and retail, Education	
	Source: Statista	Source: TechJury		Source: TechJury	
Video Games	Gamers in 2016 2.3B	137.9B		9,050 games added on Steam in 2018 114,000+ game apps on Google Play Store in 2018	

Figure 3-2 Key Trends Driving the Creative Sector



With greater choice, the services to which Canadians subscribe are changing. Subscription to traditional cable and satellite services is declining. In 2014, 79.8 per cent of households subscribed to broadcasting distribution undertakings or BDUs (e.g. cable companies). This dropped to 72.5 per cent by 2018¹¹⁷. In contrast, subscriptions to largely foreign on-demand Internet video and audio services have been rising steadily since 2011. In 2018, 61 per cent of Canadians subscribed to such an Internet video service, with the subscription rate jumping to 80 per cent for the 18–34 age group (see Figure 3-3). Over 50 per cent of Canadians aged 18–34 reported subscribing to a music streaming service, approximately double the percentage reported by all Canadians.¹¹⁸

Figure 3-3 Percentage of Canadians Who Subscribe to TV and Internet Streaming Services (2011–2018)



Source: Media Technology Monitor, Fall survey 2011–2018

Changes can also be seen in how Canadians are consuming news. Today, Canadians, particularly those in the 18-34 demographic, are increasingly consuming news content online (see Figure 3-2). This content is available through websites and applications provided by traditional newspapers, television, and radio stations, through websites that package news and through social media. Furthermore, the

¹¹⁷ CRTC, Communications Monitoring Report (2019).

¹¹⁸ Media Technology Monitor, Fall Survey 2011–2018.

news content available from these services is a mix of audio, audiovisual, and alphanumeric content. This shift has implications for the scope of the legislation — the current Act applies only to audio and audiovisual content made available by means of telecommunications and, in particular, does not cover alphanumeric news content made available in this way.

The creation of and access to accurate, reliable, and trusted sources of news content have always been important components of the regulatory framework under the Act and are critical to a healthy democracy. Although Canadians can now access news in a variety of ways, the creation of accurate, reliable, and trusted news content is in peril. 119 While news aggregators and sharing platforms benefit from the availability of news content on their platforms, newspapers, television, and radio outlets have seen their revenues decline significantly. 120 This is discussed in greater detail in section 3.5.1.

It is time to broaden the scope of the Act to include alphanumeric news content distributed by means of telecommunications. Doing so would reflect the fact that the business model for news is evolving as a result of changes in consumption habits and consumer behaviour, and that news is increasingly being distributed online and includes audio, video, and alphanumeric formats.

The CRTC must be able to monitor and address issues concerning news content made available by means of telecommunications, regardless of format. This would include online versions of newspapers. However, the CRTC should not be able to impose the same obligations on providers of primarily alphanumeric news content that it does on audio or audiovisual content providers. For example, as discussed later, the CRTC would not have the authority to impose spending obligations on service providers that disseminate online versions of newspapers.

Our focus is on news, not other forms of information. We have deliberately chosen not to recommend extending the scope of the Act to all types of information in alphanumeric form that is distributed on the Internet. Doing so would constitute overreach. Only news content (i.e. information about current events) should be included in the expanded scope of the legislation. The CRTC should continue to have the flexibility to define what constitutes news content over time, as lines blur between what is thought of as news and information.

Conventional Television, p 1; CRTC, Financial Summaries 2018 (2019), Radio, p 1.

¹¹⁹ Daniel Giroux, Les médias québécois d'information : État des lieux (Centre d'études sur les médias, Université Laval, 2019) p 45 and section 5; 2010 Public Policy Forum, The Shattered Mirror (2017); Public Policy Forum, Mind the Gap: Quantifying the Decline of News Coverage in Canada (2018), pp 2-3; April Lindgren and Jon Corbett, Local News Map Data (2018); Anne-Marie Brunelle and Colette Brin, L'information locale et régionale au Québec: Portrait du territoire 2011-2018 et perspectives citoyennes (Centre d'études sur les médias, Université Laval, 2018); Richard Stursberg, The Tangled Gaden: A Canadian Culture Manifesto for the Digital Age (2019); Fanny Lévesque, La presse locale en péril (La Presse, 29 octobre 2018). Statistics Canada, Table 21-10-0191-01 (formerly CANSIM 361-0081); CRTC, Financial Summaries 2018 (2019),

Recommendation 51: We recommend that the scope of the *Broadcasting Act* extend beyond audio and audiovisual content to include alphanumeric news content made available to the public by means of telecommunications, collectively known as media content. We further recommend that the definition of "program" in the Act be modernized and replaced by the following:

- Media content means audio or audiovisual content or alphanumeric news content;
- Audio or audiovisual content means sounds or moving images, or a combination of sounds and moving images, interactive or not, that are intended to inform, enlighten, or entertain and are made available to the public by means of telecommunications. However, this definition does not include such transmission when made solely for performance or display in a physical public place, or images that consist predominantly of alphanumeric text and are not accompanied by sounds;
- Alphanumeric news content means news about current events that predominantly consists of alphanumeric text that is made available to the public by means of telecommunications.

Through the remainder of this chapter, the term "media content" will refer to audio and audiovisual content as well as alphanumeric news content.

The Broadcasting Act now refers to a broadcasting system. This system has traditionally consisted of private actors, public institutions, including provincial educational broadcasters, and the local and community sector. In 2018, according to the CRTC, there were over 900 private commercial and noncommercial radio stations (including campus, community, and Indigenous radio stations); over 90 private conventional television stations; and over 20 educational and community services. There were also almost 300 Canadian discretionary services as well as over 300 non-Canadian services authorized to be distributed in Canada. This is complemented by the numerous television and radio stations offered by the national public broadcaster CBC/Radio-Canada. Together, traditional broadcasting services generated \$17.1 billion¹²¹ in revenues in 2018.

This system has been impacted by the large foreign companies such as Facebook, Amazon, Apple, Netflix, and Google that have generated over \$700 billion in global revenues. 122 While many of these companies offer a number of different services, they have become important intermediaries for the distribution of media content in Canada and are increasing their market share.

These companies derive significant revenues from the Canadian market through subscriptions, sales/ rental, and advertising. Netflix has the highest-grossing subscription video on demand (SVOD) service

¹²¹ CRTC, Communications Monitoring Report (2019).

¹²² Statista, Facebook's annual revenue from 2009 to 2018 (in million US dollars); Statista, Annual net revenue of Amazon from 2004 to 2018 (in billion US dollars); Statista, Apple's revenue worldwide from 2004 to 2018 (in billion US dollars); Macrotrends, Netflix Revenue 2006–2019 | NFLX; Statista, Google's revenue worldwide from 2002 to 2018 (in billion US dollars).

in Canada with estimated revenues of \$1.6 billion, representing 65 per cent of SVOD revenues in 2018. 123 Apple's iTunes was by far the highest-grossing transactional video on demand (TVOD) service in Canada, with estimated revenues of \$330 million for audiovisual content, representing 67 per cent of TVOD revenues in 2018.¹²⁴ Apple has also launched a video streaming platform in Canada. Google Play is estimated to have garnered \$32 million in sales of audiovisual content in 2018. 125 Amazon, the world's largest retailer¹²⁶ selling everything from food to electronics to fashion and beauty products, has a stake in audiovisual content with Amazon Prime and newly released StackTV, a virtual BDU. It also sells music, TV series, and movies on its online store. Amazon Prime's subscriber revenues were estimated at \$214 million, making it the second-biggest SVOD service behind Netflix in 2018. 127

On the advertising side, Facebook's estimated advertising revenues in Canada reached \$1.6 billion in 2017, 24 per cent of all online advertising revenues¹²⁸. Facebook, through which news and other media content is shared, is used by 84 per cent of Canadians, making it the most-used social media platform in Canada. 129 It is estimated that Google — which owns several platforms on which users can consume media content such as YouTube (the second most popular social media website in Canada¹³⁰), Google Play Store, Google Play Music, and Google News — garnered \$3.4 billion from the Canadian market, representing 50 per cent of all online advertising revenues in 2017.¹³¹

This larger, more complex, and dynamic environment has taken the place of the traditional broadcasting system. It now constitutes a broader media communications sector, which represents billions of dollars for the Canadian economy, generates over 100,000 jobs, and is critical to Canadian cultural sovereignty and democracy. 132

With this transformation, the statements contained in paragraph 3(1)(b) and subparagraph 3(1)(d)(i) of the Broadcasting Act should be updated, separated from the policy objectives in the Act, and reformulated. A new declaration should reflect this broader, global media communications environment. Core elements related to the French and English languages, the composition of the sector to include public, private, and community elements, as well as the role of media content in the promotion of the social, cultural, economic and political fabric of Canada should be maintained.

¹²³ CRTC, Communications Monitoring Report (2019), Figure 6.21.

¹²⁴ CRTC, Communications Monitoring Report (2019), Figure 6.22.

¹²⁵ CRTC, Communications Monitoring Report (2019), Figure 6.22.

¹²⁶ Lauren Debster, Amazon Surpasses Walmart As The World's Largest Retailer (15 May 2019) Forbes

¹²⁷ CRTC, Communications Monitoring Report (2019), Figure 6.21.

¹²⁸ Dwayne Winseck, Media and Internet Concentration in Canada 1984 – 2017 (Ottawa, Media Concentration Research Project, 2019), p 66, Table 5.

¹²⁹ Anatoliy Gruzd, Jenna Jacobson, Philip Mai and Elizabeth Dubois, The State of Social Media in Canada 2017 (2018), p 4.

¹³⁰ Anatoliy Gruzd, Jenna Jacobson, Philip Mai and Elizabeth Dubois, The State of Social Media in Canada 2017 (2018), p 8.

¹³¹ Dwayne Winseck, Media and Internet Concentration in Canada 1984 – 2017 (Ottawa, Media Concentration Research Project,

¹³² CMPA, Profile 2018: Economic Report on The Screen-Based Media Production Industry In Canada (2019), p 16, Exhibit 2-6.

This new declaration should be a strong affirmation of the fundamental link between the media communications sector and the expression of Canadian cultural sovereignty and democracy.

Recommendation 52: We recommend that section 3 of the *Broadcasting Act* be amended to create a new declaration that:

- the Canadian media communications sector, operating primarily in the English and French languages and comprising public, private, and community elements, uses interprovincial and international undertakings and facilities and provides, through its media content, a public service essential to the maintenance and enhancement of national identity, cultural sovereignty, and Canada's democracy;
- the media communications sector serves to safeguard, enrich, and strengthen the cultural, political, social, and economic fabric of Canada.

3.2.2 Setting Policy Objectives for the Sector that Reflect the Changing Environment

The legislative framework should clearly set out the policy objectives that should guide the regulator. In this regard, the current Broadcasting Act has a strong foundation. Indeed, many parties who submitted to us stated that that the policy objectives in the Act remain relevant. We agree and believe that the legislation should retain the following key policy foundations:

- The importance of Canadian media content to cultural sovereignty and democracy -Notwithstanding the many changes in the way in which Canadians create and consume content, the role of media content in supporting Canada's cultural sovereignty and national identity remains constant.
- Respect for freedom of expression and journalistic independence The principles of freedom of expression and journalistic independence must continue to guide the regulatory regime. These principles are currently reflected in subsection 2(3) of the Act and should stay.
- The primarily English and French nature of the sector This recognizes the importance of and promotes Canada's official languages. It also allows the CRTC to adapt the regulatory framework to each language market, including the particular needs and circumstances of official language minority communities (OLMCs).
- The principle that all participants in the sector must make an appropriate contribution to the objectives of the Act – This principle reflects a social contract that requires those entities that reap benefits from operating in Canada — including revenues, licence to use spectrum, and data from Canadian consumers — to also meet certain obligations. Consistent with this, foreign service providers must continue to contribute to the production and discoverability of Canadian content. As described below, the CRTC has historically ensured that the entry of foreign media content has benefitted the production and distribution of Canadian content.

The principle that all media content providers are responsible for the content they make available - This has guided the development of industry codes dealing with such issues as violence, sex role stereotyping, and offensive content, and can be expanded to deal with some types of harmful or offensive media content online.

SUPPORT BY FOREIGN MEDIA SERVICES TO CANADIAN CONTENT

The idea of conditioning the introduction of foreign programming services into Canada on support of Canadian content is nothing new. What is new would be the application of this principle to the Internet and how this might best be achieved.

Foreign media content services have been a part of the Canadian media landscape for several decades.

In the early 1970s, the CRTC allowed BDUs to carry the US network signals — today ABC, CBS, NBC, Fox, and PBS — into all Canadian markets and not just into the cities near the US border where the signals were freely available off-the-air.

At that time, several US border stations were selling ads to Canadian advertisers based on their overflow into those markets, thereby eroding the revenues of Canadian broadcasters. The decision by the CRTC to allow BDUs to carry those signals was accompanied by a rule that whenever a Canadian station had acquired the rights to a program carried on the US station, the BDU would be required to substitute the Canadian signal for the US signal if the program was being broadcast at the same time. Over the years, this "simultaneous substitution" policy has repatriated millions of dollars of ad revenue to Canada (estimated by the CRTC at \$250 million in 2012–13), while allowing foreign signals into Canada. 133

In the 1980s, the CRTC had to consider how to introduce new media content services through cable television and decided to license Canadian versions of the most popular US media content services. Accordingly, Canadian companies were licensed to make available content from such foreign services as HBO, Discovery, History, Disney, HGTV, and MTV. This was accompanied by meaningful Canadian content commitments.

¹³³ Broadcasting Regulatory Policy CRTC 2015-25, Measures to address issues related to simultaneous substitution (29 January 2015), para 14.

The CRTC also permitted a number of foreign services to come into Canada through affiliation contracts with Canadian BDUs, subject to four provisos, 1) the service could not be directly competitive with a Canadian programming service, 2) it could not sell ads on its service to Canadian advertisers, 3) in place of the "local avails" (typically, 1-2 minutes each hour used by a BDU to provide customer information or to promote its own services) on those signals, BDUs were required to promote Canadian programs, and 4) a levy of 5 per cent applied to the subscription revenue for the foreign service, paid by the BDU to support Canadian content.

Through these means, therefore, the introduction of foreign services into Canada has been done on a basis that supports Canadian content production and distribution.

Policy objectives should also reflect the importance of a wide range of accurate, reliable, and trusted sources of news content. Diverse and dependable news sources are vital to combat the phenomenon of misinformation¹³⁴ and its negative impact on informed public discourse and debate on important societal issues. Canadians should be informed, including by the reflection of national, regional, and local perspectives, from diverse sources and across all platforms.

The legislative framework should also ensure the creation of Canadian content that is of high quality. Given the increasingly global nature of the market, investment in Canadian content should be seen as creating a strategic asset that will help Canadian media companies succeed at home and abroad. This will require investment in the creation, development, and discovery of Canadian content, and the objectives of the Act should be specific in this regard.

Great content is more likely to be produced if upfront investments are made in development. However, great content will not necessarily be found unless it is promoted. The volume of content available to audiences has exploded. You Tube alone uploads some 500 hours of content every hour, while Spotify offers some 50 million songs with tens of thousands added daily (see Figure 3-2). This abundance makes it challenging for Canadians to discover Canadian content. For these reasons, we agree with stakeholders who submitted that the legislative framework should also set out objectives regarding the discoverability of Canadian content.

In an increasingly diverse society, policy objectives must be inclusive and support Canadian content that reflects Canadian diversity. Canada is a signatory to the 2005 UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions. This Convention recognizes the sovereign right of States to maintain, adopt, and implement policies to protect and promote the

¹³⁴ Merriam-Webster's Dictionary defines misinformation as being incorrect or misleading information, whereas it defines disinformation as false information deliberately and often covertly spread in order to influence public opinion or obscure the truth.

diversity of cultural expression. 135 If Canadian content is going to be successful at home and abroad, there need to be strong Canadian production companies capable of creating content that will stand out in a competitive global marketplace. This should include a strong independent production sector to preserve the diversity of voices in the face of market concentration.

With respect to the needs of Indigenous Peoples, the current wording in the Broadcasting Act the language of "special place of Aboriginals" or "as resources become available" — is no longer appropriate in an era of Reconciliation. We heard from Indigenous leaders and communities: they want to make media content themselves and they want this media content to help them preserve and nurture their languages. Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls highlighted the need for Indigenous Peoples to tell their own stories and be part of the creation of stories and the storytelling process. ¹³⁶ We agree and note that all Canadians can benefit from strengthened Indigenous reflection.

We also heard from several accessibility groups who expressed a desire for strengthened objectives around accessibility. We agree and recommend that the legislation specify that the media communications sector meet the needs of Canadians with disabilities and ensures the creation of and access to content by and for Canadians with disabilities.

Content services should be affordable for Canadians. This objective is particularly important given that Canadians' access to content increasingly requires paying for Internet access as well as content subscription fees. In addition, as Canadians spend more and more time consuming media content online, it is important that they be able to do so safely and securely and that their privacy is protected (this subject is explored in more detail later in chapter 4 of this Report). Both these priorities should be reflected in the policy objectives of the Act.

The policy objectives should not be prioritized. The CRTC should have the flexibility to ensure that through its regulatory framework the media communications sector achieves all of them on behalf of Canadians.

¹³⁵ UNESCO, Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005), Article 1(h).

¹³⁶ National Inquiry into Missing and Murdered Indigenous Women and Girls, Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls (2019), p 394.

Recommendation 53: We recommend that the policy objectives currently contained in section 3 of the Broadcasting Act be modernized to reflect the changing environment and be replaced by the following:

- Canadians should have access to trusted, accurate, and reliable sources of news reflecting national, regional, and local perspectives from diverse sources and across all platforms.
- Canadians should be able to find and access a wide range of media content choices, including Canadian choices, that are affordable and reflect a diversity of voices.
- Canadians should be able to access and consume media content safely and securely and be assured that their data and privacy are respected and protected.
- Media content undertakings should have a responsibility for the media content they provide.
- The media communications sector should:
 - invest in the development, creation, and distribution of high-quality Canadian content that competes at home and abroad and reflects Canadian diversity, with each undertaking making maximum use of Canadian creative and other resources in the creation and presentation of media content, taking into account its circumstances;
 - ensure the creation of and access to content by and for Indigenous Peoples, including Indigenous languages content;
 - ensure the creation of and access to content by and for official language minority communities;
 - meet the needs of Canadians with disabilities and ensure creation of and access to content by and for Canadians with disabilities;
 - consist of Canadian-owned and -controlled companies alongside foreign companies; and
 - promote the development of a strong Canadian production sector, including a robust independent production community.

EMBRACING THE GLOBAL MARKET

This section focuses on ensuring that the legislative framework facilitates the attainment of the objectives in a more open and global environment. It proposes definitions and mechanisms to ensure that new, and in many cases, foreign entities contribute to the achievement of Canadian cultural policy objectives. It also addresses the question of Canadian ownership and control. It repositions the role of the CRTC from that of a gatekeeper to one that provides oversight in a rapidly expanding and evolving context.

3.3.1 Defining Actors and Activities

The Broadcasting Act currently defines the actors responsible for supporting and distributing audio and audiovisual content (e.g. programming undertakings and distribution undertakings). The definitions are broad and flexible, such that they have continued to apply to different and evolving modes of dissemination of audiovisual content, including many services provided over the Internet. As described in section 3.2.1, the world of audiovisual content has profoundly changed since these definitions were crafted. Today, the market is global, and content is provided by a wide range of service providers: traditional over-the-air broadcasters, cable and satellite companies, online on-demand services, media content sharing platforms, and social media platforms. And it continues to evolve rapidly. This dynamic environment demands a re-examination of the existing definitions.

We looked carefully at the activities that matter to the creation and distribution of Canadian content — regardless of nationality, technology, or business model — taking into account the revised scope and objectives of the Act. At the same time, we wanted to ensure that the regulatory framework can continue to be flexible, fair, and forward looking, all the while being careful to avoid overreach so as not to stifle innovation. We specifically considered how to address online platform providers in the definitions.

Stakeholders are only too aware of the profound impact that the Internet is having on the Canadian audio and audiovisual sector. Many cultural stakeholders told us they want to ensure that the definitions encompass actors that operate through the Internet and take an increasing share of advertising and subscription revenues. Online platform providers disagree, arguing that they already contribute to the development and discoverability of Canadian content and talent and, therefore, do not need to be brought under the legislation.

The business model used by many of the new online companies, like traditional broadcasters, is based on providing media content to audiences while selling those audiences to advertisers. Using this model, they have been remarkably effective in drawing advertising revenues particularly because they can pinpoint their target audience using algorithms based on data provided by users. Although they have created new advertising opportunities, they have also drawn advertising revenues away from traditional media companies. Advertisers now view these online companies effectively as media companies that directly compete for their advertising dollars.¹³⁷ That is why Internet platform providers should be brought under the Broadcasting Act to the extent that they enable the dissemination or sharing of audio or audiovisual content, or alphanumeric news content.

In their submissions to us, stakeholders were also divided as to whether definitions should be modified to extend the application of the Broadcasting Act to ISPs. In our view, access services (e.g. Internet

¹³⁷ Philip M. Napoli and Robyn Caplan, Why media companies insist they're not media companies, why they're wrong and why it matters (1 May 2017) 22:5 First Monday.

access services) should be excluded from the ambit of the Broadcasting Act. As carriers, ISPs should contribute to carriage, connectivity, and universal access — as recommended earlier in chapter 2 of this Report — rather than content. The activity of providing access to a telecommunications service such as the Internet neither ensures that media content is available for distribution or that it is indeed distributed. ISPs do not exercise any editorial control over content transiting through their networks. Indeed, net neutrality rules prevent providers, such as ISPs, from interfering with the content they carry through their traffic management practices.

Other countries generally have not included Internet access services in their legislative and regulatory frameworks in support of media content. However, some have taken steps to include online services and platform providers. The European Audiovisual Media Services Directive (AVMSD) includes definitions for an "audiovisual media service" and "video sharing platform service" to capture new online actors, including foreign online actors. 138 The term "audiovisual media service" is defined in the AVMSD to mean a service where the principal purpose is to provide programs under the editorial responsibility of the service provider to the public in order to inform, entertain, or educate. By contrast, a video sharing platform service is defined to mean a service where the provider makes available programs, including user-generated videos, for which the provider does not have editorial responsibility, but which is organized by the provider "including by automatic means or algorithms in particular by displaying, tagging and sequencing. 139"

Having reviewed the impacts and business models and looking to the future, we have determined that the following activities are and will continue to be important to the achievement of Canadian cultural policy objectives and should be the basis for defining undertakings under the Act.

- Curation: the provision of a service for the dissemination of media content over which the service provider has editorial control. This includes traditional Canadian programming services, as well as online streaming services, such as Amazon Prime, Crave, Netflix, Spotify and illico.tv.
- Aggregation: the provision of a service for the aggregation and dissemination of media content offerings from curators. This includes cable companies, i.e. traditional BDUs as

¹³⁸ European Union, Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities, article (1)(a),(b).

¹³⁹ European Union, Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities, article (1)(b).

well as their online offerings; new virtual BDUs that package a number of online streaming services, such as StackTV; and news aggregators such as MSN News and Yahoo! News.

Sharing: the provision of a service enabling users to share amateur or professional media content. This includes YouTube, Facebook, and other sharing platforms to the extent they enable the sharing of audio or audiovisual content, or alphanumeric news content.

Recommendation 54: We recommend that the Broadcasting Act apply to media content undertakings involved in the creation and distribution of media content. The term "media content undertaking", which would replace the term "broadcasting undertaking" in the Act, would include media curation undertakings, media aggregation undertakings, and media sharing undertakings, as follows:

- Media curation undertaking means an undertaking whose primary purpose is to provide a service for the dissemination of media content over which it exercises editorial control. In this context, editorial control means effective control over the creation or selection of media content, including through agreements with rights holders with respect to its creation or dissemination.
- Media aggregation undertaking means an undertaking that, in whole or in part, provides a service that aggregates and disseminates media content provided by media curation undertakings.
- Media sharing undertaking means an undertaking that, in whole or in part, provides a service that enables users to share media content for which the provider does not have editorial control but which the provider organizes or controls.

These definitions are intended to avoid overreach while giving the CRTC the flexibility to define new activities in the future. As business models and technology continue to evolve there will likely be a blurring between categories. An undertaking may fall into several categories described in the definitions; how the CRTC may regulate such undertakings is covered later in this chapter.

We want to be clear about those entities that would not be covered by these definitions. The definition of media curation undertaking would not include creators of media content that appear on the service provided by the undertaking, as they are not directly providing the service. In practical terms, this means that the definition would cover a service such as illico.tv or Crave, and a broadcaster such as TVA or CityTV, but not the producer of a show appearing on those services. Similarly, the definition of media sharing undertakings excludes users of those services.

Undertakings that disseminate media content, not for the sake of that media content, but ancillary to a different primary purpose, are not media curation undertakings under these definitions. Examples of excluded content include travel sites, real estate sales sites, hospital health provision sites, and the

myriad of e-commerce sites that send media content to the public via telecommunications as part of a different business. The definitions also exclude social media platforms, except to the extent that they enable the sharing of audio or audiovisual content, or alphanumeric news content.

Our recommendations ensure that the CRTC would have the authority to exempt any undertakings that might otherwise be covered but would not affect the achievement of the objectives of the Act.

We also considered the question of Canadian ownership and control of the broadcasting system. While Canadian choices such as Crave, illico.tv, and Gem exist, the online marketplace is dominated by foreign service providers such as Netflix, and more are entering Canada. Many parties told us that they recognized the importance of Canadian ownership within the sector but also stressed the need to include the foreign component within the ambit of the Act. With foreign companies capturing significant market share, it is unrealistic to build a legislative framework based on the concept of a single system that is effectively owned and controlled by Canadians. Nevertheless, the existence of Canadian-owned and -controlled companies remains important to ensure the creation and distribution of content that reflects Canadian values and perspectives.

DOES THE BROADCASTING ACT APPLY TO FOREIGN-BASED INTERNET PROGRAMMING SERVICES?

We are of the view that given the amendments made to *Broadcasting Act* in 1991, the Act already applies to Internet broadcasting undertakings. That was also the conclusion of the 2003 Report of the Standing Committee on Canadian Heritage (the Lincoln Report). Regarding CRTC jurisdiction over programming services through the Internet, the Committee did not consider that any amendments to the Act were necessary. As stated in the report,

"The Committee is of the view that broadcasting in whatever format and however carried falls within the jurisdiction of the Broadcasting Act and under the regulatory purview of the CRTC. Thus, broadcasting by new media services is unquestionably within the purview of the Broadcasting Act and the CRTC."

Nor does it matter if those services do not transmit the program simultaneously to the public, but only send the program to individual recipients, one by one, on demand. The CRTC has already licensed numerous video on demand services offered through BDUs. The fact that the services are offered through the Internet does not change the situation. This was made clear by the Supreme Court of Canada in 2012 when it examined the example of online music services.

Rothstein J., speaking for a unanimous court on this point, stated the following in Rogers

Communications Inc. v. SOCAN, 2012 SCC 35: "Following the online music services business model, musical works are indiscriminately made available to anyone with Internet access to the online music service's website. This means that the customers requesting the streams are not members of a narrow group, such as a family or a circle of friends. Simply, they are 'the public.' In these circumstances, the transmission of any file containing a musical work, starting with the first, from the online service's website to the customer's computer, at the customer's request, constitutes communicat[ing] the work to the public by telecommunication."

The remaining question is whether the Act extends to foreign Internet programming services, even if they have no physical assets in Canada. To answer this question, it is useful to recall the statement by the CRTC in 1993 about its jurisdiction over foreign direct broadcast service (DBS) providers (Structural Public Hearing, PN CRTC 1993–74, June 3, 1993):

"With respect to foreign DBS service providers that may wish to enter the Canadian market, the Commission has determined that it would in certain circumstances have jurisdiction over them under subsection 4(2) of the Act. A DBS service provider whose signal is receivable in Canada could be found to be carrying on a broadcasting undertaking in Canada in whole or in part where, for example, it has some or all of the following characteristics:

- It acquires program rights for Canada.
- It solicits subscribers in Canada.
- It solicits advertising in Canada.
- It activates and deactivates the decoders of Canadian subscribers.

The Commission will apply the appropriate enforcement tools to assert its jurisdiction over these undertakings should they enter the Canadian market without making contributions to the Canadian system as required of all broadcasting undertakings under the Act."

Just as foreign DBS undertakings can be caught under subsection 4(2) of the Act, whether or not they have assets in Canada, so can foreign media content services provided over the Internet. As noted by the Supreme Court of Canada in SOCAN v. CAIP, [2004] 2 S.C. R. 427, an Internet communication that crosses one or more national boundaries "occurs" in more than one country. In that case, the court ruled that it was not necessary for the file server originating the content to be in Canada for there to be a "real and significant connection to Canada" under the Copyright Act.

As noted in the essay above, we are of the view that CRTC jurisdiction under the current *Broadcasting Act* extends to foreign Internet services that receive significant revenue from Canadian subscribers or receive significant revenue from advertisers for transmitting ads to Canadians, and those undertakings can be said to be carried on in part in Canada, whether or not they have assets in Canada.

However, for greater certainty, there is merit in clarifying in the Act that the legislation applies to undertakings that are carried on in whole or in part within Canada, whether or not they have a place of business in Canada. This would cover foreign Internet streaming services generating revenues in Canada.

Recommendation 55: We recommend that for greater certainty, the *Broadcasting Act* be amended to establish that the legislation applies to undertakings carried on in part within Canada, whether or not they have a place of business in Canada. This would include undertakings, persons, and entities that disseminate media content by telecommunications to Canadians or make media content available to Canadians for compensation. We further recommend that the reference to the sector as a single system that shall be owned and controlled by Canadians be removed from the Act.

3.3.2 Regulating in a More Open and Global Environment

Having defined the activities that are important to the creation and distribution of Canadian media content and having recognized that foreign companies form part of the media communications sector, the question becomes: what are the appropriate regulatory mechanisms?

The current regulatory model under the Act is based on licensing. In it, the CRTC acts as a gatekeeper, issuing licences that then allow the holder to broadcast content in Canada. The licences include obligations designed to support the production and distribution of Canadian content, including expenditure requirements, exhibition requirements, and levies. The regulatory obligations vary according to the licence categories or classes set by the CRTC. Certain undertakings or classes of undertakings are exempt from these requirements. This occurs when the CRTC is satisfied that compliance with those requirements would not contribute in a material manner to the implementation of the Act's policy objectives. Online media content services accessed over the Internet or delivered using point-to-point technology and received by way of mobile devices are currently exempted pursuant to the Digital Media Exemption Order or DMEO.¹⁴⁰

As discussed in section 3.2.1, Canadians now live in a new and expanding cultural ecosystem where online offerings from around the world are easily and increasingly entering the market: in this environment, the CRTC is no longer in a position to act as a gatekeeper, assessing ownership criteria

¹⁴⁰ Broadcasting Order CRTC 2012-409, Amendments to the Exemption order for new media broadcasting undertakings (now known as the Exemption order for digital media broadcasting undertakings) (26 July 2012), Appendix A 2(b).

and imposing specific conditions and obligations on each participant. Licensing is no longer the appropriate mechanism for such undertakings; we believe that a registration requirement would be more appropriate.

To give effect to the registration model, the CRTC should be able to establish classes of registrants. The CRTC should have flexibility in establishing these classes. This includes classes based on the type of activity performed by the undertaking (curation, aggregation, sharing). Alternatively, the CRTC may establish classes specifically for those undertakings conducting more than one activity. Furthermore, the CRTC should also have the power to amend registrations.

With respect to traditional television and radio services, these entities will have to change and adapt to a fast-paced environment in which they are competing with global actors that have substantially more reach and, consequently, more resources. However, we believe that the current licensing approach remains the appropriate regulatory mechanism for these services. Services being offered by traditional means should continue to require a licence and continue to be subject to the current policy direction with respect to the ineligibility of non-Canadians but under an increasingly flexible regime.

In this context, it will be extremely important for the CRTC to consider what changes are appropriate for licensees on a "like for like" basis, since it would be unfair and inappropriate to have a heavyhanded regime for the existing licensees and a light touch for registrants, particularly those in direct competition.

Recommendation 56: We recommend that the existing licensing regime in the Broadcasting Act be accompanied by a registration regime. This would require a person carrying on a media content undertaking by means of the Internet to register unless otherwise exempt. Those carrying on a media content undertaking by means other than the Internet would continue to require a licence unless otherwise exempt.

Recommendation 57: We recommend that to implement the new registration regime, the Broadcasting Act be amended to provide that certain powers of the CRTC in section 9 with respect to licensing also apply to registration. This includes provisions that enable the CRTC to establish classes of registrants, to amend registrations, and impose requirements — whether through conditions of registration or through regulations — on registrants, including the payment of registration fees. This would also include imposing penalties for any failure to comply with the terms and conditions of registration.

There is the potential for overreach with a new registration model for online media content undertakings, given the wide variety of these undertakings. It is, therefore, critically important that the CRTC have the power to exempt certain media content undertakings or classes of media content undertakings from

registration and regulation, and that it uses this power in instances where regulation is unnecessary or inappropriate to achieve cultural policy objectives. For example, the CRTC may exempt undertakings that fall below a certain revenue threshold or have a specialized content or format, in order to enhance innovation and avoid unnecessary regulatory burdens.

Recommendation 58: We recommend that the CRTC have the power to exempt any media content undertaking or classes of media content undertakings from registration in instances in which — by virtue of its specialized content or format, revenues, or otherwise — regulation is neither necessary nor appropriate to achieve media content policy objectives.

3.3.3 Guiding the Regulator

The legislation should also be amended to provide legislative guidance to the CRTC on how, in its day-to-day work, it should oversee and regulate the media communications sector. Subsection 5(2) of the Act already sets out several parameters for the Commission. These are summarized (and updated using the term media content) below:

- Regulation should be readily adaptable to the different characteristics of English- and French-language markets and to the different conditions under which undertakings that provide English- or French-language media operate.
- It should take into account regional needs and concerns.
- It should be readily adaptable to scientific and technological change.
- It should facilitate the provision of media content to Canadians.
- It should facilitate the provision of Canadian media content to Canadians.
- It should not inhibit the development of information technologies and their application or the delivery of resultant services to Canadians.
- It should be sensitive to the administrative burden that may be imposed on persons carrying on media content undertakings.

While these parameters remain relevant, additional guidance should be provided in four areas. First, in an environment that is more open and competitive, where the CRTC can no longer be a gatekeeper, it should regulate in a manner that is equitable, reasonable, and proportional to the objective or outcome sought. Second, in using its exemption and other powers, it should regulate when necessary or appropriate to meet cultural policy objectives taking into consideration the circumstances of the undertakings in question while also ensuring that undertakings contribute in an appropriate manner to the creation, production, and discoverability of Canadian media content.

Third, the CRTC should promote transparency, responsibility, and accountability. This is particularly critical considering the increasing sophistication of algorithms and artificial intelligence processes involved in the delivery of media content and their implications for the discoverability of Canadian content, user privacy, and the ability to make evidence-based decisions. Lastly, the CRTC should strive to make its proceedings more inclusive so that it can be better informed of the impact of its decisions on different segments of the population and on users generally. In section 1.5.1, we recommend funding mechanisms that would enable the participation of public interest groups in regulatory proceedings.

In addition to the guidance in the legislation, the GiC should continue to be able to issue policy directions to the CRTC. We have made recommendations to facilitate that process.

Recommendation 59: We recommend that subsection 5(2) of the Broadcasting Act be amended to provide further policy guidance to the CRTC so that the system is regulated and supervised in a flexible manner that:

- ensures that regulation is equitable, reasonable, and proportional to the objective or outcome sought;
- ensures that undertakings contribute in an appropriate manner to the creation, production, and discoverability of Canadian media content;
- promotes transparency, responsibility, and accountability in the way undertakings operate; and
- promotes public participation in regulatory proceedings.

REIMAGINING SUPPORT FOR CANADIAN MEDIA CONTENT 3.4

The current legislative and regulatory framework, combining private and public contributions to Canadian content, proved effective in funding and promoting Canadian content in an era during which the Canadian broadcasting system operated in a closed fashion. Now that the market is global — with more online foreign companies operating in Canada, revenues of traditional broadcasters in decline, and forms of content converging — it is time to review the model for supporting Canadian content, but not the definition of Canadian content.

This section puts forward a new equitable model intended to stimulate investment in quality Canadian content that is competitive here and abroad, while ensuring the expression of a diversity of voices. It begins by describing the impact of digital disruptions on the traditional entities and presents recommendations on how to modernize the regulatory and funding framework to ensure the financing and discoverability of quality Canadian content. Finally, this section addresses measures to ensure public support to Canadian creators.

3.4.1 Digital Disruption of Regulatory Funding Models

The current model for supporting Canadian content consists of regulatory obligations for the private sector, including spending requirements and contributions to funds, such as the Canada Media Fund (CMF). It also includes tax credits for audiovisual productions and public funding through organizations such as the CMF, Telefilm Canada, the National Film Board of Canada (NFB), and the Canada Council for the Arts. These measures have made it possible to support local and community expression, documentaries, animation, children's programs, as well as content reflecting Indigenous cultures and OLMCs. It has also supported experimentation. Financing such productions supports the expression of Canadian identity and enables the promotion of Canadian values and history.

WHY SHOULD WE SUPPORT CANADIAN TELEVISION DRAMA?

With the rise of online content platforms with global reach, the opportunities for programs with a Canadian perspective to find receptive audiences around the world will dramatically increase. The appropriate contribution of all providers offering service to Canadians for the financing of Canadian content is crucial for domestic and foreign success.

In the last 40 years, Canadian broadcast policy has supported the production of Canadian television drama, although it has never made sense from an economic standpoint. Drama (including scripted comedy) is the most popular genre on television, but it is also the most expensive genre to make.

The Canadian broadcast rights to a US television drama — which may cost \$3-4 million an hour to make and is largely paid for by the US networks — can be purchased for a few hundred thousand dollars. By contrast, a Canadian TV drama in English may cost \$1-3 million an hour to make. But to finance this, the Canadian broadcast network would have to provide a much higher licence fee commitment—one that would exceed any expected ad revenue. The result is that Canadian drama will not be produced by the market unless it is supported by a toolkit of government cultural policy measures.

Yet, since the early 1980s, the CRTC and successive Canadian governments have implemented a combination of regulations and subsidies, which have led to the creation of a significant number of hours of Canadian drama each year.

Why? The answer comes down to the importance of story, particularly stories that are relevant to a local audience. Policymakers in many countries have recognized that there is a need for TV to tell local stories — stories that come out of a country's experience and that resonate with local references and local relevance. Over the years, Canadian viewers have enjoyed a wide range of such programs. In the English-language market, these programs include Degrassi: The Next Generation, Corner Gas, The Rick Mercer Report, Little Mosque on the Prairie, The Republic of Doyle, Murdoch Mysteries, and Kim's Convenience. In the French-language market, these programs include Unité 9, La Petite Vie, Fugueuse, 19-2, Lâcher prise, Les beaux malaises, Les Invincibles, and Au secours de Béatrice. These programs would not have existed without the panoply of CRTC and government policies.

In the world of TV and movies, no one can predict success. In the fall of 2018, the four US TV networks — ABC, CBS, NBC, and FOX — introduced 55 new TV series. But 22 of them — 40 per cent — were not renewed for a second season because of insufficient viewership. In this kind of risky environment, the only answer is to commission a number of different TV series, with the expectation that at least some will succeed.

The support for Canadian drama has led to the growth of the independent production sector in Canada. In 2017-2018, Canadian productions accounted for over \$3 billion in Canadian film and TV production, half of this amount in the drama genre. That is an important economic driver in the Canadian economy. But more important is the fact that these producers can create stories rooted in Canada and with a unique Canadian perspective that all Canadians will be able to enjoy.

The consumption habits of Canadians have changed: viewing of content on myriad platforms, more and more often online; reduced subscriptions to traditional actors in favour of new ones, several of which are foreign; increased amount of time spent with digital media, and much more. One of the consequences of this digital disruption is a marked decrease in the revenues of traditional media, to the benefit of new online players, including subscription video on demand (SVOD), transactional video on demand (TVOD) and advertising video on demand (AVOD) (see Figure 3-4).

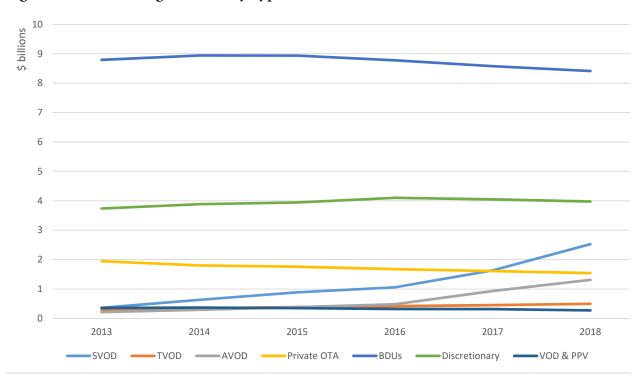


Figure 3-4 Broadcasting Revenues by Type of Service (2013–2018)

Source: Based on 2013-2018 data from CRTC Communications Monitoring Reports and Financial Summaries

The revenues of traditional audiovisual services have been decreasing overall since 2013 (see Figure 3-5). While the BDU sectors and discretionary services remain profitable, conventional television has not been profitable since 2012.141

¹⁴¹ CRTC, Financial Summaries, 2013–2018; CRTC, Harnessing Change: The Future of Programming Distribution in Canada (2018), Conventional Television.

14 \$ billions 12 10 8 0 2013 2014 2015 2016 2017 2018 Total Online Revenues Total Private Television Revenues

Figure 3-5 Audiovisual Revenues (2013–2018)

Source: CRTC (Total Private Television Revenues includes BDU revenues, private OTA revenues and advertising revenues from discretionary services)

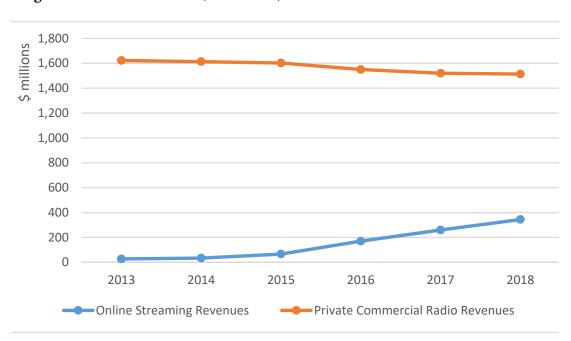


Figure 3-6 Audio Revenues (2013-2018)

Source: CRTC

While traditional radio and television still largely dominate in terms of revenues, this is unlikely to last. The revenue share of online actors can be expected to continue to grow, to the detriment of traditional media. The French-language market is, however, faring better against online competition than its English-language counterpart, which accounts for the lion's share of the decline in revenues. 142

One of the most significant impacts of the decline in revenues is the loss of regulatory contributions in support of Canadian content. Currently, up to 55 per cent of the annual revenues of private television broadcasters must be spent on the acquisition of or investment in Canadian programs, referred to as Canadian Programming Expenditures (CPEs).¹⁴³ A 30 per cent rate is imposed on major Englishlanguage ownership groups, such as Bell Media. 144 CPEs have remained fairly stable since 2016 and totalled approximately \$2.369 million in 2018. The revenues of traditional private broadcasters and discretionary services, however, have decreased by 5 per cent since reaching their peak in 2016. 145 If revenues continue to decline, CPEs will also decrease, since they are based on the broadcasters' previous year's revenues. The contributions of BDUs are also in decline. BDUs are currently required to pay out a 5 per cent levy based on their annual revenues in contributions to various initiatives to support Canadian content. Approximately half the contributions support the CMF, with the remaining funds going to local expression and Certified Independent Productions Funds (CIPFs). In 2017–2018, these contributions reached \$422 million, a decrease of approximately 15 per cent compared to 2013–2014, of which \$193 million went to the CMF. 146

In the audio sector, commercial, ethnic, traditional, and satellite broadcasters pay contributions for Canadian content development (CCD) to the Community Radio Fund of Canada, FACTOR, or Musicaction, and other eligible initiatives. 147 Much like the audiovisual industry, audio revenues have been steadily decreasing since 2013 (see Figure 3-6). In 2017-2018, basic and discretionary contributions to CCD reached \$21.4 million, down 32 per cent between 2013-2014 and 2017-2018. 148

These trends have created instability in the industry and put at risk the sustainability of the current funding regime.

¹⁴² CRTC, Financial Summaries, 2013–2018

Broadcasting Regulatory Policy CRTC 2015-86, Let's Talk TV: The way forward - Creating compelling and diverse Canadian programming (12 March 2015), para 172; Broadcasting Decision CRTC 2018-344, TV5/UNIS TV - Licence renewal and renewal of mandatory distribution order (31 August 2018), para 19.

¹⁴⁴ Broadcasting Decision CRTC 2017-148, Renewal of licences for the television services of large English-language ownership groups - Introductory decision (15 May 2017), para 30.

¹⁴⁵ CRTC, Communications Monitoring Report (2019), Figure 6.2.

¹⁴⁶ CRTC, Communications Monitoring Report (2018), Figure 10.6; CRTC, Communications Monitoring Report (2019), Figure

¹⁴⁷ CRTC, Canadian Content Development Contributions and Eligible Initiatives [accessed December 1, 2019].

¹⁴⁸ CRTC, Communications Monitoring Report (2018), Figure 8.4; CRTC, Communications Monitoring Report (2019), Figure 5.3.

3.4.2 Modernizing the CRTC's Regulatory Framework

In the discussion and recommendations that follow, we were guided in our thinking by several considerations:

- Contributions should be equitable, based as much as possible on the principle of "like for like" and be designed to stimulate investment across the content value chain from development to discovery.
- The funding model should remain a mixed one, comprising both private and public sources, each with clear purposes which, taken together, ensure high-quality Canadian content that competes at home and abroad and reflects Canada's cultural diversity.
- The content supported should be Canadian, as opposed to service productions (for example, productions filmed in Canada but for which the intellectual property is primarily foreign), and provide opportunities for Canadian creators.
- Funding should be platform- and producer-agnostic in order to maximize the opportunities for Canadian companies to invest in content, to ensure its presence across platforms, and to better align with how Canadians consume content now and into the future.

We heard from many stakeholders who expressed concern at the significant loss of revenues in the traditional broadcasting sector and pointed to the competitive disadvantage Canadian companies face against online entities, mainly foreign, that are deriving significant benefits from operating in Canada without any corresponding regulatory obligations. We found that a growing number of jurisdictions have affirmed their cultural sovereignty by imposing obligations on media services that provide content to audiences in their countries. We believe strongly in a fair regulatory regime in which companies that carry out like activities have like obligations.

Recommendation 60: We recommend that all media content undertakings that benefit from the Canadian media communications sector contribute to it in an equitable manner. Undertakings that carry out like activities should have like obligations, regardless of where they are located.

The CRTC has effectively been using spending requirements and levies to support the creation of Canadian content. To achieve cultural policy objectives, the Commission should be able to impose such requirements, as appropriate, on the full range of undertakings involved in curation, aggregation, and sharing.

Alongside its power to impose levies, the CRTC has established or certified funds that support the production and distribution of Canadian content that are then able to receive these levies, e.g., CIPFs. The CRTC should be able to continue to establish, certify, and oversee funds eligible to receive any levies it may impose to support cultural policy objectives.

Online versions of newspapers require a different approach. While our recommended definition of Canadian media curation undertakings includes those whose primary purpose is to provide a service for the dissemination of alphanumeric news content over which it exercises editorial control (i.e. online versions of newspapers) they should not be subject to spending obligations since the overwhelming proportion of their overall content provides a Canadian perspective on news and events. In these circumstances, and in light of the financial crisis facing Canadian news media, these undertakings should, in fact, be able to receive support through levies imposed on other media content undertakings. This would help ensure that Canadians have access to trusted, accurate, and reliable news from a variety of sources and on all platforms. Other forms of support for news are discussed in section 3.5.2.

The CRTC must also be able to impose discoverability measures on media content companies. Consumers now have access to an endless choice of content, making it difficult to find, or simply recognize, Canadian content. In fact, a majority of consumers have said that they have difficulty finding content they want to watch. 149 Further, algorithms and AI-based processes have a major influence on program recommendations with a consequent influence on the discoverability of content. 150

Again, a different approach is warranted for online versions of newspapers, since such undertakings already promote Canadians perspectives on news and events, making the imposition of discoverability requirements unnecessary.

The media content industry is characterized by high levels of concentration, compared with the number of creators seeking access. For example, there are over 500 independent Canadian producers of television programs in Canada but fewer than a dozen major potential buyers. The situation is similar in the United Kingdom, and its regulator Ofcom has addressed the imbalance of negotiating power by prescribing terms of trade between independent producers and broadcasters. The CRTC did the same in Canada from 2011 to 2016 but discontinued the requirement as part of its Let's Talk TV policies in 2015.151

With the emergence of even more dominant global media content undertakings, it is essential that the CRTC be given the explicit jurisdiction to regulate the economic relationships between media content undertakings and content producers, as well as between media content undertakings. The CRTC should be able to determine or approve terms of trade to ensure that independent producers are treated fairly. The CRTC should also have the authority to resolve disputes between media content undertakings.

¹⁴⁹ Price Waterhouse Cooper, How tech will transform content discovery (2017), p 6; Telefilm Canada, Discoverability: Toward a Common Frame of Reference Part 2: The Audience Journey (2018), p 14.

¹⁵⁰ Price Waterhouse Cooper, How tech will transform content discovery (2017), p 19.

¹⁵¹ Broadcasting Regulatory Policy CRTC 2015-86, Let's Talk TV: the way forward - Creating compelling and diverse Canadian programming (12 March 2015), para 141.

This issue is not confined to producers of audiovisual content. There is also an uneven playing field between social media platforms and news media organizations. A very small number of dominant social media platforms are a critical source of audiences for news media organizations. As a result of the imbalance in bargaining power, news content creators are unable to individually negotiate terms over the use of their content by social media platforms. The CRTC should also have the jurisdiction to determine or approve terms of trade where it considers that this is necessary to address an imbalance of power in news content.

These terms could include much more than the ambit of the rights granted or the basis for compensation. They could also include requirements to make audience data available to content producers. This information is key to helping Canadian producers create compelling and competitive content for audiences at home and abroad.

Recommendation 61: We recommend that the Broadcasting Act be amended to ensure that the CRTC may by regulation, condition of licence, or condition of registration:

- impose spending requirements or levies on all media content undertakings, except those whose primary purpose is to provide a service for the dissemination of alphanumeric news content over which it exercises editorial control;
- impose discoverability requirements on all media content undertakings, except those whose primary purpose is to provide a service for the dissemination of alphanumeric news content over which it exercises editorial control;
- regulate economic relationships between media content undertakings and content producers, including terms of trade; and
- resolve disputes between media content undertakings.

Figure 3-7 reflects our thinking on how the CRTC should use these new powers and ensure that media content undertakings be required to contribute financially based on a simple calculation of the percentage of Canadian-derived revenues. Given the level of subscription and advertising revenues being generated in Canada by media content undertakings, there should be sufficient funding through the proposed legislative and regulatory framework described below to support cultural policy objectives.

Figure 3-7 Recommended Financial Obligations

Activity	Undertaking	Financial Obligations
Curation Provision of a service for dissemination of media	Audio or audiovisual media curation undertaking	Primary obligation: Spending requirements
content over which it has editorial control		Alternative obligation (where spending requirements are not appropriate): Levy
Aggregation Provision of a service for aggregation and dissemination of media content from media curators	Media aggregation undertaking	Primary obligation: Levy
Sharing Provision of a service enabling users to share amateur or professional media content	Media sharing undertaking	Primary obligation: Levy

We favour the imposition of spending obligations on audiovisual media curation companies, including subscription video on demand services, as a means of generating investment in Canadian content.

The actual percentage that might apply and the conditions relating to it would be a matter for the CRTC to determine after public hearings. It will also be important that the CRTC set an expectation that online media curation undertakings that are made available to Canadians offer a certain amount of content in English and French, as appropriate.

There should be an expectation that some of the spending obligations be directed to independent producers. The CRTC currently requires that at least 75 per cent of the Program of National Interest (PNI) expenditures of the major broadcasters support Canadian programs that are produced by Canadian companies that are not owned or controlled by the broadcaster. The CRTC should be more flexible in this area while continuing to require a significant amount of Canadian production in the PNI category to be independently produced.

We recognize that program expenditures of media curation undertakings, including foreign entities, could include the acquisition of rights to distribute the program in other territories. In this regard,

credit for the acquisition of rights to Canadian programs should count toward spending obligations in the year in which the payments are actually made. This approach would avoid problems related to expense allocation and enhance the opportunities for Canadian programs to reach a global audience.

Spending obligations might not be appropriate for all media curation undertakings in all situations, today or in the future. For example, they do not seem appropriate to media curation undertakings offering audio services, such as online audio streaming services, given their business model. In this regard, we recommend imposing levies on these undertakings.

The CRTC should have the flexibility to impose other types of obligations, where spending obligations are inappropriate. The CRTC could consider in some instances offering a choice between expenditures and levies, as is the case in Belgium.¹⁵² Media aggregation undertakings, such as online transactional video on demand services as they currently exist, should be subject to a levy based on the same terms and conditions as traditional transactional video services. A levy would also be appropriate for virtual BDUs.

We also recommend imposing a levy on media sharing undertakings. Similar to the acquisition of program rights by media curation undertakings, copyright payments made by media sharing undertakings to Canadian program producers for Canadian programs should count toward any levy applicable to such services.

Recommendation 62: We recommend that in general, media curation undertakings have spending requirements rather than levies to support Canadian content. Levies should apply to media aggregation and media sharing undertakings. In circumstances in which spending requirements are inappropriate, levies should apply.

These recommendations recognize the realities of a borderless, online world in which Canadians now access media content based on what is relevant to them, not the means of delivery or the nationality of the media content service provider. Alongside measures to support content creation, it is important to ensure that Canadians are able to discover Canadian content provided by undertakings in both the private and public sectors. This is true not only for entertainment content but also for news content, which is discussed later in this chapter.

The discoverability of Canadian entertainment content has been assured primarily through exhibition, packaging, and mandatory carriage requirements on broadcasters. Multiple countries impose quotas or prominence obligations on video on demand services. These include quotas on catalogues and on content in a specific language, prominence obligations related to content used for promotional

¹⁵² Jean-François Furnémont, Mapping of national rules for the promotion of European works in Europe (European Audiovisual Observatory, 2019), s 1.2.2.

purposes and content displayed on home pages of platforms, as well as the requirement for a search filter based on the country of origin of the productions. 153

As previously noted, algorithms play a significant role in determining which content users watch. Media content undertakings that use them should be required to be more transparent to consumers and the CRTC regarding the factors on which content recommendations are based. This would make the online service providers more accountable for the extent to which they make Canadian media content choices available.

In addition, app stores and devices, along with the operating systems, application programming interfaces and preloaded applications, play an essential role in determining what content or services are accessed on the Internet. As such, they can significantly influence the discoverability of Canadian content. Some content and service providers are now selling devices that can prefer their own affiliated media content services. For example, early announcements regarding HomePod speakers seemed to imply that they will only give users access to Apple Music and iTunes and not to competing online music services, such as Spotify. 154 In this context — to the extent that undertakings curate (as a primary purpose), aggregate, or enable the sharing of audio or audiovisual content, or alphanumeric news content — they should be subject to discoverability requirements.

Recommendation 63: To ensure that Canadians are able to make informed choices and that Canadian content has sufficient visibility and is easy to find on the services that Canadians use, we recommend that the CRTC impose discoverability obligations on all audio or audiovisual entertainment media content undertakings, as it deems appropriate, including:

- catalogue or exhibition requirements;
- prominence obligations;
- the obligation to offer Canadian media content choices; and
- transparency requirements, notably that companies be transparent with the CRTC regarding how their algorithms operate, including audit requirements.

If Canada intends to promote the surfacing of Canadian content in the age of online media content, then consistent with the recommendation above, it is essential that the role of app stores and devices and related software link providers, in influencing how Canadian media content is discovered, be monitored.

¹⁵³ Jean-François Furnémont, Mapping of national rules for the promotion of European works in Europe (European Audiovisual Observatory, 2019), ss 1.2.4.-1.2.5.

¹⁵⁴ Autorité de régulation des communications électroniques et des Postes (République Française), Smartphones, tablets, voice assistants... Devices, the Weak Link in Achieving an Open Internet: Report on their limitations and proposals for corrective measures (February 2018), s 2.3.5.

The CRTC would have the flexibility to adapt discoverability requirements to the specific activities conducted by the undertaking. For example, exhibition requirements may not be appropriate for media sharing undertakings that do not have a set catalogue.

The availability of data on the consumption of online content is very important in several ways. It would help in evaluating the efficacy of programs and policies, including those focused on discoverability. It would also help inform the content creation decisions of media content undertakings and producers. As a result of industry initiatives, this data is available for the traditional radio and television sector, but there is little publicly available data regarding online content consumption. An agreed upon methodology for measuring consumption of content online should be developed by the CRTC in collaboration with the industry, and the CRTC should use its information gathering powers to report in a transparent way on the trends in consumption of Canadian content.

Recommendation 64: We recommend that the CRTC use its power to collect information and obtain consumption data from online media content undertakings and publish them in aggregated form.

3.4.3 Ensuring Public Support to Canadian Creators

Our recommendations related to Canadian content are ambitious and multifaceted. Complementing the changes in regulatory obligations in this area are measures to strengthen public financing in support of Canadian content.

A successful Canadian content ecosystem must include local and community content provided through a variety of sources including small private players or public ones such as educational broadcasters. It also requires special measures to meet the needs of diverse communities, including OLMCs and Indigenous Peoples and communities. It should also spur the creation of content that may face systemic challenges in the marketplace. Public funding is critical to ensuring these forms of audiovisual entertainment content are created.

It is crucial to ensure sufficient funding to programs for Indigenous content, conceived by and for Indigenous Peoples and communities. We support the call to action launched by the Truth and Reconciliation Commission of Canada, which supports Aboriginal Peoples Television Network's (APTN) leadership in expressing the cultures, languages, and viewpoints of Indigenous Peoples. 155

Given that forms of content are converging, and that distinctions based on distribution media (cinemas, cable, online, etc.) or screens (television, computers, tablets) are less relevant, it is no longer appropriate

¹⁵⁵ Truth and Reconciliation Commission of Canada, Honouring the Truth, Reconciling for the Future Summary of the Final Report of the Truth and Reconciliation Commission of Canada (2015), p 335, Call to action 85.

to distinguish the source of funding by screen, platform, or format. We support the establishment of a public institution that is fully financed with public funds, is neutral regarding the producer, and will support audiovisual entertainment content on any screen or platform.

This institution could be created by combining the complementary roles of the Canada Media Fund and Telefilm Canada, which both provide support to development and production of audio-visual content. It should transition from a model based on broadcaster envelopes to one based on supporting activities ranging from development to creation to production and discoverability, regardless of the distribution medium. This new institution could better target financing where it is needed to promote a diversity of voices. It could support Canadian creators and producers to take creative risks and innovate, to express their cultures, and to gain experience that could lead them on to commercial success. The institution should have the flexibility to determine where it is most appropriate to allocate its funds to fulfill cultural objectives. The federal government should develop the mandate and operational parameters of this new organization in consultation with stakeholders.

Recommendation 65: We recommend that the government establish a single public institution tasked with funding the creation, production, and discoverability of Canadian productions on all screens. This institution will combine the functions of the Canada Media Fund and Telefilm Canada.

Being fully funded from public sources means that the new institution should not benefit from the levies on BDUs. The levies being paid to the CMF should primarily be redirected to the CIPFs. The CIPFs came about as a result of industry initiatives and support a variety of content (including youth programming, documentaries, and digital media). This would provide more flexibility to both independent producers—who are crucial to maintaining a diversity of voices—and broadcasters to invest and create Canadian content. This flexibility would help them meet the new stated objective that Canadian content be of high quality and able to compete at home and abroad.

The remaining funds from the levies could be directed to other existing or new funds or programs approved by the regulator. The composition of these funds will continue to be determined by the CRTC, who would ensure that these funds contribute to cultural policy objectives. In section 3.5.2, we consider that some of these funds could be directed to news content.

There may be some high-risk productions, such as films, that may not receive much support from the CIPFs. As necessary, it will be up to the new institution to use its own funding programs to fill perceived gaps.

Recommendation 66: We recommend that the regulatory levy that formerly went to the Canada Media Fund be redirected to the Certified Independent Production Funds, as well as to other existing or new funds or programs approved by the CRTC.

It is critical to ensure that with the changes in funding sources, there are still a healthy number of socalled 10-out-of-10 Canadian productions, which maximize Canadian creative input.

Current programs funded in part by the CMF through its broadcast envelopes generally require Canadian productions to ensure that all key creative positions are occupied by Canadians. Programs that do not depend on CMF financing can qualify as Canadian content if they meet a minimum of 6 points out of 10. The protection for 10-out-of-10 Canadian productions would disappear with the elimination of the CMF broadcast envelopes, to be replaced by Canadian program expenditure requirements that will be applicable to streaming as well as traditional broadcasters.

There is no question that productions in which all key creative positions are occupied by Canadians — which have a Canadian writer, a Canadian director, and Canadian lead actors — are more likely to reflect a Canadian perspective. On that basis, we encourage the federal government and the CRTC to ensure that a significant portion of financing provided through the new public institution and CIPFs goes to productions where all key creative positions are occupied by Canadians. Consistent with this, where media curation undertakings include new Canadian dramas and long-form documentaries in their offerings, the CRTC should set an expectation that all key creative positions be occupied by Canadians on a reasonable percentage of those programs. Maximizing the Canadian creative inputs can enhance the Canadian perspective of such programs without affecting freedom of expression.

If this expectation is not met over time, the CRTC should make it an actual requirement.

Recommendation 67: We recommend that where media curation undertakings include new Canadian dramas and long-form documentaries in their offerings that count toward their regulatory obligations, the CRTC should set an expectation that all key creative positions be occupied by Canadians on a reasonable percentage of those programs. If the expectation is not met over time, the CRTC should consider converting it to a requirement.

To achieve these ambitious goals, the government must be prepared to invest in public institutions that provide support to cultural media content. For many years, investment stagnated and decreased in 2012 when the federal budget brought in a 10 per cent reduction over three years in funds allocated to the National Film Board of Canada and Telefilm Canada. Parliamentary appropriations to the Canada Council of the Arts remained at around \$182 million for almost a decade¹⁵⁶. It was only in 2016 that investment began to increase. At that time, the government committed to reinvest from 2016 to 2021, an additional \$550 million to the Canada Council for the Arts, \$13.5 million to the NFB, and \$2 million to Telefilm Canada. 157

¹⁵⁶ Canada Council for the Arts, Annual Reports, 2007–2008 to 2015-2016.

¹⁵⁷ Government of Canada, Budget 2016 (22 March 2016), Table 5.1.

To achieve our vision for the public sector, public institutions, such as the NFB, the Canada Council for the Arts, and the new funding agency, must benefit from sufficient, stable, and long-term funding. At a minimum, their funding must keep pace with inflation.

Recommendation 68: We recommend that the federal government index to inflation parliamentary appropriations allocated to institutions supporting cultural media content.

It is essential to remove certain barriers to public funding programs, including tax credits and financing funds that support private investment in cultural media content. These programs should not differentiate between types of producers and should encourage broadcasters affiliated with production companies to invest in and make Canadian content, while continuing to promote a strong community of independent producers. Given the convergence of the types of distribution media, public funding should also be platform-agnostic.

Recommendation 69: We recommend that as a general principle, the government ensure that tax credits and funds are platform-agnostic and are accessible to all Canadian production companies, whether independent or broadcaster affiliated.

SUPPORTING DIVERSE, ACCURATE, TRUSTED, AND RELIABLE NEWS 3.5

3.5.1 Recognizing the Crisis in Traditional News Media

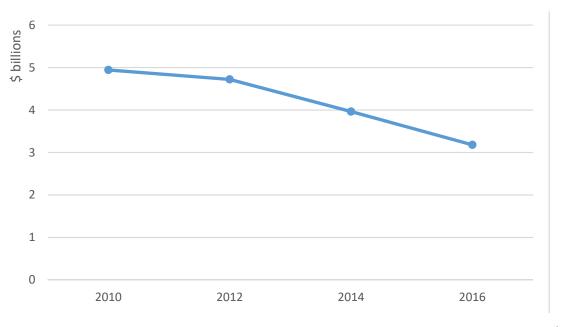
A strong, financially stable, and independent news sector that delivers diverse, accurate, trusted, and reliable sources of news to Canadians through a variety of media is essential to the health of democracy and to an engaged citizenry. It is also necessary to counter the spread of misinformation facilitated by communications technologies. This section focuses on ensuring that Canadians have access to a wide range of accurate, reliable, and trusted sources of Canadian news.

The digital shift has threatened the viability of Canadian news content. Traditional sources of news are losing revenues both from advertising and subscriptions (see Figures 3-8 and 3-9), compromising their capacity to produce quality news and information.¹⁵⁸ While Canadians continue to rely on Canadian news media, they are increasingly accessing this content online, including through social media platforms.

¹⁵⁸ Statistics Canada. Table 21-10-0191-01 (formerly CANSIM 361-0081) Newspaper publishers, summary statistics.

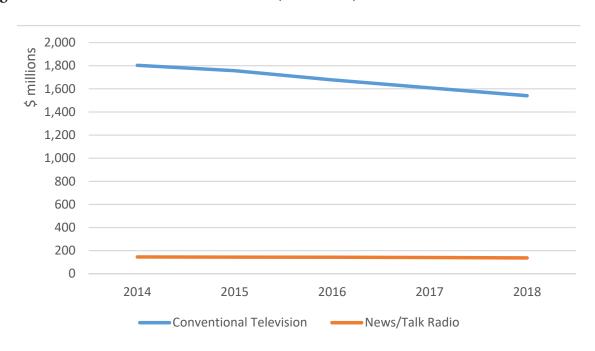
Advertising revenues are moving away from traditional outlets, such as print newspapers, conventional television and radio stations, toward online media aggregation and sharing services, given the superior ability of these services to attract consumers.

Figure 3-8 Newspaper Operating Revenues in Canada (2010-2016)



Source: Statistics Canada

Figure 3-9 Audio and Audiovisual Revenues (2014-2018)



Source: CRTC

The declining revenues are affecting the quality and quantity of accurate, reliable, and trusted sources of news available to Canadians, particularly local and community sources of news.

Further, the decline in revenues of newspapers has already had a significant impact on production. Between 2012 and 2016, operating expenses of newspapers declined by over 28 per cent, and salaries, wages, commissions, and benefits declined by over 30 per cent. These declines where the result of closures and cuts. In Canada, 189 community newspapers and 36 daily papers closed between 2008 and 2018, of which 44 disappeared due to mergers. These closures and mergers have affected 178 communities. ¹⁵⁹ In Quebec, 57 weekly or bi-weekly newspapers shut down between 2011 and 2018. This is in addition to the closures between 2011 and 2018 of 12 monthly, semi-monthly, or bimonthly newspapers, 6 digital newspapers, and 1 regional daily¹⁶⁰. At the time of writing, 6 major Quebec dailies had indicated that they were on the brink of bankruptcy.

While television undertakings have also experienced decreased revenues, spending on news content has been somewhat insulated by a series of regulatory measures. These include contributions from BDUs to the Independent Local News Fund (ILNF), reallocations by vertically integrated companies of some of their BDU contributions to their conventional stations, as well as exhibition quotas for locally reflective news. In 2018, contributions from BDUs to news operations totalled \$69.4 million. 161

With the decline in BDU revenues averaging 1.5 per cent per year since 2014, the funding mechanisms currently in place are likely to be less effective over time. Conventional television stations — typically the bedrock of audiovisual spending on news and an important source of local news — have not been profitable since 2012; they have lost over \$600 million in revenues between 2013 and 2018. Revenues for radio have also been declining. However, spending on news on radio has remained relatively stable. 162

While advertising revenues for newspapers, radio, and television undertakings (including from their online services) are in decline, overall online advertising revenues are increasing (see Figure 3-10). Global platforms that aggregate or allow for the sharing of news are capturing a large proportion of the advertising revenues. It is estimated that Google and Facebook receive almost 75 per cent of online advertising revenues in Canada. By comparison, the websites of traditional television and newspapers only account for 8.5 per cent of all Internet advertising. 164

¹⁵⁹ April Lindgren and Jon Corbett, Local News Map Data (2018), pp 5-7.

¹⁶⁰ Anne-Marie Brunelle and Colette Brin, L'information locale et régionale au Québec: Portrait du territoire 2011–2018 et perspectives citoyennes (Centre d'études sur les médias, Université Laval, 2018), p 17.

¹⁶¹ CRTC, Financial Summaries 2018 (2019).

¹⁶² CRTC, Communications Monitoring Report (2019).

Dwayne Winseck, Media and Internet Concentration in Canada 1984 – 2017 (Ottawa, Media Concentration Research Project, 2019), p 66, Table 5.

¹⁶⁴ ThinkTV, Net Ad Volume in Canada including Television, Radio, Internet, Newspaper Magazine and OOH (11 December 2018).

There is little doubt that the current model for supporting news is not sustainable. The traditional news industry in Canada, as in many countries around the world, is facing a crisis, which has serious implications for Canada's democratic system and social values.

\$ billions 5 0 2011 2010 2012 2013 2014 2015 2016 2017 - Radio ——Internet

Figure 3-10 Advertising Revenues in Canada (2010–2017)

Source: ThinkTV

3.5.2 Ensuring the Creation of Diverse, Accurate, Trusted, and Reliable News

Social media platforms, for the most part, provide online access to news sources and repackage information from other sources. They are not typically directly involved in the creation of news. 165 Traditional media remain the main source of original news content, making the decreasing funding for traditional media of particular concern. It has been shown that Canadians value 166 and trust traditional media more than news that is available on social media. 167

¹⁶⁵ Pew Research Center, How News Happens: A study of the news Ecosystem of One American City (11 January 2010); 2010 Public Policy Forum, The Shattered Mirror (2017).

¹⁶⁶ EKOS Research Associates Inc, Report on Future of Audio and Video Programming in Canada: Surveys and Focus Groups (prepared for the CRTC, 2018), s 2.1.

¹⁶⁷ Nanos, Trust in news sources and opinions on the CBC - FCB Survey Summary (prepared for Friends of Canadian Broadcasting, 2017), p 1-3.

The trend in consumption of news content online and the crisis in traditional news media are not limited to Canada. Several countries, including the United Kingdom, France, Belgium, Germany, Norway, and Australia have introduced measures to support the creation of news.¹⁶⁸ These either support journalism and the production of news, or the digital transition of traditional news media undertakings, or both. In 2018, the federal government announced a \$595 million package over five years in support of journalism¹⁶⁹ consisting of:

- a 25 per cent refundable tax credit for qualifying news organizations to apply to labour costs associated with producing original content;
- a temporary, non-refundable tax credit to allow subscribers to claim 15 per cent of the amount paid for eligible digital news subscriptions; and
- a new category of "qualified donee" for non-profit journalism organizations to grant them charitable status and permit them to issue receipts for donations from individuals and corporations.

These measures are welcome and complement the regulatory measures put in place by the CRTC. However, more must be done. We agree with those who submit that further legislative and regulatory measures are needed to support the creation of news. We also agree that funding programs for news content should preserve journalistic independence.

As a first step, the labour-based tax credit should extend beyond its current term, in order to strengthen the capacity of news organizations over the long term.

Further, as a general principle, any support measures, including the labour-based tax credit, aimed at news media should apply to news delivered over all platforms and in all formats.

Recommendation 70: We recommend that the federal government ensure that the labour-based tax credit for journalism organizations announced in 2018 apply to undertakings that deliver alphanumeric, audio, or audiovisual news content on all platforms.

In light of the financial crisis in news production, we carefully considered whether some or all of the previously discussed levy to be applied to media aggregation undertakings and media sharing undertakings should contribute to the production of news content. It would represent a significant source of new funding to address the crisis in news media and to provide long-term support to the objective of ensuring a wide range of accurate, reliable, and trusted sources of news.

¹⁶⁸ Maria De Rosa and Marilyn Burgess, An Overview of Support Mechanisms for Local News in Selected International

¹⁶⁹ Canada Revenue Agency, Support for Canadian Journalism – General (2019).

In the case of media sharing undertakings, this levy would be on the revenue derived from the advertising that is disseminated to the public along with audio or audiovisual content or alphanumeric news content. Revenue derived from advertising sent to the public along with alphanumeric content other than news would not be subject to the levy.

To further support Canadian journalism, a greater portion of the current BDU levy could be directed to the creation of news. This would be in addition to the portion of the levy that already goes to support the ILNF.

A new independent arm's length program could be established to support the production of news, including local news, on all platforms. It would be open to all media curation undertakings whose primary purpose is to provide a service for the dissemination of alphanumeric news content over which it exercises editorial control, providing they respect principles of ethical journalism and editorial independence.

Recommendation 71: We recommend that the CRTC consider that some or all of the levies on media aggregation and media sharing undertakings contribute to the production of news content. These contributions would be directed to an independent, arm's length CRTC-approved fund for the production of news, including local news on all platforms. We further recommend that the CRTC consider redirecting a greater portion of the levy currently paid by broadcasting distribution undertakings to this same fund for the production of news.

As noted, Canadians are increasingly accessing news online through social media platforms, which facilitate the sharing of content produced by other news media typically without any form of compensation to the journalists and media outlets that created the content. The problem is exacerbated by the imbalance in negotiating power between the dominant social media platforms and the great number of creators who actually produce the news. As a result, the costs of producing original news are largely absorbed by the content-producing media, further undermining the capacity of news organizations to produce accurate, reliable, and trusted news.

The problem of the uneven playing field between social media platforms and news media organizations is discussed in section 3.4.2. The same issue was noted in the 2019 Report of the Standing Committee on Industry, Science and Technology (INDU) on the Statutory Review of the Copyright Act.

A regulatory framework is needed to address this issue, over and above any measures that may arise out of copyright reform. As reflected in Recommendation 61, the CRTC should be given the explicit jurisdiction to regulate the economic relationships between media content undertakings and content producers, including terms of trade. Just as the CRTC should be able to ensure that audiovisual content producers are treated fairly, it should be able to regulate the relationship between social media platforms that share news content and the Canadian news sources that produce the news, to ensure that the latter are treated fairly.

Recommendation 72: We recommend that the relationship between social media platforms that share news content and the news content creators be regulated to ensure that news producers are treated fairly where there is an imbalance in negotiating power. Consistent with the earlier Recommendation 61, the CRTC should have the specific jurisdiction to regulate economic relationships between media content undertakings and content producers, including terms of trade. This would include media content undertakings that make alphanumeric news content available to the public.

Beyond the issue of funding for news is the question of discoverability. Canadians must also have access to accurate, trusted, and reliable news content, including news from a Canadian perspective. Currently, the CRTC imposes exhibition requirements with respect to local news on television. As news consumption moves online, discoverability requirements should be put in place.

Recommendation 73: We recommend that to promote the discoverability of Canadian news content, the CRTC impose the following requirements, as appropriate, on media aggregation and media sharing undertakings:

- links to the websites of Canadian sources of accurate, trusted, and reliable sources of news with a view to ensuring a diversity of voices; and
- prominence rules to ensure visibility and access to such sources of news.

3.6 ENHANCING THE LEGISLATIVE AND REGULATORY TOOLKIT

This section deals with matters such as improving regulatory impact and efficiency, monitoring, and consequential amendments to help ensure that the legislation gives effect to our recommended framework. It concludes with copyright and piracy.

3.6.1 Improving Regulatory Impact and Efficiency

As part of the shift in the CRTC's role, it should be encouraged to improve its regulatory impact by promoting co-regulation and self-regulation. For example, the CRTC should encourage industry to develop codes of conduct and require licensees and registrants to abide by such codes. It already does this in some areas, such as the Canadian Association of Broadcasters' Broadcast Code for Advertising to Children. Such codes could address privacy, transparency regarding algorithms and AI-based processes, accessibility, and measures to address complaints by users on a variety of matters. Classes of codes could apply to different undertakings depending on the level of editorial control they exercise.

To further promote regulatory efficiency and flexibility, the CRTC should have the power to provide partial or additional relief, to issue conditional and interim decisions, and to issue ex parte decisions where it considers that the circumstances of the case justify it. This is the case under sections 60 to 62 of the Telecommunications Act. This change to the Broadcasting Act would enhance the CRTC's ability to respond to changes in the marketplace in a timely manner.

Recommendation 75: We recommend that the Broadcasting Act be amended to give the CRTC the power to provide partial or additional relief, to issue conditional and interim decisions, and to issue ex parte decisions where the circumstances of the case justify it.

3.6.2 Monitoring and Compliance

Building on Recommendation 2 pertaining to the CRTC's powers regarding information gathering, the CRTC should have the authority to impose reporting requirements with respect to financial information, algorithms and AI-based processes, and consumption data on all media content undertakings. This information would be valuable for research purposes and should be made public in aggregated form in CRTC reports on the media communications sector.

Recommendation 76: We recommend that the Broadcasting Act be amended to ensure that the CRTC can — by regulation, condition of licence, or condition of registration — impose reporting requirements, including with respect to financial information, consumption data, and technological processes such as algorithms, on all media content undertakings.

The CRTC should also be able to act in the case of non-compliance with the regulatory framework it establishes with respect to licencees and registrants. The legislation should enable the CRTC to impose AMPs on media content undertakings in instances of non-compliance. This AMPs regime should resemble the general AMPs scheme in the *Telecommunications Act* (section 72.001 and following), while ensuring that the maximum thresholds are set at a level high enough to be a sufficient deterrent to global actors.

Recommendation 77: We recommend that to strengthen the compliance regime for both licences and registrations, the Broadcasting Act be amended to include provisions for Administrative Monetary Penalties, similar to the general scheme in the Telecommunications Act, with maximum thresholds set at a level high enough to create a deterrent for foreign undertakings.

3.6.3 Consequential Amendments

In section 3.3.2, we recommend that the legislation ensure that certain powers of the CRTC regarding licensing should also apply to registration, including those provisions that enable the CRTC to establish classes of registrants, to amend registrations, and impose requirements on registrants, including the

payment of registration fees. There are other powers that currently apply to licensing and should be included with respect to registration:

- The GiC should not be able to issue an order with respect to the registration of a particular person or in respect of the amendment of a particular registration (subsection 7(2)).
- The GiC should not be able to issue an order with respect to a registration matter pending before the CRTC where the period for the filing of interventions in the matter has expired unless that period expired more than one year before the coming into force of the order (subsection 7(4)).
- Any document issued by the CRTC in the form of a decision or order should, if it relates to the issue or amendment of a registration, be deemed for the purposes of this section to be a decision or order of the CRTC (subsection 31(4)).
- Any person that is required by the CRTC to register and who does not is guilty of an offence punishable on summary conviction and is liable in the same way as a licensee (subsection 32(1)).
- Any registrant who contravenes or fails to comply with any regulation or order made by the CRTC is guilty of an offence punishable on summary conviction and is liable in the same way as a licensee (subsection 32(2)).
- Any registrant who contravenes or fails to comply with any condition of registration is guilty of an offence punishable on summary conviction (section 33).

3.6.4 Copyright and Piracy

Content piracy has been identified as a significant problem in a more open and global environment. The issue of copyright piracy on the Internet was extensively reviewed by INDU, which published its report on June 3, 2019. The While the Committee was sympathetic to the concerns of the industry over piracy, it did not support the development of an administrative regime to address the issue. In its view, it is for the courts to adjudicate whether a given use constitutes copyright infringement and to issue orders in consequence. We agree.

There are two approaches to addressing piracy: first, copyright reform and, second, prohibiting unlawful actions that facilitate the reception of programs from Internet sites.

A number of countries have addressed copyright reform by authorizing their courts to stop Internet piracy on foreign websites through blocking orders addressed to ISPs and de-indexing orders addressed to search engines. For example, Australia amended its copyright laws in December 2018, such that copyright owners seeking injunctions can now target a broad range of infringing websites and quickly

¹⁷⁰ Report of the Standing Committee on Industry, Science and Technology, Statutory Review Of The Copyright Act (June 2019), p 97.

and effectively obtain blocking and de-indexing orders. While such orders will not be able to stop all online piracy, they have the potential to reduce it substantially, particularly when coupled with the availability of affordable legal sites.

In Canada, the courts appear to have the necessary toolkit to address instances of copyright infringement on the Internet pursuant to provisions of the Copyright Act and the Federal Courts Act. We defer to other for on whether the Copyright Act needs to be amended to develop other processes for obtaining blocking orders.

With respect to the second approach, sections 9 and 10 of the *Radiocommunication Act* currently make it an offence to decode, retransmit, and operate devices, equipment, or components to receive an unlawfully decrypted subscription program. These provisions should be moved to the *Broadcasting Act* and expanded to include all forms of media content, whether received through satellites or through the Internet. Consequential amendments should also be made to ensure proper enforcement of these provisions.

Recommendation 78: We recommend that to address piracy, sections 9 and 10 of the Radiocommunication Act — which state that it is an offence to decode, retransmit, or operate devices, equipment, or components to receive unlawfully decrypted subscription programs — be moved to the Broadcasting Act and be expanded to include all forms of media content, whether received through satellites or the Internet.

We are aware that our recommendations will likely lead to the rescinding or modification of the current DMEO. This would impact the compulsory licence regime in section 31 of the Copyright Act which provides that, under certain conditions, traditional BDUs can retransmit local or distant signals without violating copyright. This same exception is not extended to "new media retransmitters," for whom the capture and retransmission of such signals would constitute an infringement of copyright. "New media retransmitters" are defined as those who fall under the current DMEO. Under the current regime, Internet-based BDUs must obtain the permission of the copyright owners to disseminate the programs on those channels.

In any examination of this matter, several issues must be taken into account, such as the implications for the owners of copyright and the current principle that the distribution of program content on the Internet should be subject to marketplace negotiations, the impacts on consumers and the future development of new online distribution models.

3.7 STRENGTHENING THE NATIONAL PUBLIC BROADCASTER

The Canadian Broadcasting Corporation/Société Radio-Canada (CBC/Radio-Canada) plays a critical role in the current media landscape, including with respect to creation and access to news from a Canadian perspective. It was the subject of considerable stakeholder comment. While its future mandate, funding, and governance are discussed separately, we recognize that these three elements are completely intertwined and require an integrated approach that reflects the dynamic, open, and global media environment in which it operates.

CBC/Radio-Canada's current mandate is set out in paragraphs 3(1)(l) and (m) of the Broadcasting Act and stipulates that the Corporation "should provide radio and television services incorporating a wide range of programming that informs, enlightens, and entertains." It should specifically provide programming that is predominantly and distinctively Canadian, reflecting the linguistic, multicultural, and regional aspects of Canada, and contributing to the flow and exchange of cultural expression and shared national consciousness and identity. This broad mandate has established CBC/Radio-Canada as a key cultural institution in Canada, with Canadian content as its central focus. Since its inception, it has played an important role in producing and promoting all types and genres of television and radio programming. It currently accomplishes its mandate through the operation of over 30 services across all media platforms. In addition, it operates Radio-Canada International, an international service providing service in English, French, Spanish, Arabic, and Mandarin.

The audio and audiovisual landscape in Canada is changing profoundly, with significantly greater choice for Canadians, including a widening range of entertainment from around the world as well as a plethora of news and information from multiple sources. In these circumstances, it is more important than ever to ensure a strong Canadian cultural anchor. This anchor must have the ability and resources to maintain a strong Canadian presence at home in the face of increasing competition and to simultaneously exploit new opportunities to showcase Canada on the global stage.

3.7.1 Updating the Mandate of the Public Broadcaster

Stakeholders appear to have two somewhat different visions for the future mandate of CBC/Radio-Canada. Some see a continuation of the current broad mandate set out in the Broadcasting Act with perhaps additional responsibilities added to the list. Others believe that some constraints should be imposed, specifically limiting CBC/Radio-Canada to services and content that would not otherwise be provided by the private sector.

We are convinced that CBC/Radio-Canada should continue to provide a full range of Canadian audio and audiovisual content that informs, enlightens, and entertains. In so doing, it should be animated by a public purpose not a commercial one, lending several distinct characteristics to its content choices.

Specifically, CBC/Radio-Canada should pursue a diversity of media content to reflect Canada's own makeup and not focus just on lucrative mainstream audiences. This should include a mix of genres and not preclude categories such as entertainment content, in which CBC/Radio-Canada can make a significant contribution to the expression of Canada's national identity by connecting Canadians and enabling them to tell their stories to each other and to the world. Moreover, a public mandate calls for high-quality content, providing a depth of analysis and content that may require extensive financial resources. Finally, in meeting these goals, it should be prepared to explore fresh approaches, experiment, and take risks, even if all attempts are not met with success. This concept of innovation appears in the legislative frameworks for several public broadcasters, including Australia, Ireland, and the United Kingdom.

A corollary to these distinct features is that CBC/Radio-Canada should not be limited to television and radio programming but should be encouraged to experiment with all means for providing content to Canadians, including online digital services and any other means that may emerge in the future.

Recommendation 79: We recommend that to ensure the national public broadcaster is able to adapt to a more open, global, and competitive media communications environment, the Broadcasting Act be amended to remove the specific reference to radio and television in the mandate of CBC/ Radio-Canada. This would ensure that CBC/Radio-Canada is able to provide a wide range of media content that informs, enlightens, and entertains on multiple platforms and media.

Local content requirements are often set out as conditions of CBC/Radio-Canada's licence for a specific geographical area. As a result, removing the requirement for CBC/Radio-Canada to provide radio and television services and the subsequent migration to online services could lead to less local content being made available to Canadians. Local content plays an important role for Canadians from all parts of the country who wish to see themselves reflected in audio and audiovisual content. It is also costly to produce and difficult to export. There may therefore be fewer and fewer incentives for commercial content providers to provide local content in a global marketplace. CBC/Radio-Canada has a role to play in addressing this situation.

As part of its current mandate to reflect the different needs and circumstances of each official language community, CBC/Radio-Canada provides media content directed at official language minority communities across the country. This service remains a core feature of the public broadcaster.

At the same time, it remains essential that Canadians have access to content from different parts of the country, in order to gain a better understanding of one another and of our common features and range of perspectives. Given the vital role that Canadian cultural content can play in connecting Canadians to one another and in sharing our different stories, it is important to find new ways within the emerging media landscape to encourage this mutual exchange, so that Canadians are shaped by

our own values, cultures, and perspectives. The Broadcasting Act should explicitly state that CBC/ Radio-Canada should reflect national, regional, and local communities to national, regional, and local audiences.

Another aspect of the transition to digital services is the use of pay walls to monetize content. Given the public mandate of CBC/Radio-Canada, any reduction in CBC/Radio-Canada's current level of radio and television should only take place after the CRTC has carefully examined the impact it may have on Canadians who cannot access or afford content on digital platforms. At a minimum, there must be some level of free content, both news and entertainment, on CBC/Radio-Canada's digital platforms.

Nowhere will the role of a well-resourced public media provider be more important than in the area of news and information content. As discussed earlier, the media landscape for news and information is being transformed radically, with significant pressure on the preservation of reliable news sources at the local, regional, national, and international level. Trustworthy news lies at the heart of a fully functioning democracy. The range and extent of CBC/Radio-Canada's current services play an important role in providing citizens with information that is vital for our democracy to thrive. In this context, CBC/Radio-Canada has a heightened responsibility to provide high-quality, accurate, and dependable news, ensuring that Canadians have access to relevant and reliable information from all parts of Canada. It is also critical that Canadians are able to see and hear a Canadian perspective on international events. A profound understanding of what is going on in other parts of the world has never been more important.

Another critical source of information for Canadians is local news. The Let's Talk TV Quantitative Research Report 171 commissioned by the CRTC in 2014 showed that local news is important to 81 per cent of Canadians, while other forms of local content are important to 53 per cent of Canadians. Like other types of local content, it is costly to produce and is under constant financial pressure.

The mandate of CBC/Radio-Canada should be widened to stipulate that it has a specific responsibility both to provide national, regional, and local news and to reflect Canadian perspectives on international news.

While the changes taking place in the media landscape are creating numerous challenges, they are also opening up new opportunities. The arrival of content from around the world has created an unprecedented level of competition for Canadian viewers; at the same time, the possibilities for Canadian stories and other content to be shared with an international audience have never been greater. However, being successful requires not only significant resources but also considerable risk taking, innovation, and experimentation.

¹⁷¹ CRTC, Let's Talk TV: Quantitative Research Report (24 April 2014).

While other members of the Canadian media landscape will have important contributions to make, CBC/Radio-Canada is ideally situated to make significant effort on projecting Canada to the world. Showcasing Canadian content to international audiences should be added to its mandate.

Another important area that falls within CBC/Radio-Canada's public mandate is Indigenous content. Several stakeholders called for more resources and mechanisms to support the funding, distribution, and discoverability of media content created by Indigenous Peoples. Some suggested that CBC/Radio-Canada, in particular, should act as a complement not a competitor, helping with capacity building and nurturing this aspect of Canadian content. We support the Truth and Reconciliation Commission of Canada in its call to action recognizing CBC/Radio-Canada's role in supporting Reconciliation and reflecting the diverse cultures, languages, and perspectives of Indigenous Peoples and communities. 172

CBC/Radio-Canada provides a range of services in support of Indigenous content. For example, it serves over 100 northern communities, broadcasting more than 125 hours of content per week in eight Indigenous languages. It has also supported events celebrating Indigenous stories, connecting authors and their writing with students, and has worked with Indigenous communities to preserve radio and television content in multiple Indigenous languages dating back decades. Its mentoring and training programs also seek out and prepare Indigenous journalists. 173

We recognize the importance of reflecting Indigenous Peoples and communities, in promoting Indigenous cultures and languages as part of the diverse Canadian landscape and believe that CBC/ Radio-Canada should have a legislated role to play in this regard. In addition, the government should encourage CBC/Radio-Canada to explore a range of activities and fresh approaches, including partnerships, resource sharing, mentorship, capacity building, and other supportive roles, to collaborate with Indigenous creators and communities.

Our recommendations regarding the expansion of CBC/Radio-Canada's role are aimed at transforming Canada's public broadcaster into Canada's public media institution. Transforming itself may encourage CBC/Radio-Canada to change the way it approaches its role, doing things differently rather than doing different things. There may be opportunities to partner effectively with other public institutions, to take risks with new voices and ideas, and to support emerging creators. This transformation will also require sufficient funding to allow it to deliver its mandate as well as a governance structure that will allow it to pursue its statutorily mandated journalistic, creative, and programming independence. These issues are discussed below.

¹⁷² Truth and Reconciliation Commission of Canada, Honouring the Truth, Reconciling for the Future Summary of the Final Report of the Truth and Reconciliation Commission of Canada (2015), p 293-294, Call to action 84

¹⁷³ CBC/Radio-Canada, Indigenous Reflection and Representation (2018).

Recommendation 80: We recommend that the Broadcasting Act be amended to add the following elements to the mandate of CBC/Radio-Canada:

- reflecting local communities and audiences;
- providing national, regional, and local news;
- reflecting Canadian perspectives on international news;
- reflecting Indigenous Peoples and promoting Indigenous cultures and languages;
- showcasing Canadian content to international audiences; and
- taking creative risks.

We further recommend that the Act be amended to ensure that the national public broadcaster has the objects and powers it needs to deliver on its updated mandate.

3.7.2 A Revised Funding Model

CBC/Radio-Canada currently has multiple sources of revenue, with the largest portion coming from parliamentary appropriations. In 2017-2018, this amounted to \$1.208 billion or 68 per cent of its total revenues. In addition to parliamentary appropriations, CBC/Radio-Canada received \$318 million from advertising, \$127 million from subscriber fees, and an additional \$128 million from financing, investment, and other sources.¹⁷⁴ CBC/Radio-Canada benefits indirectly from the CMF, which supports broadcasters' investments in Canadian television programming. In 2017-2018, CBC/Radio-Canada's performance and development envelopes totalled about \$86 million.¹⁷⁵ Finally, productions in which CBC/Radio-Canada invested received \$60 million in federal tax credits in 2017-2018.¹⁷⁶

The funding level for CBC/Radio-Canada has been the topic of much discussion over the years, with conflicting conclusions contained in the five parliamentary and government reports issued over the last decade and a half.177

¹⁷⁴ CBC/Radio-Canada, Annual Report 2017–2018 (2018).

¹⁷⁵ Canada Media Fund, 2017-2018 Performance Envelope Allocations (2017); Canada Media Fund, 2017-2018 Development Envelope Allocations (2017).

¹⁷⁶ Estimates based on CMPA, Profile 2018: Economic Report on The Screen-Based Media Production Industry In Canada (2019), Exhibit 3-8.

¹⁷⁷ Standing Committee on Canadian Heritage. Our Cultural Sovereignty: The Second Century of Canadian Broadcasting (June 2003); Standing Committee on Canadian Heritage, CBC/Radio-Canada: Defining Distinctiveness in the Changing Media Landscape (February 2008); Standing Committee of Transport and Communications, Time for Change: The CBC/ Radio-Canada in the Twenty-first Century (July 2015); Standing Committee on Canadian Heritage, Disruption: Change and Churning in Canada's Media Landscape (June 2017); Department of Canadian Heritage, Creative Canada Policy Framework (2017).

Several stakeholders commented to us on the timing, levels, and sources of funding for CBC/ Radio-Canada, stressing the need for predictability and stability. Many suggested that this could be accomplished by allocating federal funds on a multi-year basis to improve CBC/Radio-Canada's ability to plan and to increase its political autonomy. Some stakeholders also called for the elimination of advertising as a source of revenue, which raises the issue of providing an offsetting increase in the parliamentary appropriation.

Parliamentary appropriations are established on a yearly basis and are often characterized by shortterm increases and decreases. Though it was recently provided with some additional funds beginning in 2016-2017, CBC/Radio-Canada has generally seen a decline in its federal funding, due in part to unfunded inflation. In terms of per capita spending on public broadcasting, Canada ranked 16 out of 18 OECD countries in 2015-2016 and significantly lagged behind several comparator jurisdictions (see Figure 3-11).¹⁷⁸ Specifically, Canada spent \$29 per capita on public broadcasting while both Australia and Ireland spent \$55. Meanwhile, the United Kingdom and France spent \$105 and \$73, respectively, ranking 7th and 9th. Adjusting for the additional infusion of dollars beginning in 2016-2017, Canada increased its per capita spend to \$34, still leaving a significant gap with similar countries. We would like to note that the Corporación de Radio y Televisión Española, the NHK in Japan and the Australian Broadcasting Corporation do not have advertising revenues. 179 The BBC's UK services are also commercial free. 180

¹⁷⁸ CBC/Radio-Canada, Our culture, our democracy: Canada in the digital world (Submission to the Broadcasting and Telecommunications Legislative Review Panel, January 2020), p 20.

¹⁷⁹ Spain, Ley 8/2009, de 28 de agosto, de financiación de la Corporación de Radio y Televisión Española, referenced in Trinidad García Leiva, Spain: Law on the Funding of RTVE Corporation Adopted, [accessed on 1 December 2019]; NHK, Receiving Fee System, [accessed on 1 December 2019]; Australia, Annual Report 2019; ABC, ABC Editorial Policies, Advertising and sponsorship ABC magazines (26 February 2019).

¹⁸⁰ BBC, Licences Fees and Funding – About the BBC, [consulted 1 December 2019].

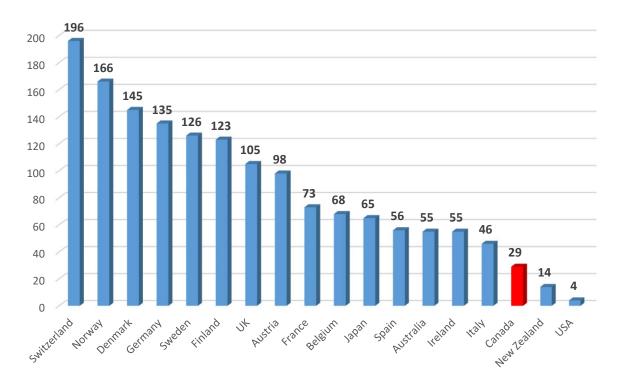


Figure 3-11 Per Capita Public Funding of PSBs in C\$ (2016)*

*Excludes any commercial revenue earned by public broadcasters.

Source: Based on data from Nordicity

Obviously, the mandate and circumstances of public broadcasters vary enormously in different countries, influencing their funding needs. CBC/Radio-Canada has several specific challenges that contribute to its costs, such as the need to provide services in both official languages and the breadth of its geographical coverage.

The risks of misinformation and the increased importance of global media entities are discussed in chapter 4. In this context, the mandate of the public media institution of the future should be expanded, encouraging it to take creative risks, to further reflect the diversity of Canada, including its Indigenous Peoples and dual linguistic communities, to broaden its responsibilities to both local and international news, and to showcase Canadian talent to international audiences.

CBC/Radio-Canada's ability to transform itself successfully into a public media institution, with the distinct features we have highlighted, is somewhat compromised by its continuing reliance on advertising, which necessarily introduces a commercial imperative into its decision-making. As noted earlier, a public media institution should pursue a diversity of media content to reflect Canada's own makeup and not focus on programs that are driven by the need to attract advertising revenues. Moreover, its focus on advertising puts it directly on a collision course with private broadcasters and even print

media, as all pursue a dwindling pot of traditional advertising revenues and compete with giant foreign operators for the online business. Reducing CBC/Radio-Canada's reliance on this dwindling pot can provide some useful breathing space for the private broadcasters.

As CBC/Radio-Canada takes on greater distinctiveness, this is an appropriate time for it to disengage from its advertising activities, beginning with its news content and having as a goal the elimination of all advertising within five years. This path forward will have clear financial consequences that must be addressed as well.

In our view, enlarging the mandate of CBC/Radio-Canada to act as a Canadian public media institution would serve no useful purpose if it does not receive sufficient funding to play this role. Moreover, given the challenges it will invariably face, it is imperative that CBC/Radio-Canada has as much independence, stability, and predictability as possible in a rapidly changing environment. In these circumstances, the government should enter into long-term funding commitments with CBC/ Radio-Canada, for at least 5 years, ensuring it is adequate to meet the new mandate.

Recommendation 81: We recommend that the Broadcasting Act be amended to require the federal government to enter into funding commitments of at least 5 years with CBC/Radio-Canada, based on discussions with the Corporation on its funding needs, including those required to carry out its updated mandate and taking into account inflation and projected revenues from advertising and subscriptions. We further recommend that CBC/Radio-Canada gradually eliminate advertising on all platforms over the next five years, starting with news content.

3.7.3 Governance and Accountability

While subsection 46(5) of the *Broadcasting Act* provides it with freedom of expression and journalistic, creative, and programming independence, CBC/Radio-Canada, like other journalistic operations, carries out its activities under the general management and supervision of its president and is answerable to its Board of Directors. Unlike other private organizations, however, both CBC/Radio-Canada's president and board members are appointed by the GiC.

CBC/Radio-Canada is also subject to the oversight of a host of other government actors. First and foremost, it falls within the CRTC's jurisdiction and must therefore obtain licences for its various broadcasting services. It reports annually on all of its licences and must seek their renewal based on the term that has been granted for each. It must submit an annual report to the Minister of Canadian Heritage who tables it before each House of Parliament. It must also provide a corporate plan to the Minister of Canadian Heritage encompassing all its businesses and activities, including investments.

The new role envisioned for CBC/Radio-Canada will require as much independence, stability, and predictability as possible in a rapidly changing environment. Funding should be provided on a multiyear basis, with a view to increasing its autonomy and allowing it to pursue its statutorily mandated journalistic, creative, and programming independence. An additional element in securing its independence is ensuring that the appointments of the president and the board of directors, including its chair, are free from political interference.

The government has recently overhauled the appointments process for CBC/Radio-Canada. 181 To provide the Minister of Canadian Heritage with recommendations of qualified candidates for these appointments, it set up the Independent Advisory Committee for Appointments to the CBC/Radio-Canada Board of Directors, which is an independent and non-partisan body whose mandate is to conduct selection processes guided by published, merit-based criteria for GiC appointments to CBC/ Radio-Canada.

This approach has decreased the likelihood of partisan appointments, but does not have the force of law and could be abandoned at some point in the future. Given the expanded mandate recommended for CBC/Radio-Canada, it is of the utmost importance to safeguard its independence as much as possible and to enshrine in legislation the need for an open, transparent, and competency-based appointment process for GiC appointments of CBC/Radio-Canada's Chair, President and Board of Directors.

Given that CBC/Radio-Canada should have specific responsibilities to increasingly reflect the diversity of Canada, including its Indigenous Peoples and dual linguistic communities, the government should pay particular attention to ensure that its process continues to seek high-quality candidates that are a true reflection of the country.

Recommendation 82: We recommend that the Broadcasting Act be amended to enshrine an open, transparent, and competency-based appointment process for Governor in Council appointments of CBC/Radio-Canada's Chair, President, and Board of Directors. This amendment should also require that the appointments process ensure diversity, gender parity, and representation from Indigenous and minority groups.

While CBC/Radio-Canada should be granted as much independence as possible to carry out its mandate, it must nonetheless be fully accountable for the actions it takes and its uses of public funds. CBC/Radio-Canada currently accounts for some of its activities to the CRTC through its annual reporting on the terms and conditions of its licences as well as the renewal process. However, many of its activities, particularly its digital services, do not require licences.

The current approach is ill-suited for the rapidly changing landscape in which the Canadian public media institution will be operating. First, it is piecemeal regulation based on licences for specific radio

¹⁸¹ Department of Canadian Heritage, Independent Advisory Committee for Appointments to the CBC/Radio-Canada Board of Directors (2018) [accessed 1 December 2019].

and television broadcasting services, and one in which certain information is provided in different formats to different oversight bodies, and information on digital services is not generally made available. This makes conducting a comprehensive assessment of the extent to which CBC/Radio-Canada is meeting its mandate difficult.

The renewed framework for the BBC's operations can provide a blueprint for a more holistic approach. In 2017, Ofcom was appointed as the BBC's first external regulator under a revised Royal Charter for the BBC. This Charter sets out the mission of the BBC, stipulates the public purposes that the BBC must promote in all its public service activities, and provides broad guidelines in relation to the BBC's general duties and obligations such as public engagement, market impact, transparency, accountability, diversity, and technology.

The BBC is also governed by the terms of an agreement with the Secretary of State for Digital, Culture, Media and Sport. This agreement sets out a range of requirements, including the terms and conditions of the provision of public funds over a five-year period. The Agreement provides direction on the interpretation of the Public Purposes set out in the Charter. It also provides details on the powers to be exercised by Ofcom, including a general description of the operating framework that must be developed by Ofcom, and sets out the requirements for the BBC and Ofcom to establish performance measurements that the BBC must meet.

The operating framework contains the provisions that Ofcom considers appropriate to secure the effective regulation of the BBC's activities set out in the Charter and Agreement. It considers three aspects of the BBC: performance, compliance with content standards, and impact on competition in the United Kingdom.

We have recommended that legislation be amended to require the government to enter into long-term funding commitments with CBC/Radio-Canada, based on discussions with the Corporation on its funding needs, including the need to effectively carry out an updated mandate. Like the agreement between the BBC and the British government, these discussions should form the basis of an agreement between CBC and the Department of Canadian Heritage. It would stipulate the terms and conditions under which CBC/Radio-Canada receives stable multi-year funding; articulate the means by which CBC/Radio-Canada intends to attain the goals set out in the *Broadcasting Act*; and describe a mechanism for CBC/Radio-Canada and the CRTC to develop performance measurements for assessing CBC/ Radio-Canada's performance across all platforms, similar to the operating framework of the BBC.

Recommendation 83: We recommend that the Broadcasting Act be amended to shift the CRTC's role from licensing individual services of CBC/Radio-Canada to overseeing all its content-related activities. We further recommend that the CRTC report to the Minister of Canadian Heritage annually on the status of CBC/Radio-Canada's performance of its mandate.

RECOGNIZING THE URGENCY TO ACT

3.8.1 Requiring Internet Media Content Undertakings to Contribute

As reflected in Recommendations 56 and 61, we recommend that the CRTC regulate certain Internet media content undertakings and impose requirements for the support of Canadian content production and discoverability. There is an urgent need to proceed quickly to address the inequities in the audiovisual sector caused by the rise of unregulated programming services delivered over the Internet with no Canadian content obligations. We are aware of the time it would take to implement our recommendations. Pending the introduction of new legislation to address the matter, which may take a considerable time before it comes into force, the CRTC should use its existing powers to address the situation.

This concern has been raised by some parties who emphasized the urgency of the situation and called for immediate action, such as the revision of the DMEO, to mobilize new players to contribute in advance of a potential modification of the legislative framework.

As noted, the capacity of the traditional broadcasting sector to contribute to the production of Canadian content is declining. As more and more advertising dollars move to the Internet and BDU subscription revenues continue to decline, the support for high-quality Canadian production will be in peril. This situation is serious, and action should be taken even before the *Broadcasting Act* is amended. It is particularly important to address this situation regarding Canadian entertainment programming. It is the most expensive form of Canadian programming and the programming that involves the greatest risk. Accordingly, we strongly recommend that urgent action be taken to address the issue. Under the current *Broadcasting Act*, the CRTC can amend the existing DMEO to impose exemption conditions on certain classes of Internet programming services. However, using the exemption power in this way should not be the preferred approach to establish the basic conditions and rules for media content undertakings in the long term. Once the Act is amended, a registration system would be the best way to regulate these services.

However, given the urgency of the situation, and pending the introduction of new legislation, the CRTC should address the matter now by imposing exemption conditions on Internet programming undertakings. To accomplish this, the government can issue directions to the CRTC to use its existing powers to address the matter. This will ensure that in the nearer term, Canadian content requirements can be imposed on streaming services that provide programming to the public.

We have concluded that there is ample jurisdiction for the CRTC to act as proposed, without any amendments to the Act.

Recommendation 84: We recommend that while awaiting the adoption of legislative amendments, the government urgently issue directives to the CRTC, requiring that it hold a hearing and issue a new exemption order to impose obligations on Internet programming undertakings that generate a certain minimum revenue in Canada.

To this end, we propose the following wording:

DRAFT ORDER ISSUING DIRECTIONS TO THE CANADIAN RADIO-TELEVISION AND TELECOMMUNICATIONS COMMISSION RESPECTING EQUITABLE CONTRIBUTIONS IN RESPECT OF CANADIAN BROADCASTING SERVICES REVENUES

- 1. This Order may be cited as the *Direction to the CRTC (Equitable Contributions) Order*.
- 2. In this Order,

Canadian programming means programming that qualifies as Canadian under Public Notice CRTC 2000-42 as amended;

Canadian programming revenue means (a) revenue from Canadian subscribers for the provision of programming, provided that where the revenue is in respect of the provision of other goods or services as well as for subscription to the programming service, the CRTC may determine what proportion of the revenue relates to the provision of the programming service; and (b) revenue from advertisers or their agents in respect of advertising included in or with the programming service that was sent to Canadians.

CRTC means the Canadian Radio-television and Telecommunications Commission;

Internet programming undertakings means programming undertakings delivered or accessed over the Internet that do not primarily provide user-generated programs, and that had more than \$10 million in Canadian programming revenue during the previous year;

- 3. The CRTC is directed to amend the Exemption Order for Digital Media Broadcasting Undertakings, Appendix to Broadcasting Order CRTC 2012-409, by excluding Internet programming undertakings from section 2 of that Order.
- 4. The CRTC is directed to issue a new exemption order applicable to Internet programming undertakings that requires as a condition of exemption that:
 - (a) the undertaking makes a significant financial contribution to the production of Canadian programming derived from a percentage of its Canadian programming revenue;
 - (b) if the CRTC so determines, the undertaking supports the discoverability of the Canadian programming it provides;
 - (c) the undertaking takes such other steps as the CRTC may determine to support the production of Canadian programming; and

(d) the undertaking submits such information regarding the undertaking's activities as may be required by the CRTC.

3.8.2 Applying Sales Tax on Foreign Media Content Undertakings

Another area where the government can act immediately is on the issue of sales tax. Canadian online media content undertakings must collect GST/HST, whereas foreign ones do not have to. This puts Canadian companies at a disadvantage from a pricing perspective.

Almost all interested parties have stated that they are in favour of the application of the GST/HST on foreign media content undertakings that provide digital goods or services to Canadians. A growing number of foreign jurisdictions, including Australia and the countries of the European Union, require such a tax as soon as buyers are in their territory. Quebec and Saskatchewan also require foreign online suppliers to collect and remit provincial sales taxes when providing their services to Canadian consumers.

Our model of regulation and support for Canadian content is grounded in the concept of equity as a guiding principle. Consistent with this, the current inequitable application of rules with respect to GST/HST should not continue.

Recommendation 85: We recommend that the federal government require foreign media content undertakings to collect and remit the GST/HST.

4. IMPROVING THE RIGHTS OF CANADIANS AND ENHANCING TRUST IN THE DIGITAL ENVIRONMENT

4.1 INTRODUCTION

Communications technologies offer Canadians a wealth of opportunities to connect with ideas, opinions, content, news and information, people, cultures, services, and economic opportunities locally and around the world. Canadians increasingly live connected lives, as technologies enable more customized user experiences, more convenient product and service delivery, and unprecedented access to information and entertainment.

Canadians are generally eager adopters of communications technologies—from video streaming services, podcasts, content sharing services, and social media, to a multitude of applications on their devices; in their homes, in the form of smart technologies such as speakers and TVs, toys, appliances, and ultimately smart homes; and on their bodies, in the form of wearable devices. Users embrace these for their convenience in enabling them to do more—more communicating, more learning, more viewing and listening, more sharing, more socializing, more health monitoring, more shopping, and more relaxing. Artificial intelligence and cognitive computing are shaping and customizing the user experience to meet the user's unique circumstances. Everything is becoming connected and cognitized.

The technologies underlying this connected and cognitized world heavily rely on access to personal information to customize the user experience and compete for user attention. Technologies now considered essential to the day-to-day lives of Canadians are at risk of being used to manipulate and misinform people, undermine Canada's collective values and institutions, and threaten individual dignity and safety.¹⁸²

Further, behind many of the technologies Canadians have come to rely on are a number of relatively new, omnipresent global businesses that are able to capitalize on network effects and acquisitions to dominate markets. The relationship between these service providers and users is asymmetrical—individual users are nearly powerless. They cannot negotiate terms or conditions of service, and often do not have any practical alternatives to using these services.

Data has become a new form of currency. Users are giving away their personal and other information as a non-monetary form of remuneration for the use of these digital services. Through accumulation of this Big Data, service providers better understand their users and, from the value thereby created, can offer more customized experiences as well as more customized advertising, which has become a significant revenue stream. For the major digital services, "data is the central point of power." 183

The digital environment is now about "all the things that comprise our society - our democratic institutions, our health and wellness, education, access to information and media institutions, and dignity, to name a few." 184 Despite the opportunities, and Canadians' adoption of communications technologies, trust in the digital environment is low, and skepticism is growing about individuals' ability to control their personal information and influence how they are treated.

Without trust in the digital environment, the social and economic promises of communications technologies are in jeopardy.

In this chapter, we address questions relating to consumer rights, security, accessibility, and privacy. In doing so, we pay particular attention to giving voice to marginalized Canadians from diverse social locations. We make several recommendations for legislative change to improve the rights of Canadians and enhance trust in the digital environment.

We also explore broader developments and the social implications of technological transformation. These issues may extend well beyond the legislation we are tasked with reviewing and may not belong to a single area of law. We are guided in this task by several considerations:

- The primacy of human rights: Canadian communications law and policy must respect Canadians' human rights, meaning that Canadians "are all entitled to a life of equality, dignity and respect, to live free from discrimination and harassment." 185
- Balance: Any intervention must carefully balance individual and collective interests against other competing priorities. In this regard, "lack of regulation" itself should not be taken as "synonymous with being supportive of innovation." 186
- Strategic foresight: Policies and laws must be developed to enable innovation, while remaining flexible and adaptable. They must empower the appropriate institutions with the tools necessary to act when needed.
- Accountability: Service providers must be accountable to their users. Governments must be accountable to their citizens.

¹⁸³ Emily Laidlaw, Mapping Current and Emerging Models of Intermediary Liability (2019), p 50.

¹⁸⁴ Emily Laidlaw, Mapping Current and Emerging Models of Intermediary Liability (2019), p 10.

¹⁸⁵ Canadian Human Rights Commission, "About Human Rights" [accessed 1 December 2019].

¹⁸⁶ Emily Laidlaw, Mapping Current and Emerging Models of Intermediary Liability (2019), p 50.

4.2 ACHIEVING BARRIER-FREE ACCESS TO COMMUNICATIONS SERVICES

The question of universality of telecommunications services and recommended measures to enhance broadband deployment in Canada, are addressed in chapter 2. Our recommendations are driven by the view that Canadians should have affordable and barrier-free access to high-quality, safe, secure networks where they live and work. All Canadians must have access to broadband connectivity in order to foster the ability of everyone to meaningfully participate in all aspects of connected life and to promote freedom of expression.

In this section, we focus on measures for removing further barriers to connected life, namely affordability of telecommunications services for marginalized Canadians from diverse social locations, and accessibility of communications by Canadians with disabilities.

4.2.1 Ensuring Affordability of Telecommunications Services for Marginalized Canadians from Diverse Social Locations

The affordability of essential communications service can be a particular challenge for marginalized Canadians from diverse social locations, as determined by such intersecting factors as race, gender, income, citizenship status, disability, sexuality, or age. Even where connectivity is available, they may not be able to afford services, which in turn further marginalizes these individuals.

Affordability is generally thought of as a consumer's capacity to pay for a particular good or service. Further, "the proportion of disposable income allocated to that particular good or service tends to decline as income increases, while the share of income allocated to luxuries tends to grow with increasing income."187 For its part, the CRTC defines affordability as "the proportion of income that consumers have to spend in relation to a) broadband services prices, and b) household income levels." 188

Affordability is addressed in the current legislative and regulatory framework. Section 7(b) of the Telecommunications Act explicitly lists affordability as one of nine policy objectives: specifically, the rendering of "reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada." Subparagraph 1(a)(i) of the 2006 Telecommunications Policy Direction 189 instructs the CRTC to pursue these telecommunications policy objectives through the use of market forces to the maximum extent feasible. Subsection 1(a) of the

¹⁸⁷ Reza Rajabiun, David Ellis and Catherine Middleton, Literature Review: Affordability of Communications Services (March 2016), p 4.

¹⁸⁸ CRTC, CRTC Submission to the Government of Canada's Innovation Agenda (21 December 2016), p 9, Annex: Key challenges to broadband access in Canada.

¹⁸⁹ Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives, SOR/2006-355 (2006).

2019 Telecommunications Policy Direction 190 includes the promotion of competition and innovation, as well as affordability and consumer interests. It requires the CRTC to consider the extent to which its decisions "foster affordability and lower prices, particularly when telecommunications service providers exercise market power"; and "ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas."

Canada's Digital Charter: Trust in a digital world (the Digital Charter) also declares that "[a]ll Canadians will have equal opportunity to participate in the digital world and the necessary tools to do so, including access, connectivity, literacy and skills."191

The CRTC has generally maintained that competition is sufficient to protect the interests of telecommunications users and has largely forborne from regulating rates for retail telecommunications services. It has, however, implemented some targeted measures to address affordability. For example, in the 2018 low-cost data decision, the CRTC directed the national wireless carriers to collectively file proposals for national lower-cost data-only mobile wireless service plans. 192

In broadcasting, the CRTC has required broadcasting distribution undertakings to offer an affordable basic TV package priced at no more than \$25 per month. 193 This requirement is particularly important since over-the-air television—historically a free and widely available alternative to cable, satellite, and Internet Protocol television subscriptions—has declined to approximately 7 per cent of viewership. 194

The federal government has implemented a number of related programs focused on ensuring that more Canadian families and youth have access to resources available through the Internet. These programs include Computers for Schools¹⁹⁵ and Computers for Success Canada¹⁹⁶, as well as the industry-led Connecting Families¹⁹⁷ program. Several large service providers have also voluntarily offered, on a limited basis, programs that offer low-income families the opportunity to purchase lowcost Internet plans.

Despite rapid growth in the availability of broadband, Canadians still experience a digital divide. There remains a considerable gap between those who have access to broadband Internet and can fully participate in society, and those from diverse social locations who have no or inadequate access and, as a result, find themselves excluded and further marginalized from full participation in society. The

¹⁹⁰ Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interest and Innovation, SOR/2019-227 (2019).

¹⁹¹ ISED, Canada's Digital Charter: Trust in a Digital World (2019).

¹⁹² Telecom Decision CRTC 2018-475, Lower-cost data-only plans for mobile wireless services (17 December 2018).

¹⁹³ Broadcasting Regulatory Policy CRTC 2015-96, Let's Talk TV: A World of Choice - A roadmap to maximize choice for TV viewers and to foster a healthy, dynamic TV market (19 March 2015), para 21.

¹⁹⁴ CRTC, Communications Monitoring Report (2018).

¹⁹⁵ ISED, Computers for Schools [accessed 1 December 2019].

¹⁹⁶ Government of Canada, Computers for Success Canada (2019).

¹⁹⁷ ISED, Connecting Families [accessed 1 December 2019].

divide is particularly pronounced between urban and rural or remote residents, and between lowand high-income households. Low-income and marginalized people disproportionally cannot afford Internet access.¹⁹⁸ These people are deprived of access to services that have become essential for daily lives and for social and economic participation.

The digital divide particularly impacts Indigenous Peoples and communities. Affordability and access of telecommunications for Indigenous Peoples and communities require particular consideration, taking into account circumstances experienced by Indigenous Peoples that can be attributed to historic colonialism and gaps between Indigenous and non-Indigenous communities today.

The opportunity costs of going without essential communications services are very high, at both an individual and societal level. To achieve a fully inclusive society, all Canadians, including those marginalized Canadians from diverse social locations, and Indigenous Peoples, should have connectivity that meets their needs.

Several recommendations in this Report focus on ensuring affordability, and several measures are currently in place to enhance affordability for marginalized Canadians from diverse social locations. A more systematic approach is required. Legislative amendments requiring ongoing examination of affordability and empowering the CRTC to take action, if necessary, will improve connectivity for these Canadians.

Recommendation 86: We recommend that the *Telecommunications Act* be amended to require the CRTC to study the affordability of telecommunications services periodically and, if necessary, to implement measures to improve affordability for marginalized Canadians from diverse social locations.

4.2.2 Improving Accessibility of Communications Services for All Canadians

It is essential that communications services be fully accessible and inclusive for all Canadians. A number of legislative and regulatory provisions have been put in place to address accessibility.

Canadian communications legislation currently recognizes the importance of accessibility but varies in how it does so. Section 7 of *Telecommunications Act* includes two related policy objectives: the rendering of "reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada," at section 7(b) and responding "to the economic and social requirements of users of telecommunications services," at section 7(h). Paragraph 3(1)(p) of the Broadcasting Act includes as a policy objective that "programming accessible by disabled persons should be provided within the Canadian broadcasting system as resources become available for the purpose."

¹⁹⁸ CIRA, Gap Between Us: Perspectives Building a Better Online Canada (2019).

Under subsection 5(1.1) of the *Radiocommunication Act*, in exercising the powers conferred under that Act, the Minister of Industry "may have regard" to the Canadian telecommunications policy objectives as well. While the 2006 Telecommunications Policy Direction does not include any reference to accessibility, the 2019 Policy Direction requires the CRTC to consider the extent to which its decisions "enhance and protect the rights of consumers in their relationships with telecommunications service providers, including rights related to accessibility."

The CRTC has recognized that reliable broadband access improves the daily lives of people with disabilities through greater access to Internet-based applications that facilitate communication, work, and the accessibility of goods and services. 199

The CRTC has also imposed certain requirements on telecommunications service providers and broadcasting distribution undertakings to improve the accessibility of the information and services they offer.²⁰⁰ These include providing handsets to serve the needs of Canadians who are blind or partially sighted and directing television broadcasters to improve the quality of closed captioning for people who are Deaf or Hard of Hearing. To improve access to, and the quality of, the experience for people who are blind or partially sighted, the CRTC requires programming undertakings to increase the availability of described video. This assists Canadians who are blind or partially sighted to better understand what is occurring on the screen. The Broadcasting Distribution Regulations also require broadcasting distribution undertakings to make accessible set-top boxes and remote controls available to subscribers with motor skills disabilities.²⁰¹

To further address the gap in telecommunications services for Canadians who are Deaf or Hard of Hearing, the CRTC has mandated the support of video relay services. These enable telephone calls using sign language through an interpreting operator.²⁰² In 2018, the CRTC updated the regulatory framework for message relay services (MRS) to ensure that Canadians who are Deaf, deafened, Hard of Hearing, or speech-impaired would continue to be able to make and receive telephone calls.

The CRTC requires most broadcasters to caption all programs over the broadcast day. For persons who are Deaf or Hard of Hearing, closed captioning provides a critical link to the news and other programming. In addition, closed captioning can also improve comprehension and fluency of literacy skills of children and adults.²⁰³

¹⁹⁹ Telecom Regulatory Policy CRTC 2016-496, Modern telecommunications services – The path forward for Canada's digital economy (21 December 2016).

²⁰⁰ Broadcasting and Telecom Regulatory Policy CRTC 2009-430, Accessibility of telecommunications and broadcasting services (21 July 2009), as amended by Broadcasting and Telecom Regulatory Policy CRTC 2009-430-1, Accessibility of telecommunications and broadcasting services - Correction (17 December 2009).

²⁰¹ Broadcasting Distribution Regulations (SOR/97-555).

²⁰² Telecom Regulatory Policy CRTC 2014-187, Video relay service (22 April 2014).

²⁰³ Broadcasting Public Notice CRTC 2007-54, A new policy with respect to closed captioning (17 May 2007); See also, CRTC, "TV Access for People who are Deaf or Hard of Hearing: Closed Captioning," [accessed 1 December 2019].

Since April 2018, the CRTC has required all wireless service providers to participate in the National Public Alerting System (NPAS). Wireless public emergency alerts are distributed via a text message alert on LTE networks. While alternate formats of the alerts may be issued for Canadians who are blind or partially sighted, Deaf, or Hard of Hearing, not every alerting authority or device has the capability to produce or receive these formats.

Telecommunications service providers are currently updating their networks to prepare for nextgeneration 9-1-1 (NG9-1-1) on voice and text messaging services. The NG9-1-1 measures will enhance accessibility by allowing users to video stream emergencies, send photos of accident damage, and send personal medical information. Text with 9-1-1 will also be made available to the general public, a service that is already available to Canadians who are Deaf, Hard of Hearing, or speech-impaired.²⁰⁴

The Accessible Canada Act (ACA), which became law in June, 2019 introduced new general and sector-specific requirements applicable to matters under federal authority, including broadcasting and telecommunications services. Specific measures in the communications sector include requiring those undertakings to prepare and publish accessibility plans covering various matters, in accordance with regulations set by the CRTC. The ACA also imposes a duty on the regulated entities to consult persons with disabilities in the preparation of these plans.

In addition, the ACA includes consequential amendments to the Telecommunications Act and the Broadcasting Act to authorize the CRTC to administer and enforce the ACA, while giving the CRTC the power to exempt, on a time-limited basis, any regulated entity or class of regulated entities from the application of the key requirements. It further amends section 13 of the CRTC Act to require annual reports on activities (inquiries, inspections, and orders) conducted under each of the Broadcasting Act and the *Telecommunications Act* to identify, prevent, and remove barriers, as defined in the ACA. These must include observations about whether the activities in respect of the ACA disclosed, "any systemic or emerging issues related to the identification and removal of barriers, and the prevention of new barriers."

Additionally, in August 2019, the organizations responsible for enforcing the ACA, including the CRTC, announced the establishment of the Council of Federal Accessibility Agencies to take "steps to engage stakeholders, including persons with lived experience, to ensure that the voices of persons with disabilities inform the Council's work."205

A variety of measures are in place in comparator jurisdictions to ensure that people with disabilities can access broadcasting and telecommunications services. In broadcasting, these include closed captioning, video description, and emergency broadcasts. In telecommunications, accessibility measures include

²⁰⁴ Telecom Regulatory Policy CRTC 2019-66, Next-generation 9-1-1 network design efficiencies (7 March 2019).

²⁰⁵ Canadian Human Rights Commission, On the path towards a more accessible Canada with the creation of the Council of Federal Accessibility Agencies (14 August 2019).

access to relay services, emergency services, and accessible devices. Legislation in the United Kingdom includes provisions to ensure that people with disabilities are able to access and manage bills and payments, while the FCC in the United States offers a clearinghouse with information on accessible equipment and services.

In addition to specific accessibility measures, some jurisdictions have embedded accessibility expertise within their communications regulator, to proactively provide advice on accessibility-related issues in regulatory policies. For example, the FCC includes a Disability Rights Office that provides expert advice and assistance.²⁰⁶ Similarly, in Canada, the Canadian Transportation Agency (CTA) established an Accessibility Advisory Committee composed of "representatives from the community of persons with disabilities, the transportation industry and other interested parties." It consults regularly on accessibility issues and helps the CTA "develop regulations, Codes of Practice and industry guidelines on accessibility."207 The CTA also funds expenses related to participation in the Accessibility Advisory Committee for the representatives of a wide range of accessibility groups and stakeholders. This participation is intended to foster greater information sharing, enable the industry and the CRTC to obtain a first-hand understanding of accessibility needs, and work directly on removing barriers for Canadians with disabilities.

The ACA is an important step in creating a barrier-free Canada. While a number of measures to enhance the accessibility of communications services are in place today, several barriers continue to exist. Given the importance of communications services in the daily lives of Canadians, Canada's communications sector legislation must entrench and promote accessibility of communications services above and beyond the ACA.

Recommendation 87: We recommend that the objectives of the Telecommunications Act and the Broadcasting Act be amended to include accessibility of services covered by the respective Acts by persons with disabilities to recognize the importance of barrier-free access to communications services, and entrench accessibility above and beyond the Accessible Canada Act.

Recommendation 88: We recommend that the CRTC Act be amended to require the CRTC to create and fund participation in an Accessibility Advisory Committee to meet, at a minimum, on an annual basis, and to publish reports on these meetings. We further recommend that a delegate of the Accessibility Advisory Committee be an ex officio member of the Public Interest Committee recommended in Recommendation 15 of this Report.

²⁰⁶ Federal Communications Commission, Disability Rights Office [accessed 1 December 2019].

²⁰⁷ Canadian Transportation Agency, Accessibility Advisory Committee [accessed 1 December 2019].

4.2.3 Fostering Digital and Media Literacy

Digital and media literacy refers to the ability to access, analyze, evaluate, and create content in a variety of forms.²⁰⁸ It can empower Canadians to better understand the digital environment, and equip them with skills to contribute to a competitive and innovative society and economy. Digital and media literacy is also an important means by which users may understand their rights and become aware of the risks associated with online activities and understand how technologies can be used and misused to misinform and manipulate them.

None of the communications statutes currently address digital and media literacy directly. Section 7 of the Telecommunications Act includes as a policy objective to "respond to the economic and social requirements of users of telecommunications services". This provision may be invoked as a legislative basis to promote digital literacy. Among its objectives, the *Broadcasting Act* recognizes that educational programming "is an integral part of the Canadian broadcasting system." The Digital Charter states that "[a]ll Canadians will have equal opportunity to participate in the digital world and the necessary tools to do so, including access, connectivity, literacy and skills."209

In its review of basic telecommunications services in 2016, the CRTC observed that "a gap in digital literacy skills is a factor that can contribute to limiting consumers' ability to participate in the digital economy and society, and that closing this gap would maximize the potential benefits for Canadians." It concluded, however, that "responsibility for the issue of digital literacy is not within the Commission's core mandate," and that "[m]ultiple stakeholders are involved in the digital literacy domain, and additional coordination among these stakeholders is necessary to address this gap."210

There have been several studies of digital literacy, a number of federal, provincial, and non-governmental programs, and numerous calls for action. Most recently, in its report "Democracy under Threat: Risks and Solutions in the Era of Disinformation and Data Monopoly", the Standing Committee on Access to Information, Privacy and Ethics (ETHI) recommended an increase in investment in digital literacy initiatives.²¹¹ Of particular note, over the last 25 years, MediaSmarts, a national, bilingual, not-forprofit organization has conducted research and created learning tools to help Canadian children and youth develop the critical thinking and digital literacy skills needed to participate fully in the digital society and economy. MediaSmarts works with a wide range of partners nationally and its digital literacy programs have been used in thousands of Canadian schools.²¹²

²⁰⁸ Patricia Aufderheide, Media Literacy. A Report of the National Leadership Conference on Media Literacy (1993), p 6.

²⁰⁹ ISED, Canada's Digital Charter: Trust in a digital world (2019).

²¹⁰ Telecom Regulatory Policy CRTC 2016-496, Modern telecommunications services – The path forward for Canada's digital economy (21 December 2016), para 245.

²¹¹ Standing Committee on Access to Information, Privacy and Ethics, Democracy under threat: risks and solutions in the era of disinformation and data monopoly (December 2018), recommendation 17.

²¹² MediaSmarts, Annual Report 2018 (2018).

Notwithstanding this important work, Canada lacks a coherent, national coordinated plan on digital literacy. Moreover, a concerted approach with provincial and territorial authorities is needed.

In contrast, in the financial sector, the federal government has made financial literacy a priority, including convening a task force in 2009,213 and creating a regulatory agency — the Financial Consumer Agency of Canada (FCAC). FCAC's mandate has expanded over time to include a broad range of financial consumer protection measures, oversight of federally regulated financial entities, financial consumer education, and researching and observing trends. Leading much of this is the Financial Literacy Leader, who spearheaded the development of the National Strategy for Financial Literacy. The federal government has also worked with the provinces and territories to coordinate efforts in this area.

Several comparator jurisdictions have recognized the importance of digital and media literacy in the communications sector, although there is no consistent approach. For example, the United Kingdom's Communications Act 2003 imposes an explicit duty on Ofcom to promote media literacy and to conduct research on the state of media literacy in the United Kingdom. The EU Audiovisual Media Services Directive directs media service providers to promote media literacy development, enable citizens to use technologies effectively, and to critically assess media content, respectively.²¹⁴ In France, the Conseil supérieur de l'audiovisuel's "Clés de l'audiovisuel" website²¹⁵ provides extensive information for consumers about the audiovisual media environment in France and the Commission nationale de l'informatique et des libertés (CNIL) provides advice on managing and protecting personal data online.²¹⁶ The Australian eSafety Commission provides extensive advice for citizens on issues related to safe use of online media²¹⁷ on its website. The FCC also provides information about access, use and consumer protection related to various broadcasting services.²¹⁸

In a connected media universe in which people risk being individually exposed to detrimental content or practices, efforts need to be made in Canada to improve digital and media literacy.

²¹³ Department of Finance, Minister of Finance Launches Task Force on Financial Literacy (26 June 2009), Department of Finance, Report of Recommendations on Financial Literacy, Canadians and Their Money Building a brighter financial future (December 2010).

²¹⁴ European Union, Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities.

²¹⁵ Conseil supérieur de l'audiovisuel, Clés de l'audiovisuel [accessed 1 December 2019].

²¹⁶ Catherine Middleton, Consumer protection measures for telecommunications and broadcasting services in foreign jurisdictions (May 2019), p 24.

²¹⁷ Australian Government, eSafety Commissioner [accessed 1 December 2019]; Catherine Middleton, Consumer protection measures for telecommunications and broadcasting services in foreign jurisdictions (May 2019), p 24.

²¹⁸ Federal Communications Commission, Broadcast, Cable and Satellite [accessed 1 December 2019]; Catherine Middleton, Consumer protection measures for telecommunications and broadcasting services in foreign jurisdictions (May 2019), p 24.

Recommendation 89: We recommend that the federal government, together with provincial and territorial authorities, develop a national digital literacy strategy to empower users of communications and digital services to make informed choices and conduct their online activities safely. We further recommend that the Telecommunications Act and Broadcasting Act be amended to grant the CRTC authority to examine and report on digital and media literacy.

4.3 ADDRESSING THE IMPACT OF DATA **COLLECTION AND USE**

As we noted in section 4.1, Canadians should have — but currently do not have — a high level of trust in the digital environment. Without trust, there is a danger that users may seek ways to disconnect, or may demand strict rules that could stifle innovation or undermine other collective values, such as free speech.

Trust can only be built if Canadians have confidence that service providers respect human dignity and the other principles of a free and democratic society. These principles include the protection of users' privacy, which implies the lawful use of their personal information. Service providers must also be accountable for how their services may be misused by others to misinform, manipulate, and otherwise harm users.

This section examines issues related to individual privacy and the collective interest in understanding and ensuring greater accountability by social media platforms for the value created by the collection and use of data. Section 4.4 looks specifically at social harms created by misinformation and manipulation of information; illegal content is examined in section 4.5.

4.3.1 Individual Data: Protecting Privacy

One of the key areas undermining trust in the digital environment relates to the privacy of individuals' data.

There is growing apprehension about how personal information is collected, used and shared. Personal information constitutes a new form of currency. More remains to be done to implement a regulatory framework capable of responding to these concerns.

Communications technologies that organize data and information using algorithmic processes and processes based on artificial intelligence open up a universe of commercial, scientific, and social opportunities through the comprehensive profiling of individuals and groups. However, with vast amounts of data being collected on individuals through all facets of their lives, the risks of undermining the privacy of personal information are growing; for example, through over-collection, misuse, and intentionally or accidentally sharing personal information on an individual and collective basis in ways that threaten individual autonomy, choice, security, and respect.

The current legislative regime in Canada with respect to the protection of privacy currently consists of federal statutes — the Privacy Act and the Personal Information Protection and Electronic Documents Act (PIPEDA) — provincial privacy frameworks and sector-specific rules. With respect to the latter, section 7 of the *Telecommunications Act* contains a policy objective to "contribute to the protection of the privacy of persons." As part of implementing this objective, the CRTC has imposed a number of provisions to protect the confidentiality of telecommunications customer information and has determined that it may impose different standards than those in PIPEDA, given the CRTC's different jurisdiction.²¹⁹ There is no explicit reference to privacy in the *Broadcasting Act*. The Digital Charter seeks to build a foundation of trust and includes several principles focused on privacy and data.

The federal government must do more to ensure the protection of Canadians' personal privacy and collective interests. Canada's privacy regime is no longer suited to the present-day environment and does not adequately address the potential risks posed by communications technologies. For example, current approaches are centred almost exclusively on the individual character of information and data, ignoring the power imbalance between individuals and digital service providers. It is important to develop the tools to protect the collective interest of society when platform providers make use of personal data.

The Office of the Privacy Commissioner (OPC), which oversees PIPEDA, has testified before the Senate Standing Committee on Transport and Communications that (TRCM) "the evolution of telecommunication technologies holds serious implications for privacy protection."220 In response to our Call for Comments, the OPC submitted that Canadians do not understand how or why their personal data is being collected, and that it is unclear whether Canadians are able to give meaningful consent regarding the use of their personal data. In terms of collection, the OPC noted that personal data gathered by telecommunications service providers is particularly sensitive and care should be taken by these providers when gathering data.

It is important to note that the European Union's General Data Protection Regulation (GDPR) has in effect become a global standard with respect to the privacy of individual data. The GDPR regulates the processing by an individual, a company, or an organization of personal data relating to individuals in the EU. It harmonizes national data privacy laws and does not permit data to be transferred to a non-EU country unless that jurisdiction has an adequate level of data protection. There has not yet been an adequacy assessment of PIPEDA under the GDPR, although the EU did recognize PIPEDA in 2001 as providing adequate protection according to the EU Data Protection Directive. ETHI last reviewed

²¹⁹ Telecom Decision CRTC 2003-33, Confidentiality provisions of Canadian carriers (30 May 2003), para 23-27.

²²⁰ Privacy Commissioner Daniel Therrien's appearance before the Senate Standing Committee on Transport and Communications (TRCM) on the Study on Modernizing Canada's Communications Legislation (16 October 2019), para 3.

PIPEDA, as required every five years, in 2017-2018, and made a number of recommendations regarding achieving adequacy under GDPR, while respecting Canadian circumstances.²²¹

Given the importance of personal information in how communications services operate, Canadian communications statutes should contain a broad, unified, cross-sector policy commitment to privacy and confidentiality of communications services, over and above the provisions of PIPEDA as the law of general application. Canada should also take steps to address adequacy with respect to global privacy standards.

Recommendation 90: We recommend that the objectives of the Telecommunications Act and the Broadcasting Act be amended to include a commitment to protecting the privacy and confidentiality of user information with respect to communications services covered by the respective Acts.

Recommendation 91: We recommend that the Personal Information Protection and Electronic Documents Act be adapted as appropriate to ensure adequacy with emerging global standards, except for any standards that may be inconsistent with Canadians' fundamental right to freedom of expression.

4.3.2 The Collective Interest in Monitoring and Regulating Big Data

A small number of increasingly essential, and increasingly dominant, online platform providers base their business model on the capacity to collect and analyze Big Data to serve their corporate interests. These data are collected not only from individuals, but also from everything that is connected to the network. Doing so allows them to better understand consumer behaviour and target users with customized offerings to increase revenue directly through product and service sales, and indirectly through advertising sales. This business model has generated tremendous commercial value through the use of Big Data to monetize the attention of audiences to advertisers.

National and international institutions have identified Internet platforms' characteristics in an attempt to document their efforts and deploy an appropriate regulatory framework consequently. A study by Vincent Gautrais and Nicolas Vermeys,²²² which we commissioned, cites the European Commission's study on the important characteristics of the online platforms that national and international institutions have sought to identify in their efforts to build a regulatory framework. These characteristics make it

²²¹ Standing Committee on Access to Information, Privacy and Ethics, Towards Privacy by Design: Review of the Personal Information Protection and Electronic Documents Act (February 2018).

²²² Vincent Gautrais and Nicolas Vermeys, Revue de littérature en matière de régulation des plateformes numériques, étude réalisée pour le groupe d'experts sur la révision des lois sur les communications (2019), p 6.

possible to create and shape new markets, call into question traditional markets, organize new forms of participation, or conduct an activity based on the collection, processing, and formatting of large volumes of data. Further, they operate on two-sided or many-sided markets, with a varying degree of control over the interactions of user groups. They also benefit from network effects through which the value of services increases in proportion to the number of users.

These platforms usually deploy technologies to enable them to instantly and easily reach their users. They play an essential role in the creation of value in the digital environment, especially due to their capacity to accumulate data. They are thus able to initiate new business projects, and generate new strategic dependencies among other players.

Based on these characteristics, the European Commission distinguished the following types of platforms: (i) markets and platforms for online commerce: (ii) mobile ecosystems and application distribution platforms; (iii) Internet search services; (iv) social media and content platforms, and (v) online advertising platforms.

The characteristics of these platforms facilitate immediate connection to products and services, including cultural content, by using data processing, artificial intelligence or algorithms to profile customers, customize offerings, and leverage network effects to build and maintain positions of dominance in numerous markets.

There is no question that Big Data processing and algorithmic processes based on artificial intelligence and other emerging technologies, present numerous commercial, scientific, and social benefits, and are critical to competition and innovation. Big Data and the significant growth in data monetization have, however, also raised ethical considerations regarding collective societal values as well as the ownership and authority to use the data gathered from users.

The processes involved present numerous threats to individual safety and autonomy, and collective societal values to the extent that the platform providers are shielded from transparency and accountability by commercial secrecy. The control over data and technology exercised by many of these businesses also allows for a level of surveillance that was unimaginable even twenty years ago. Certain undesirable consequences arising from the often-unanticipated effects of Big Data or algorithms can also result in discriminatory exclusion or in abusive practices or manipulation.

The main users of Big Data today differ greatly from the technical intermediaries targeted by legislation adopted towards the end of the 20th century. Today, platform providers have few accountability obligations and domestic authorities have not developed a coordinated plan on a global basis to address this situation. It is critically important to develop mechanisms to ensure the transparency and accountability of those using the collective resource that is Big Data in order to achieve the goals of trust, fairness, and respect for fundamental rights.

In considering the implications of the use of Big Data, we have been seized by the critical and urgent significance of issues in this domain, including those impacting competition, consumer protection, privacy, public safety, and taxation. They transcend the scope of the particular statues that we have been tasked with reviewing and in fact go beyond the mandate of any single regulatory body. Addressing the implications of the use of Big Data requires a multi-dimensional, holistic approach to develop effective and comprehensive legislative and regulatory frameworks. This is an urgent task that should be acted on promptly and with the involvement of all the relevant authorities, including at a minimum, Statistics Canada, the CRTC, the OPC, and the Competition Bureau.

Recommendation 92: We recommend that Statistics Canada, the CRTC, the Competition Bureau, the Office of the Privacy Commissioner and other relevant regulatory authorities be charged by the federal government with examining the use of Big Data by dominant online platform providers and potential threats to privacy, competition, consumer protection, cultural sovereignty, democratic institutions, and taxation, and make recommendations on legislation that may be appropriate to address these matters.

Recommendations earlier in this Report would bring online platform providers under the jurisdiction of the CRTC to the extent that they are involved in the distribution or sharing of media content, including alphanumeric news. In making these recommendations, we are aware that over time the lines between news and other information may blur and become difficult to draw. Understanding and acting on the interaction between Big Data and media content will require the CRTC to have appropriate powers to intervene with respect to the Big Data practices of the providers under its jurisdiction.

Recommendation 93: We recommend that the Ministers of Canadian Heritage and of Industry direct the CRTC to gather information, audit, and intervene, if necessary, with regard to how services covered by the Broadcasting Act and the Telecommunications Act combine algorithms and artificial intelligence with Big Data, in order to respond quickly to changes in the communications services, improve transparency, and promote trust.

4.4 ADDRESSING SOCIAL HARMS IN THE DIGITAL ENVIRONMENT

While personal information is used innovatively to understand customer behaviour and, with this understanding, to market and expand the range of service and product offerings, technologies can also be used to undermine individual and collective rights and freedoms, by enabling unlawful discrimination and surveillance. They can also be used to undermine democratic values, by manipulating and misinforming users, and playing on fears and biases.

As a recent report from the Brookings Institution observed, "The advertising revenue that fuels the attention economy leads companies to create new ways to keep users scrolling, viewing, clicking, posting, and commenting for as long as possible. Algorithms designed to accomplish this often end up displaying content curated to entertain, shock, and anger each individual user. The ways in which online platforms are currently engineered have thus come under fire for exacerbating polarization, radicalizing users, and rewarding engagement with disinformation and extremist content."223

Furthermore, the diffuse and rapid dissemination of content online is enabling the distribution of false or misleading information to misinform and manipulate users. Communications technologies are used to share or to facilitate the sharing (with or without knowledge or intent) of misinformation, including fake news, fake voices such as bots, fake images, or deepfakes, as well as to distort information and to amplify misinformation.

Algorithms are one of the key tools that enable misinformation and manipulation, causing direct and indirect social harms when used for delivering news and information to the public. Direct social harm occurs when algorithms are used both to censor online content—by removing content or unlinking content matched to user search terms—and to spread disinformation campaigns through online platforms. More significant indirect social harms take place when algorithms are used for gatekeeping information or content.

In Canada, codes and standards of conduct have been developed in some areas to detect and suppress misinformation and manipulation. With respect to the accuracy of news, a patchwork of voluntary and mandatory codes currently applies to news delivered through different media. Print and other news outlets are subject to voluntary self-regulation through the National NewsMedia Council of Canada (for English-language media) and the Quebec Press Council. In contrast, accuracy of news in the broadcasting environment is regulated by statute: paragraph 3(1)(g) and 3(1)(h) of the Broadcasting Act require that the "the programming originated by broadcasting undertakings should be of high standard" and that "all persons who are licensed to carry on broadcasting undertakings have a responsibility for the programs they broadcast."

²²³ Clara Hendrickson and William A Galston, Big tech threats: Making sense of the backlash against online platforms (Brookings Institution, 28 May 2019), para 3.

To implement this statutory requirement, the CRTC relies on industry-developed codes and standards. It set out Guidelines for Developing Industry-Administered Standards²²⁴ and has called on the industry to develop codes and standards to address particular issues. Once the CRTC reviews and approves an industry-developed standard, it may if appropriate, require broadcasters to comply with it. Many of the standards that apply to private broadcasters are enforced by the Canadian Broadcast Standards Council (CBSC), which is funded by the Canadian Association of Broadcasters. In the case of the CBC/Radio-Canada, complaints are handled by the CBC/Radio-Canada Ombudsman. In both cases, a complaint can be filed directly with the CRTC if the CBSC or CBC/Radio-Canada Ombudsman has not resolved the issue to the complainant's satisfaction.

Accuracy of information, as a broader concept, is not regulated in Canada, except for narrow aspects covered by the laws of general application. For example, the Competition Act regulates misleading advertising. The Criminal Code provision on spreading false news has been declared unconstitutional by the Supreme Court of Canada, on the basis of restricting the freedom of expression and violating section 2 of the Canadian Charter of Rights and Freedoms.²²⁵

Canada, like many other countries, has recently implemented a series of initiatives to help address issues pertaining to online disinformation, outside of the regulatory framework. These include the National Strategy on Countering Radicalization to Violence, the 2019 Digital Charter and the Digital Citizen Initiative — all efforts designed to address the impacts of online disinformation and other online harms in Canada.

Countries around the world are grappling with and developing initiatives related to the detrimental impacts of misinformation and manipulation. The London School of Economics Truth, Trust and Technology Commission has recommended a suite of measures including an increased transparency of platforms' policies and a new Independent Platform Agency.²²⁶ In the United Kingdom, there are currently two proposals for a statutory duty of care regime for social media companies: the first focuses on the protection of young people, while the second is much broader and would "apply to companies that allow users to share or discover user-generated content or interact with each other online."227 The latter is also coupled with a proposal for a new independent regulator to monitor and ensure compliance, whose initial "focus will be on those companies that pose the biggest and clearest risk of harm to users, either because of the scale of the platforms or because of known issues with serious harms."228

²²⁴ Public Notice CRTC 1988-13, Guidelines for Developing Industry-Administered Standards (29 January 1988).

²²⁵ R v Zundel [1992] 2 SCR 731.

²²⁶ LSE Commission on Truth Trust and Technology, Tackling the Information Crisis: A Policy Framework for Media System Resilience (2018), p 36.

²²⁷ United Kingdom, Science and Technology Committee, Impact of social media and screen-use on young people's health (31

²²⁸ United Kingdom, Department for Digital, Culture, Media & Sports and Home Office, Online Harms White Paper (26 June 2019), para 31.

There have also been recent efforts at coordination on an international basis. In response to the March 15, 2019, terrorist attacks in New Zealand, the governments of New Zealand and France adopted the Christchurch Call, a commitment between governments and tech companies to eliminate terrorist and violent content online.²²⁹ The call has been supported by a number of countries, including Canada.

In Canada, ETHI issued a report, "Democracy under Threat: Risks and Solutions in the Era of Disinformation and Data Monopoly."230 ETHI was also part of the International Grand Committee on Big Data, Privacy and Democracy, composed of Parliamentarians and representatives from ten other countries, which held hearings in the United Kingdom and Canada. The International Grand Committee called for a commitment to foster fair market competition, increase the accountability of social media platforms, protect privacy rights and personal data, and maintain and strengthen democracy.231

The ease with which harmful content and conduct can be shared and amplified using digital intermediaries, to the detriment to individual safety and collective societal norms, is challenging regulators and legislators around the world. (Digital intermediaries, often referred to as online social platforms, are a broad category of actors that use technology to enable or mediate relationships between users/buyers and producers/sellers.)²³² Introducing measures in this area must be done thoughtfully. It is critically important to make a clear distinction between measures to reduce misinformation and those that suppress speech. Great care must be taken to avoid limiting freedom of expression or the right to privacy, and to prevent against enabling corporate or state surveillance or censorship.

In an increasingly connected society, an appropriate balance should be struck between maintaining a free and open space for the exchange of ideas and information, respecting and protecting individual and collective rights and freedoms, and not further marginalizing Canadians from diverse social locations. At the core of the challenges posed by harmful content is the question of the rights and responsibilities of digital intermediaries for the accuracy or appropriateness of information that is distributed on or shared via their platforms, and any related social harms that may be caused. Any intervention must be balanced against human rights and, particularly the freedom of expression. A multi-pronged approach is needed to address existing and emerging social harms stemming from the dissemination and intensification of harmful content. It should also strike a balance between individual freedoms, the freedom of the Internet, and the growing power of online platform providers.

²²⁹ New Zealand, Ministry of Foreign Affairs and Trade, Christchurch Call to eliminate terrorist & violent content online (2019) [accessed 1 December 2019].

²³⁰ Standing Committee on Access to Information, Privacy and Ethics, Democracy under threat: risks and solutions in the era of disinformation and data monopoly (December 2018)

²³¹ House of Commons, News Release: Standing Committee on Access to Information, Privacy and Ethics Publishes a Report on the International Grand Committee on Big Data (18 June 2019), para 3.

²³² Emily Laidlaw, Mapping Current and Emerging Models of Intermediary Liability (2019), p 6–8.

Digital intermediaries are playing a central role in the lives of Canadians and giving rise to a number of complex issues that are outside the scope of our mandate. It is clear that new legislation is required to help clarify online social platform providers' liability for harmful content and conduct. The development of legislation dealing with these issues requires a close examination of the legal issues raised by online platforms broadly, in particular those related to privacy as well as competition and intellectual property laws. Above all else, such legislation must be enacted in conjunction with other countries that share common democratic values with Canada.

Recommendation 94: We recommend that the federal government introduce legislation with respect to liability of digital providers for harmful content and conduct using digital technologies, separate and apart from any responsibilities that may be imposed by communications legislation. Given that the challenges in this area are global in nature, we also encourage the federal government to continue to participate actively in international fora and activities to develop international cooperative regulatory practices on harmful content.

ILLEGAL CONTENT AND CONDUCT

Illegal content and conduct are related to, but distinct from, harmful content and conduct. They include behaviours that violate a wide range of laws, including child exploitation and abuse, terrorist content and activity, hate crimes, incitement of violence, sale of illegal products or services, cyber violence, harassment and stalking, or non-consensual sharing of intimate images. These issues may fall under federal laws, such as the Criminal Code, and may also be covered by a wide range of provincial or territorial legislation.

Each type of illegal activity is addressed through distinct legal frameworks that delineate the responsibilities of law enforcement agencies, and those creating and those sharing illegal content, as well as the responsibilities and obligations of a wide range of intermediaries that make the content available. All these obligations and responsibilities are balanced against human rights, particularly the right to privacy. Given how fast communications technologies evolve, it is essential to provide processes that will ensure that the enforcement mechanisms contained in these frameworks are efficient and continue to properly balance the needs of law enforcement agencies with human rights.

Recommendation 95: We recommend that the federal government regularly review the efficiency of enforcement mechanisms for monitoring and removing illegal content and conduct found online. Given the diverse range of governing frameworks for these matters in Canada, we encourage the federal government to coordinate with provincial and territorial governments.

4.6 EMPOWERING AND PROTECTING CONSUMERS OF COMMUNICATIONS SERVICES

In Canada, the consumer protection regime for communications services is a matter of shared jurisdiction between the federal government with respect to telecommunications and broadcasting, and the provincial and territorial governments with respect to property and civil rights. Not surprisingly, consumer protection measures for matters under the provincial and territorial jurisdictions are not necessarily uniform across the country. These differing regimes are a reality of the "modern cooperative" approach to federalism which favours, where possible, the application of statutes enacted by both levels of government."233

While the CRTC has generally pursued a policy of forbearance and reliance on market forces in telecommunications, it has introduced a number of consumer protection measures through its broad powers under sections 24 and 24.1 of the *Telecommunications Act*. These pertain to both the substantive rights of telecommunications consumers and the resolution of complaints between customers and their service providers.

For example, the CRTC has imposed mandatory codes of conduct setting minimum rights of consumers of communications services, or conversely, minimum standard of conduct for communications service providers. Specifically, it has issued three codes in telecommunications: the Wireless Code for retail mobile wireless voice and data services; the Deposit and Disconnection Code for forborne residential primary exchange services provided in forborne markets; and the recently enacted Internet Code, for retail fixed Internet access services provided by large facilities-based ISPs. In broadcasting, the CRTC has issued the Television Service Provider (TVSP) Code for residential television distribution services by large licensed TVSPs and their affiliates. While the Wireless Code and the Deposit and Disconnection Code apply to services to individual consumers and small businesses, the TVSP Code and Internet Code apply only to services to individual consumers.

In addition to these codes, the CRTC has issued a mix of other consumer protection measures in telecommunications, including protections for the confidentiality of subscriber information, number portability obligations, accessibility obligations, safeguards for charges relating to 900 phone numbers, next generation 9-1-1 network design, and unsolicited telecommunications rules. The CRTC also has primary enforcement responsibility under Canada's Anti-Spam Legislation.

Significantly, the CRTC established in 2007 the CCTS under sections 24 and 24.1 of the *Telecommunications Act*, as an independent, industry-funded body responsible for resolving complaints between customers and telecommunications service providers on unregulated matters, free of charge to customers. The CRTC periodically reviews and approves the CCTS's mandate and has expanded it in the past to include administering and reporting on the CRTC-developed codes of conduct.

Service provider participation in the CCTS was originally limited to large service providers with revenues greater than \$10 million. Since 2011, participation is mandatory for all service providers, although it only takes effect for smaller services providers when a customer files a complaint. Participants are required to disclose financial information and pay CCTS fees, abide by the complaint-handling process set out in the CCTS Procedural Code, and implement a public awareness plan that includes informing customers of their rights to escalate unresolved complaints to the CCTS.

CCTS's mandate is limited to unregulated matters, since the CRTC handles complaints about regulated services. As the CCTS has explained: "As an organizing principle, the CCTS's scope relates to unregulated telecommunications and television distribution services, and therefore excludes subject matters that (i) are handled by another authority; or (ii) are regulated; or (iii) relate to the content being transmitted over telecommunications or broadcasting networks. ²³⁴"As most services are deregulated, the CCTS is effectively Canada's principal complaint-handling institution for customers of communications services.

The CCTS can only resolve individual complaints brought to it by customers and can only remedy the problem for the individual customer who filed the complaint. The CCTS does not have the ability to directly effect broad change, since it does not have the power to require service providers to change their practices, address systemic problems that affect numerous customers, or handle complaints from the general public.

Complaints data from the CCTS shows an upward historical trend in complaints about telecommunications services, driven mostly by complaints about wireless and Internet service. On the order of the GiC, ²³⁵ the CRTC conducted a public inquiry in 2018 into misleading and aggressive sales practices and found "misleading or aggressive retail sales practices are present in the telecommunications service provider market in Canada and, to some extent, in the television service provider market." It also found that these practices "occur to an unacceptable degree" and "are harming Canadian consumers, in particular vulnerable Canadians."236 While the CRTC identified a range of approaches to address these issues, at the time of our preparation of this Report, it has not taken further action.

²³⁴ Intervention of the CCTS in Telecom Notice of Consultation CRTC 2018-422, Call for comments—Proceeding to establish a mandatory code for Internet services, file 1011-NOC2018-0422 (19 December 2018), para 8.

²³⁵ Order in Council P.C. 2018-685 (6 June 2018).

²³⁶ CRTC, Report on Misleading or Aggressive Communications Retail Sales Practices (2019), p 2.

A study we commissioned on consumer protection measures and regulatory practices in communications services in comparator jurisdictions²³⁷ notes that the nature of consumer protection measures in telecommunications and broadcasting sectors differ. In broadcasting, the focus is on managing access to content for broadcasting services, while in telecommunications, measures focus on service acquisition and quality of service. The study also identifies some points of commonality; for example, protections for marginalized consumers and people with disabilities in both sectors.

The range, scope, and methods of implementation of consumer protection measures in telecommunications services in comparator jurisdictions vary. In the United Kingdom, the measures are set out by Ofcom in the General Conditions of Entitlement, which authorize the provision of telecommunications services. In Australia, many of the protections are included in the industrydeveloped Telecommunications Consumer Protections (TCP) Code, with compliance monitored by an independent complaint-handling agency, the Telecommunications Industry Ombudsman. In France, the emphasis is on empowering consumers to make informed choices, by ensuring that they have access to high-quality information on service providers. In the United States, wireless providers have a voluntary code of conduct that guides their interactions with consumers, and the FCC makes complaint information available to the public.

All comparator jurisdictions have universal service obligations in place but differ in the nature of the services they encompass. There are extensive measures to assist and protect consumers when they acquire telecommunications services, such as a wide range of comparison tools, as well as rules regarding switching service providers. Some jurisdictions also include specific requirements about information to be included in contracts. All jurisdictions have do-not-call registries to allow consumers to opt out of unsolicited telemarketing calls, as well as rules in place to protect consumers from spam communications.

Each jurisdiction has adopted measures to facilitate the consumer complaints process, defining the respective responsibilities of the service provider, the regulator, and third-party complaint handlers in resolving consumer complaints. Complaints are monitored by respective regulators and can trigger investigations.

Across the jurisdictions, there are common themes in the approaches to consumer protection in broadcasting services and programming. Broadcasting regulation focuses on broadcasting content, rather than issues related to how the content may have been acquired or the quality of service. There appear to be few measures in place to address sales practices for broadcasting services, or to ensure that consumers have adequate information to understand options for purchasing or otherwise acquiring access to broadcasting content, with the exception of information provided on accessing over-the-air television.

²³⁷ Catherine Middleton, Consumer protection measures for telecommunications and broadcasting services in foreign jurisdictions (May 2019).

In Canada, the current approach in telecommunications is to impose conditions on service providers, under sections 24 and 24.1 of the Telecommunications Act, which require compliance with various codes of conduct administered by the CCTS. In our view this approach is appropriate, in combination with our recommended changes to the CRTC powers under section 24. There are, however, several elements which should be strengthened to provide a more uniform, systemic, and proactive consumer protection regime.

First, the CCTS currently administers the four consumer codes of conduct, with overlapping but sometimes inconsistent rules and remedies, regarding services that blur the lines between telecommunications and broadcasting. Many Canadians subscribe to more than one service and seek simplicity in their interactions with service providers. Multiple sets of rules may be an impediment to empowering and informing consumers, when consumer protection measures should protect their interests, empower them to make informed choices about communications services, and create fair market practices.

Second, the CCTS has been created through regulatory policy and not explicitly through statute, which may have the effect of undermining its important role in resolving complaints and providing redress for individual customers.

Third, in the course of fulfilling its role, the CCTS accumulates significant knowledge and expertise about industry practices that may be of interest and value to individual consumers, service providers, the industry, the CRTC, and the public at large. Yet, only a fraction of that knowledge is currently made available publicly, either through published decisions, annual reports, case studies, or annotated codes. Further, this accumulated knowledge may also be valuable in identifying industry trends and systemic issues. While the CCTS reports include metrics on individual complaints and trends, it does not report on systemic issues that may have been identified through the complaint process.

Addressing systemic practices is one of the most complex aspects of consumer redress, since it goes to the core of the relationship between the service provider and consumer. The appropriate process for resolving such issues should be a public proceeding that provides an opportunity to all interested parties to provide input. Therefore, the role of examining industry practices in light of identified trends is better carried out by the CRTC.

While the CCTS should continue to compile complaint data and identify trends, the credibility and integrity of its complaint handling function rests on its independence. At the same time, we recognize the federal government's original intention that the CCTS be an "an integral component of a deregulated telecommunications market,"238 and recommend building in a stronger feedback loop for the CCTS with the CRTC on systemic issues and industry trends.

Recommendation 96: We recommend that in order to better protect the interest of consumers, the Telecommunications Act and the Broadcasting Act be amended to entrench and expand the role of the Commission for Complaints for Telecom-Television Services in statute, by enabling the CRTC to:

- create and approve the mandate and structure of an independent, industry-funded, communications consumer complaints office with the authority to investigate and resolve complaints from individual and small business retail customers of services covered by the respective Acts;
- require the office to report publicly on its handling of complaints, periodically and no less than annually; and
- take action on consumer issues identified by the office and report annually on measures taken to address those issues.

Recommendation 97: We recommend that the CRTC review periodically its consumer protection framework for services covered under the Telecommunications Act and the Broadcasting Act, having regard to consumer trends and habits, and systemic consumer issues identified by the independent communications consumer complaints office. We further recommend that in order to ensure consistent minimum standards with respect to consumer protection, the CRTC:

- take into account any provincial and territorial consumer protection measures that may impact communications services when adopting consumer protection measures; and
- provide justification in those instances in which it adopts consumer protection measures that provide for lesser protection than those in any given Canadian jurisdiction.

ANNEX A COMMISSIONED RESEARCH

Ashton, Kelly L. A Comparative Analysis of Measures to Help Reflect Diversity in Audiovisual Content. Toronto: Kelly Lynne Ashton Consulting, 2019.

De Rosa, Maria, and Marilyn Burgess. An Overview of Funding Mechanisms for Domestic Audiovisual Content in Selected International Jurisdictions. Montreal: Communications MDR, 2018.

De Rosa, Maria, and Marilyn Burgess. An Overview of Support Mechanisms for Local News in Selected International Jurisdictions. Montreal: Communications MDR, 2019.

Gautrais, Vincent and Nicolas Vermeys. Revue de littérature en matière de régulation des plateformes numériques. Montreal: 2019.

Laidlaw, Emily B. Mapping Current and Emerging Models of Intermediary Liability. Calgary: 2019.

LYA. Review of Access to Passive Infrastructure across Canada - Provincial and Municipal Governments. Montreal: Lemay-Yates Associates Inc., 2019.

Middleton, Catherine. Consumer Protection Measures for Telecommunications and Broadcasting Services in Foreign Jurisdictions. York: Catherine Middleton Consulting, 2019.

Middleton, Catherine. *Institutional Frameworks for Public Interest Participation in the Telecommunications and Broadcasting Sectors*. York: Catherine Middleton Consulting, 2019.

Nordicity. Benchmarking Foreign Jurisdictions: Funding Mechanisms and Incentives for Video Games Development. Ottawa: 2019.

Nordicity. International Benchmarking Study of the Canadian Television Production Sector. Ottawa: 2019.

Ryan, Mike H. A Comparative Analysis of Institutional Frameworks for the Communications Sector in Canada, the United States of America, Australia, the United Kingdom, France and Germany. London: MHRyan Law, 2019.

Sepulveda, Edgardo. International Comparative Analysis of Publicly-funded Broadband Deployment Mechanisms in Rural, Remote & Indigenous Areas. Toronto: Sepulveda Consulting Inc., 2019.

Stewart, Janette, and Jay Lee. Comparative Analysis of Spectrum Policy and Regulation. New York: Analysys Mason, 2019.

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Wall Communications Inc. Study on Comparative Analysis of Access to Support Structures. Ottawa: 2019.

Wall Communications Inc. Study on MVNOs in Foreign Jurisdictions. Ottawa: 2019.

ANNEX B TERMS OF REFERENCE

I. INTRODUCTION

As modes of communication, connection, and culture, broadcasting and telecommunications play a significant role in the social and economic lives of Canadians. The rapid emergence and expansion of digital technologies present new opportunities for Canadians to communicate with each other and the world. They also present challenges to our typical ways of thinking about broadcasting and telecommunications, as well as the relationships Canadians have with these sectors.

The government recognized in Budget 2017 that Canada's media industries and the systems that allow for broadcasting, distribution, and the exchange of ideas are fundamentally changing and that our legislation has not kept pace. Furthermore, the government stated its support for an open and transparent Internet, in addition to a commitment to protect our culture and grow Canada's creative sector in a way that is focused on the future and on bringing the best of Canada to the world.

New technologies and business models are introducing disruptive change while simultaneously creating new opportunities. For example, we have seen the growth of wireless technologies and the Internet of Things, and Internet-based, global players are entering the Canadian market, resulting in increased competition and different regulatory approaches between traditional broadcasters and online players. By embracing and adapting to the disruption, Canada can position itself to maximize the benefits the digital age brings to our citizens, artists and creators, communications industry, and economy as a whole.

To ensure Canadian broadcasting and telecommunications are well positioned to meet these and other objectives, the Government of Canada has launched a review of the broadcasting and telecommunications suite of legislation. As stated in Budget 2017, this review will look to examine issues such as telecommunications and content creation in the digital age, net neutrality, cultural diversity, and how to strengthen the future of Canadian media and content creation. This review is intended to examine the existing legislative framework and tools in the context of the digital age and what changes may be needed to support the Government of Canada in meeting these objectives.

II. A JOINT REVIEW

The review will examine the relevant legislation jointly given the linkages between broadcasting and telecommunications. For example, there is a high degree of vertical integration and concentration

across the two sectors. Some of Canada's largest broadcasters are also the largest telecommunications carriers owning a large portion of Canada's wired and wireless network infrastructure and they often market and sell services in bundles. Both sectors are subject to many of the same global trends given the spread of digital technologies and the growing importance of the Internet; and companies benefit economically from scale, but the specific needs of smaller communities are also important. Certain issues such as net neutrality and cultural diversity can have cross-implications. Effective administration and governance have considerable overlap and the Canadian Radio-television and Telecommunications Commission (CRTC) regulates both the broadcasting and telecommunications sectors. Moreover, both the broadcasting and telecommunications sectors benefit from policies that encourage competition, innovation, and affordability of service.

Overall, it is in the public interest to have a joint review that considers the legislation in light of the linkages that exist. In addition to the Broadcasting Act and the Telecommunications Act, any necessary changes to the Radiocommunication Act ought to be considered given that it constitutes an integral part of the same legislative framework, and is constructed in a manner that takes the objectives of the Telecommunications Act as its own. These three Acts are complementary and form the main legislative framework for communications.

To an extent, broadcasting and telecommunications are distinct activities. The goals and practices associated with creating, choosing, and packaging different types of content can be quite different from building and operating telecommunications networks. These differences have historically been reflected in distinct pieces of legislation and policy objectives. Nevertheless, given the complementary nature of the legislation in question, common trends, and policy linkages, it is important to have a coherent review that does not examine these issues in isolation.

Broadcasting and telecommunications together make up Canada's communications sector, each guided by the ambition to reach a world-class standard. 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.

Our communications sector should also enable and promote culture as touchpoints for Canadians and be the foundation for Canadian content and culture in English and French, which thrive in Canada and abroad. It should also enable Canadians to participate in the free flow and exchange of information, supporting the principles of Canadian democracy. Finally, a world-class communications sector for Canada should safeguard the interests of Canadian consumers and support the safety, security, and privacy of Canadians.

This document goes on to set out the government's priorities for telecommunications and broadcasting along with key questions for consideration in conducting the review. While the discussion below is organized by statute, these issues should be examined with due consideration to the common linkages and cross-cutting factors that exist.

TELECOMMUNICATIONS ACT & RADIOCOMMUNICATION ACT III.

Telecommunications networks are a critical enabling platform. They are used for personal communications, e-commerce and entrepreneurship, information and entertainment, education, healthcare, scientific research, and emergency services.

The market and technological context for telecommunications has evolved dramatically. Wireless communications in Canada have grown from a relatively niche service to tens of millions of connections and devices. The Internet has similarly grown into an essential service throughout the economy and society.

The government recognizes how important these services are for daily life and set out in its telecommunications policy vision priorities of quality, coverage, and price. It is essential that these services are: of high quality; reliable while reflecting technological advance; available where Canadians live and work, including in rural and remote areas; and affordable. Without competitive prices and choice, Canadians cannot afford to use these services.

Nevertheless, the sector is still marked by substantial economies of scale and a high degree of concentration. While reports have typically found that Canada has high-quality networks, high prices are a persistent challenge. There are growing concerns over safety, security, and privacy risks as more of our activities go online. It is imperative that we continue to build out affordable, high-quality services and close the digital divide. Future waves of technological change are expected with the advent of 5G wireless networks, ever-growing demand for faster network speeds, and rapid growth in the number of devices connecting everything from automobiles to sensors for precision agriculture.

Over the course of this evolution, some aspects of the Telecommunications Act and Radiocommunication Act have held up well, while in others there is scope for improvement. This review is an opportunity to ensure Canada has a modern legislative framework that is positioned for the future.

In light of this context, the government would like to hear views on legislative changes that would improve our ability to address the following priorities:

1. UNIVERSAL ACCESS AND DEPLOYMENT

Universal access to high-quality and affordable telecommunications services has never been more important. This importance is currently reflected in legislative provisions and the CRTC's basic service regulatory framework, which was recently updated to include modern broadband and mobile services. Outside of this framework, a series of government funding programs have directly supported expansion to parts of the country that would not otherwise be served by the private sector. Improving access to these services for Canadians in rural and remote areas, including for Indigenous communities is a key priority.

A related issue is access to passive infrastructure such as poles, ducts, and rights-of-way for deploying telecommunications infrastructure. Inefficient access can dramatically increase the cost of deployment or prevent it altogether. This importance is expected to grow with developments in 5G wireless, small cells that have equipment distributed in a much greater variety of locations and on non-traditional structures, and increasing demand for fibre optics. However, responsibilities over access to passive infrastructure are currently shared across multiple bodies and levels of government, presenting challenges for efficient and effective deployment.

Universal access and deployment also play a role in achieving the objectives of the Broadcasting Act. As more and more cultural content becomes available via the Internet, ensuring that Canadians in all regions have access to high-quality and affordable telecommunications services becomes helpful in enabling cultural expression and diversity.

Questions

- 1.1 Are the right legislative tools in place to further the objective of affordable high quality access for all Canadians, including those in rural, remote and Indigenous communities?
- Given the importance of passive infrastructure for network deployment and the expected growth of 5G wireless, are the right provisions in place for governance of these assets?

2. COMPETITION, INNOVATION, AND AFFORDABILITY

A key government priority is promoting competition within all sectors of the Canadian economy to ensure growth and continued economic development. Dynamic competition is important for a modern communications landscape that produces innovation, choice, and affordable prices for Canadians. The Telecommunications Act gives the CRTC certain tools to promote competition and its associated benefits. Relevant policy objectives include affordability of high-quality services and responding to the economic and social requirements of users. The objectives also include a provision to promote reliance on market forces, an important consideration in the early 1990s monopoly environment.

Given the integrated nature of many Canadian carriers and the high degree of concentration in the sector, barriers to dynamic competition need to be considered in the context of convergence. However, it should be made clear that the government is not interested in a proposal that reduces Canadian ownership of broadcasting.

Question

Are legislative changes warranted to better promote competition, innovation, and affordability?

3. NET NEUTRALITY

Net neutrality is a key government priority given its importance for freedom of expression and the "innovation without permission" ethos that underpins the success of the Internet.

Net neutrality principles are currently reflected in the sections of the legislation concerning discrimination/undue preference and a prohibition of carriers from controlling the meaning of messages. The CRTC has issued regulatory decisions to implement these principles that take into account different technological and market circumstances. Flexibility has enabled the CRTC to act quickly to apply these principles to new situations and to tailor the rules appropriately. Canada has been a world leader in this regard. However, more and more activities are shifting online and networks are carrying an increasingly diverse range of applications. Net neutrality principles must continue to be a core part of future legislation while giving the regulator the flexibility needed to consider new developments and adapt accordingly.

Question

3.1 Are current legislative provisions well-positioned to protect net neutrality principles in the future?

4. CONSUMER PROTECTION, RIGHTS, AND ACCESSIBILITY

As telecommunications services pricing and contracts have grown more complex, measures to protect consumer interests have become more important. The ability for Canadians with physical disabilities to be able to fully engage with modern communications services is critical to their social and economic wellbeing. Relevant legislative provisions include the policy objective to respond to the economic and social requirements of users and CRTC authority to attach conditions of service. Currently, the CRTC requires that telecommunications service providers participate in the consumer protection framework administered by the Commission for Complaints for Telecom-Television Services and to abide by the CRTC's Wireless Code of Conduct. Similarly, the CRTC has regulations in place to compel accommodations for Canadians with disabilities such as Video Relay Service, which is a sign-language translation service used by Canadians with hearing disabilities.

Question

4.1 Are further improvements pertaining to consumer protection, rights, and accessibility required in legislation?

5. SAFETY, SECURITY AND PRIVACY

Public safety, security, and privacy take on an expanded meaning and increased importance given how deeply the Internet reaches into Canadian homes and businesses. Concerns of Canadians extend far beyond the vital 9-1-1 services that connect them to first responders. The lines between networks, services, applications, and content have blurred. Emerging technologies like quantum computing, distributed ledger technology, Big Data, machine learning, and artificial intelligence are expected to fundamentally change our notions of security and privacy. Currently, there is no explicit reference to security/safety in the objectives, while privacy is reflected.

Safety, security, and privacy are broad issues that extend well beyond the *Telecommunications Act* and *Radiocommunication Act*. Economic security, national security, public safety, and the security of critical infrastructure are distinct and yet closely linked. These concepts are more broadly addressed through other statutes and legislative authorities. In considering the *Telecommunications Act/ Radiocommunication Act*, key considerations are how to balance security, privacy, and the potential for economic growth and innovation, and whether changes are warranted in this context or are best addressed elsewhere.

Question

5.1 Keeping in mind the broader legislative framework, to what extent should the concepts of safety and security be included in the *Telecommunications Act/Radiocommunication Act?*

6. EFFECTIVE SPECTRUM REGULATION

The changing nature of wireless communications will continue to drive demand for new and innovative approaches to spectrum regulation. The deployment of 5G networks and the Internet of Things, for example, will not only increase the overall demand for wireless bandwidth with billions of devices used by millions of Canadians, but result in a wide variety of smart devices and intelligent users. The context has changed dramatically since the *Radiocommunication Act* was introduced.

These devices, which can be compliant when they are sold to the user, but changed or used afterwards in an unauthorized manner, test the limits of today's regulatory framework and could hamper innovation and enforcement in the future.

Question

6.1 Are the right legislative tools in place to balance the need for flexibility to rapidly introduce new wireless technologies with the need to ensure devices can be used safely, securely, and free of interference?

7. GOVERNANCE AND EFFECTIVE ADMINISTRATION

The government's responsibilities and powers to address issues in telecommunications and radiocommunication are assigned to different organizations and decision-makers, such as the CRTC, ISED, Competition Bureau, as well as Cabinet. Periodically, it is important to be re-examine decisionmaking structures to ensure they continue to suit the current context, are performing effectively and efficiently, and can support competition in the telecommunications market.

In particular, there is the opportunity to consider the Governor-in-Council (GiC) powers that set the conditions of the relationship between the government and the CRTC. The current GiC powers are limited to a few sections within the Telecommunications Act, most notably which grant the GiC the ability to issue a binding broad policy direction to the CRTC, vary or rescind or refer back a CRTC decision, and require the CRTC to make a report on an issue of the GiC's choosing. This issue area has substantial linkages with the comparable section under the *Broadcasting Act*.

Questions

- 7.1 Is the current allocation of responsibilities among the CRTC and other government departments appropriate in the modern context and able to support competition in the telecommunications market?
- Does the legislation strike the right balance between enabling government to set overall policy direction while maintaining regulatory independence in an efficient and effective way?

IV. **BROADCASTING ACT**

The current Broadcasting Act was enacted at a time before the rise of the Internet, when the Canadian broadcasting system and the production and exhibition of Canadian programming was mostly insulated from international competition and overseas players. In this environment, a major part of the broadcasting system's value was its unique ability to cultivate and maintain cultural sovereignty and identity, as the majority of the programming viewed by Canadians was provided by Canadian broadcasters.

In the 27 years since the Act was enacted, the Internet has allowed content to flow across borders and be created in new ways. Now, Canadians have a seemingly infinite amount of choice in the content they want to consume, and creativity is being harnessed in ways Parliament could not have predicted. The new open, global communications environment creates opportunities for Canadian content on the world stage but also poses challenges at home with respect to the creation of and access to Canadian cultural content, as well as, reliable news and information content.

The government's vision for a Creative Canada, announced in Fall 2017, emphasized the need to: protect, promote, and support Canadian culture, in both official languages; capture a greater share of global markets; take a platform-agnostic perspective; and embrace culture and creativity's potential as a driver for economic growth, in light of the change and disruption that has taken place in the communications environment.

The broadcasting sector can play a key role in this vision by acting as a launchpad for Canadian content to compete at the global level, and harnessing the potential of Canadian culture and its creativity to drive economic growth, all while serving its role in protecting culture, and cultivating and maintaining cultural identity and diversity. The value placed on Canada's broadcasting sector can be expanded and redefined to focus on choice and creativity while maintaining the core principles of national identity and cultural sovereignty that underpin Canada's cultural policy.

The goal of this review is to modernize the communications framework to support this vision. The Broadcasting Act can play a pivotal role in the government's new approach given its function in establishing the regulatory framework for the broadcasting industry. As such, the government would like to hear views on legislative changes that would improve our ability to address the following priorities:

8. BROADCASTING DEFINITIONS

The Broadcasting Act sets out a regulatory framework for the Canadian broadcasting system. The Act defines the broadcasting system as a single system comprising radio and television broadcasters, from the public, private, and community broadcasting sectors, engaged in both programming and distribution activities – undertakings which involve the transmission of programs by means of telecommunications to the public, which has been characterized as a technologically-neutral definition. The CRTC has a regulatory framework in place via licencing and exemption orders. As part of this framework, broadcasters are required to contribute to the policy objectives set out in the *Broadcasting Act*, such as through financial contributions, programming expenditure, and exhibition requirements.

Today, new forms and sources of content are entering the Canadian market unlicensed through digital technology. In this context, broadcasting services and content can be seen as one part of a larger, open, and shifting communications landscape. Online services, both Canadian and foreign, have become a part of Canada's creative ecosystem and have a role to play in the production, distribution, and discovery of Canadian content. The government is seeking ways to ensure that broadcasting stays relevant and that there is fairness in the system, as well as to define the role of online players.

Questions

- How can the concept of broadcasting remain relevant in an open and shifting communications landscape?
- 8.2 How can legislation promote access to Canadian voices on the Internet, in both official languages, and on all platforms?

9. BROADCASTING POLICY OBJECTIVES

In the new digital environment with almost limitless choice and increased competition for audiences, there is a recognition of a greater imperative to ensure high-quality and competitive programming, to promote it effectively and to ensure its discoverability both at home and abroad (e.g., as a launchpad for Canadian content). The current Broadcasting Act was enacted at a time in which television and radio were primary sources for information and entertainment content for Canadians. It set out some twenty discrete policy objectives and twenty-eight sub-objectives focussed on ensuring the creation and presentation of Canadian programming that would reflect the needs and aspirations of Canadians in all their diversity. This includes official language minority communities, Indigenous Peoples, and persons with disabilities.

Questions

- How can the objectives of the *Broadcasting Act* be adapted to ensure that they are relevant in today's more open, global, and competitive environment?
- 9.2 Should certain objectives be prioritized? If so, which ones? What should be added?
- 9.3 What might a new approach to achieving the Act's policy objectives in a modern legislative context look like?

10. SUPPORT FOR CANADIAN CONTENT AND CREATIVE INDUSTRIES

The Broadcasting Act states that "each element of the broadcasting system shall contribute in an appropriate manner to the creation and presentation of Canadian programming." Ensuring that Canadian programming is readily available and that the enabling legislation allows for the production and creation of Canadian programming is a core component of the *Broadcasting Act*. The government's vision for a Creative Canada makes investing in Canadian stories, artists, and creators a priority.

There are a number of tools and mechanisms to require support for Canadian content, such as quotas on radio and television, expenditure requirements for programming undertakings, and regulatory contributions and mandatory carriage requirements for broadcasting distribution undertakings. In contributing to the creation of and access to Canadian content, broadcasters play a key role in the government's vision for a Creative Canada. Without a viable and healthy broadcasting sector, the continued success of Canadian creators, independent producers, and the content they produce is at risk.

The traditional business model of Canadian broadcasters is facing disruption brought about through the spread of digital technology. This presents opportunities and challenges. By breaking down borders and facilitating instant communication, digital technology provides increased access to export markets for Canadian content while also providing more opportunities for partnerships and collaboration with creators, producers, and new players all over the world. At the same time, Canadians are accessing and consuming information and entertainment content more and more from foreign Internet-based audio and video service providers and on an increasingly diverse range of devices, particularly mobile phones. These players are now part of the Canadian marketplace and compete with traditional broadcasters (primarily private broadcasters) for subscribers, audiences and revenues. Their presence also challenges the viability and success of French-language content. In addition, broadcasters and content producers face online piracy, which is challenging the business model of content creation and distribution.

Traditional regulatory mechanisms by which creation and access to Canadian content have been achieved may not be as effective in the digital environment where usual practices linked to scheduled audio or television programming or story-telling may no longer apply. Therefore, there is an opportunity to consider whether there are new ways that Canadian content creation, distribution, and discovery in both official languages can be supported in this new digital communications environment. However, the government is not interested in an approach that increases the cost of services to Canadians.

Questions

- 10.1 How can we ensure that Canadian and non-Canadian online players play a role in supporting the creation, production, and distribution of Canadian content?
- 10.2 How can the CRTC be empowered to implement and regulate according to a modernized Broadcasting Act in order to protect, support, and promote our culture in both official languages?
- 10.3 How should legislative tools ensure the availability of Canadian content on the different types of platforms and devices that Canadians use to access content?

11. DEMOCRACY, NEWS, AND CITIZENSHIP

Through its news and information programming on both radio and television, Canadian broadcasting plays a key role in the development and maintenance of a healthy democracy, where institutions are held accountable and citizens are engaged and informed. Local television and radio provide Canadians with information on issues that affect their daily lives.

Moreover, for news and information programming to fulfill its role in maintaining a vibrant and healthy democracy, there must be a diversity of voices expressed and heard in the broadcasting sector. Only when there is a multitude of perspectives and opinions coming from separate independent sources can news and information programming enable a marketplace of ideas where democracy can flourish.

Canadian news media are in the process of a disruptive and dramatic change. Broadcasters are key players in the funding and distribution of local news and are facing reduced revenues, and a shrinking advertising market as large foreign online players attract more and more advertising revenues. Furthermore, social media platforms are becoming an increasingly significant source of news. Recognizing the appeal and reach of such platforms, various actors are using them to distribute false and misleading information. The phenomenon of online disinformation has the potential to undermine our democratic institutions, compromise the integrity of our elections and erode public trust.

Both public and private broadcasters have a role to play to ensure that Canadians receive local news and information in both official languages.

Questions

- 11.1 Are current legislative provisions sufficient to ensure the provision of trusted, accurate, and quality news and information?
- 11.2 Are there specific changes that should be made to legislation to ensure the continuing viability of local news?

12. CULTURAL DIVERSITY

Cultural diversity is about ensuring that Canadians of all backgrounds and experiences can create and access content that speaks to them; this means protecting, supporting, and promoting Canadian content as technology evolves and changes. In the online environment where content flows effortlessly across borders, cultural diversity operates in a new open Internet context, one that respects net neutrality and enables the diversity of cultural expression. By enabling diversity of cultural expression, the online environment should also respect and have room for linguistic duality, Indigenous cultural expression, and gender equality. A review of the legislative framework for the communications sector should take this context into account.

Question

12.1 How can the principle of cultural diversity be addressed in a modern legislative context?

13. NATIONAL PUBLIC BROADCASTER

The current *Broadcasting Act* contains the mandate of the national public broadcaster. The government continues to support this mandate, which requires CBC/Radio-Canada to provide a wide range of programming that: informs, enlightens, and entertains; is created for both English and French linguistic markets; reflects regions; promotes cultural expression; and serves linguistic minority communities.

With the rise of digital media, the context in which CBC/Radio-Canada operates has undoubtedly shifted since the Act was written. Canadians expect our national public broadcaster to show strong leadership and fully renew its rich tradition of excellence in the digital world. As such, the mandate of the public broadcaster needs to adapt to the modern context in order to ensure that CBC/Radio-Canada keeps serving Canadians from all over the country while maintaining its existing mandate to "inform, enlighten and entertain." The Broadcasting Act review will explore ways to update CBC/ Radio-Canada's mandate and ensure its independence and stability over the long-term.

CBC/Radio-Canada should be a leading partner among Canada's cultural and news organizations, and should play a leading role in showcasing Canadian cultural content in both French and English, and in reflecting Indigenous Peoples and our country's diversity—at home and around the world.

Questions

- 13.1 How should the mandate of the national public broadcaster be updated in light of the more open, global, and competitive communications environment?
- 13.2 Through what mechanisms can government enhance the independence and stability of CBC/Radio-Canada?
- 13.3 How can CBC/Radio-Canada play a role as a leader among cultural and news organizations and in showcasing Canadian content, including local news?
- 13.4 How can CBC/Radio-Canada promote Canadian culture and voices to the world, including on the Internet?
- 13.5 How can CBC/Radio-Canada contribute to reconciliation with Indigenous Peoples and the telling of Indigenous stories by Indigenous Peoples?
- 13.6 How can CBC/Radio-Canada support and protect the vitality of Canada's official languages and official language minority communities?

14. GOVERNANCE AND EFFECTIVE ADMINISTRATION

A review of the *Broadcasting Act* should consider how the functioning and efficiency of the regulatory framework could be improved given technological developments, including the growing impact of algorithms on access to content. The CRTC's main instrument to achieve policy goals stems from its ability to grant broadcasting licences and impose terms on those licences. A review of the *Broadcasting* Act should consider how the modern context necessitates a rethinking of the way the CRTC achieves its policy goals. In addition, it should consider whether the tools available to the CRTC other than licensing (such as enforcement mechanisms) are sufficient to achieve the policy objectives of the Act.

There is also the opportunity to consider the Governor-in-Council (GiC) powers that set the conditions of the relationship between the government and the CRTC. The current GiC powers are limited to a few sections within the Act, most notably which grant the GiC the ability to issue a broad policy direction to the CRTC, refer back a licensing decision, and request that the regulator provide a report on an issue of the GiC's choosing. In a time of transition and great change, there is an opportunity to consider whether this balance needs to be adjusted, while upholding the essential independence of the regulator.

Questions

- 14.1 Does the Broadcasting Act strike the right balance between enabling government to set overall policy direction while maintaining regulatory independence in an efficient and effective way?
- 14.2 What is the appropriate level of government oversight of CRTC broadcasting licensing and policy decisions?
- 14.3 How can a modernized Broadcasting Act improve the functioning and efficiency of the CRTC and the regulatory framework?
- 14.4 Are there tools that the CRTC does not have in the *Broadcasting Act* that it should?
- 14.5 How can accountability and transparency in the availability and discovery of digital cultural content be enabled, notably with access to local content?

V. CONCLUSION

Canada has built a legislative framework comprised of the *Telecommunications Act*, the *Radio-communication Act*, and the *Broadcasting Act* that has served Canadians over the years. Now is the time to renew that framework. This represents an opportunity to take a more modern and complementary approach to our review of communications legislation, ensuring a coherent analysis and set of recommendations in the pursuit of creating and maintaining a world-class communications sector in Canada.

This government invites you as members of the Panel to think how broad trends are driving change and consider innovative and practical ways to ensure that our legislation is well-positioned for the future and Canada's communications sector continues to serve the needs of Canadians.

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Alliance Interactive canadienne

Alliance québécoise des techniciens et techniciennes de l'image et du son (AQTIS), Association des réalisateurs et réalisatrices du Québec (ARRQ), Société des auteurs de radio, télévision et cinéma (SARTEC), Union des artistes (UDA)

Allstream

Asian Television Network

Association of Canadian Publishers

Association of Municipalities of Ontario

Association québécoise de l'industrie du disque, du spectacle et de la vidéo (ADISQ)

Association québécoise de la production médiatique (AQPM)

Awesome Over 50

Bell Canada Enterprises Inc. (BCE)

Blue Ant Media

British Columbia Broadband Association

Broadband Communications North

Broadcasting Accessibility Fund

Cable Public Affairs Channel (CPAC)

Canada Charity Partners

Canada Media Fund (CMF)

Canadian Association of Broadcasters (CAB)

Canadian Association of Community Television Users and Stations (CACTUS)

Canadian Association of Content Exporters (CACE)

Canadian Association of Film Distributors and Exporters (CADFE)

Canadian Association of Fire Chiefs

Canadian Association of Public Educational Media

Canadian Association of the Deaf

Canadian Association of Wireless Internet Service Providers (Canwisp)

Canadian Broadcast Museum Foundation

Canadian Communication Systems Alliance (CCSA)

Canadian Council of the Blind

Canadian Electricity Association (CEA)

Canadian Electronics and Communications Association (CECA)

Canadian Interactive Alliance

Canadian Internet Registration Authority (CIRA)

Canadian Media Concentration Research Project (CMCRP)

Canadian Media Guild

Canadian Media Producers Association (CMPA)

Canadian Music Policy Coalition

Canadian Network Operators Consortium Inc. (CNOC)

Canadian Radio-television and Telecommunications Commission (CRTC)

Canadian Wireless Telecommunications Association (CWTA)

CBC/RadioCanada

Charlotte County Television (CHCO-TV)

Cisco Systems Canada Co.

City of Calgary

City of Toronto

CNIB Foundation

Coalition for Culture and Media

Coalition for the Diversity of Cultural Expressions (CDCE)

Cogeco Inc.

Conseil provincial du secteur des communications

Consumers Council of Canada

Corus Entertainment

Cybera Inc.

Deafness Advocacy Association Nova Scotia

DHX Media Ltd.

Directors Guild of Canada

Distributel

DOC Talks Festival & Symposium

E-Comm 9-1-1

Eastern Ontario Regional Network (EORN)

Eastlink

Eeyou Communications Network

Entertainment One

Entertainment Software Association of Canada

Facebook Canada

Fédération de la jeunesse canadienne-française

Fédération des communautés francophones acadiennes du Canada

Fédération des télévisions communautaires autonomes du Québec (FTCA)

Fédération nationale des communications

Federation of Canadian Municipalities (FCM)

First Mile Connectivity Consortium

First Nations Technical Services Advisory Group (TSAG)

Forum for Research and Policy in Communications (FRPC)

Friends of Canadian Broadcasting

Google Canada

Government of the Northwest Territories

Government of Yukon

Independent Broadcast Group

Independent Telecommunications Providers Association (ITPA)

Indigenous Screen Office

Interim Commissioner of Competition

International Alliance of Theatrical Stage Employees

Internet Society

Internet Society Canada Chapter

National Campus and Community Radio Association (NCRA-ANREC), Alliance des radios communautaires du Canada (ARC du Canada), Association des radios diffuseurs communautaires du Québec (ARCQ), Community Radio Fund of Canada (CRFC-FCRC)

National Emergency Number Association (NENA)

National News Media Council of Canada (NNC)

Native Communications Society of the Northwest Territories

Netflix Canada

Northwestel

Office of the Privacy Commissioner of Canada

One Media Law

Open Media

OUTtv Network Inc.

Pelmorex Corp.

Province of British Columbia

Public Broadcasting in Canada (PBC)

Public Interest Advocacy Centre (PIAC)

Public Safety Broadband Network Consulting (PSBN)

Quebec English-language Production Council (QEPC), Quebec Community Groups Network (QCGN), English-language Arts Network (ELAN)

Quebecor Media Inc.

Radio Advisory Board of Canada (RABC)

Regional and Rural Broadband

Rogers Communications Inc.

Rural Ontario Municipal Association

S.B. Shah Law Professional Corporation

Saskatchewan Association of Rural Municipalities

SaskTEL

Shaw Communications

Shaw Rocket Fund

Société de la francophonie manitobaine

Société Nationale de l'Acadie

SSi Micro Ltd.

Stingray Group

Super Channel Entertainment Group

Syndicat des communications de Radio-Canada (SCRC), Fédération nationale des communications (FNC-CSN)

TekSavvy Solutions Inc.

Télé-Québec

Telesat Canada

TELUS

The Globe and Mail

Toronto Community Media Network

Toronto Police Service

TV5 Québec Canada

TVO

Unifor

United Nations Educational, Scientific and Cultural Organization (UNESCO)

VMedia

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Writers Guild of Canada

Xplornet Communications Inc.

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Dr. Gerri Sinclair

Dr. Gregory Taylor

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Aboriginal Peoples Television Network (APTN)

Accessible Media Inc. (AMI)

Aircraft Pictures

Alliance des producteurs francophones du Canada (AFPC)

Alliance des radios communautaires du Canada (ARC)

Alliance of Canadian Cinema Television and Radio Artists (ACTRA)

Alliance of Equality of Blind Canadians (AEBC)

Alliance québécoise des techniciens et techniciennes de l'image et du son (AQTIS)

Allstream Amazon.com

Asian Television Network

Association des radiodiffuseurs communautaires du Québec (ARCQ)

Association des réalisateurs et réalisatrices du Québec (ARRQ)

Association franco-yukonnaise (AFY)

Association québécoise de l'industrie du disque, du spectacle et de la vidéo (ADISQ)

Association québécoise de la production médiatique (AQPM)

Baffin Regional Chamber of Commerce (BRCC)

Bell Canada Enterprises Inc. (BCE)

Bell Media

Blue Ant Media

Broadband Communications North

Cabin Radio

Calgary Association of the Deaf (CAD)

Canada Media Fund (CMF)

Canadian Association of Broadcasters (CAB)

Canadian Association of Community Television Users and Stations (CACTUS)

Canadian Association of Content Exporters (CACE)

Canadian Association of Film Distributors and Exporters (CADFE)

Canadian Association of the Deaf

Canadian Association of Video Relay Service (VRS)

Canadian Association of Wireless Internet Service Providers (Canwisp)

Canadian Communications Systems Alliance Inc. (CCSA)

Canadian Council of the Blind (CCB)

Canadian Electricity Association (CEA)

Canadian Electronics and Communications Association (CECA)

Canadian Internet Policy and Public Interest Clinic (CIPPIC)

Canadian Internet Registration Authority (CIRA)

Canadian Network Operators Consortium (CNOC)

Canadian Media Producers Association (CMPA)

Canadian Radio-television and Telecommunications Commission (CRTC)

Canadian Satellite and Space Industry Forum

Canadian Wireless Telecommunications Association (CWTA)

CBC/Radio-Canada

Chaire de l'UNESCO sur la diversité des expressions culturelles (Université Laval)

Citizen Lab (Munk School of Global Affairs, University of Toronto)

City of Iqaluit

City of Yellowknife

Clear Sky Connections

CNIB Foundation

Coalition for Culture and Media

Coalition for the Diversity of Cultural Expression (CDCE)

Cogeco Inc.

Community Radio Fund of Canada

Corus Entertainment

Cybera Inc.

Deaf and Hear Alberta

Deaf Wireless Canada Consultative Committee

DHX Media Ltd.

Directors Guild of Canada

Eastlink

Energy Transformation Network of Ontario

English- Language Arts Network-Quebec (ELAN)

Entertainment One

Entertainment Software Association of Canadian

Facebook Canada

Fédération de la jeunesse canadienne-française (FJCF)

Fédération des communautés francophones et acadiennes (FCFA)

Fédération des télévisions communautaires autonomes du Québec (FEDETVC)

Federation of Canadian Municipalities (FCM)

First Mile Connectivity Consortium

First Nations Technical Services Advisory Group (TSAG)

Google Canada

Government of the Northwest Territories

Government of Nunavut (Community and Government Services)

Government of Yukon

Gwich'in Tribal Council

Holdfast

Ice Wireless

Iconoclaste Musique Inc.

Independent Telecommunications Providers Association (ITPA)

Indigenous Filmmakers Association

Indigenous Screen Office

Inuit Broadcasting Corporation

Inuit Tapiriit Kanatami (ITK)

Inuvialuit Communications Society

KatloTech Communications

Kepler Communications

Knowledge Network

Koj-B Films

Komodo OpenLab **KOTV** La Guilde des développeurs de jeux vidéo indépendants du Québec La Presse Le Devoir Media Access Canada (MAC) MediaSmarts Missinipi Broadcasting Corporation (MBC) Morag Loves Company National Campus and Community Radio Association (NCRA) National Film Board of Canada (NFB) Native Communications Inc. Native Communications Society of the Northwest Territories Netflix Canada Newfoundland and Labrador Film Development Corporation Newfoundland Broadcasting Company (NTV) Northern Native Broadcasting Yukon (CHON-FM) Northwest Territories Association of Communities Northwestel Novus Entertainment Nunavut Film Development Corporation Nuvujaq Inc. Open Media

OUTtv Network Inc.

Panoramic Pictures

Paqtnkek Mi'kmaw Nation

Productions Rivard

Public Interest Advocacy Centre (PIAC)

Qaujigiartiit Health Research Centre (QHRC)

Quebec Community Group Network (QCGN)

Quebec English-language Production Council (QEPC)

Radio Advisory Board of Canada (RABC)

Rink Rat Productions Inc.

Rogers Communications Inc.

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SaskTEL

Sirius XM

Société de la francophonie manitobaine

Société des auteurs de radio, télévision et cinéma (SARTEC)

Société nationale de l'Acadie

Sovimage

SSi Micro Ltd.

Stingray Group

Telefilm Canada

Télé-Québec

Telesat Canada

TELUS

The Globe and Mail

Torstar

TV5 Québec Canada

TVO

Union des Artistes (UDA)

Union des consommateurs

VMedia

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Writers Guild of Canada (WGC)

Xplornet Communications Inc.

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Bianca Masalin-Basi

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Megan Parisotto

Merlynda Vilain

ANNEX F ABBREVIATIONS

4G: Fourth-generation wireless networks

5G: Fifth-generation wireless networks

ACA: Accessible Canada Act

ACMA: Australian Communications and Media Authority

AMPs: Administrative monetary penalties

APTN: Aboriginal People's Television Network

AVMSD: European Audiovisual Media Services Directive

BBC: British Broadcasting Corporation

BDU: Broadcasting distribution undertaking

BEREC: Body of European Regulators for Electronic Communications

BPF: Broadcasting Participation Fund

CCCS: Canadian Centre for Cyber Security

CCTS: Commission for Complaints for Telecom-Television Services

CCTV: Closed-circuit television cameras

CIPF: Certified Independent Production Fund

CMF: Canada Media Fund

CRTC: Canadian Radio-television and Telecommunications Commission

CSE: Communications Security Establishment

CSIS: Canadian Security Intelligence Service

CSTAC: Canadian Security Telecommunications Advisory Committee

CTA: Canadian Transportation Agency

DBS: Direct broadcast service providers

DMEO: Digital media exemption order

DPOH: Designated public office holder

DPP: Differential-pricing practices

EBITDA: Earnings before interest, tax, depreciation and amortization

ETHI: Standing Committee on Access to Information, Privacy and Ethics

FCA: Federal Court of Appeal

FCAC: Financial Consumer Agency of Canada

FCC: Federal Communications Commission

GDPR: General Data Protection Regulation

GiC: Governor in Council

GST/HST: Goods and Services Tax/Harmonized Sales Tax

ICT: Information And Communications Technology

ILNF: Independent Local News Fund

INDU: The Standing Committee on Industry, Science and Technology

ITMP: Internet traffic management practices

IoT: Internet of Things

ISED: Innovation, Science and Economic Development Canada

ISP: Internet service provider

LTE: Long-Term Evolution

Mbps: Megabit per second

MDU: Multi-dwelling unit

MVNO: Mobile virtual network operator

NERA: National Economic Research Associates

NFB: National Film Board of Canada

NG9-1-1: Next generation 9-1-1 voice and text messaging system

OECD: Organization for Economic Cooperation and Development

Ofcom: Office of Communications

OLMCs: Official language minority communities

OPC: Office of the Privacy Commissioner

PIPEDA: Personal Information Protection and Electronic Documents Act

PN: Public notice

PNI: Program of national interest

PSTN: Public switched telephone network

SIGINT: Computer network security and foreign intelligence

SOCAN: Society of Composers, Authors and Music Publishers of Canada

TRAI: Telecommunications Regulatory Authority of India

TSP: Telecommunications service provider