Petition to the Governor in Council to Vary

Telecom Regulatory Policy CRTC 2015-326, Review of wholesale wireline services and associated policies

Petition

of

Bell Canada

20 October 2015

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EXECUTIVE SUMMARY

Canada's future prosperity depends on being a world leader in broadband.

- E1. Canada's future prosperity depends on being a world leader in broadband. The best modern broadband networks will be critical 21st century infrastructure, supporting a thriving digital, information and knowledge economy creating well-paid, highly skilled jobs and providing Canadians in urban and rural areas with access to new technologies like 4K television, ultra high-speed video streaming from Canadian services CraveTV and Shomi and United States based Netflix, and next-generation distance learning, telehealth and other innovative online learning tools for years to come.
- As a result of competition between companies that invest in their own broadband networks (facilities-based competition), Canada is among the broadband world leaders today and now we are poised to do more. Following an investment of over \$2.5 billion, Bell's Gigabit Fibe Internet service is already available to more than two million Canadians in communities like Halifax, Quebec City, Kingston and Gatineau. And today Bell stands ready to bring this cutting edge technology to millions more, creating thousands of new jobs for Canadians. This is no easy task considering Canada's low population and challenging geography.
- E3. In July 2015 the CRTC made the surprising decision, contrary to Canada's longstanding policy of facilities-based competition, to unfairly change the existing rules applicable to fibre-to-the-home broadband networks by mandating reseller access to these networks while they are still in the process of being built.¹ This decision to favour resale over investment means that:
- i. far less private capital will be deployed in fibre-to-the-home network infrastructure;
- ii. far fewer communities, particularly smaller and rural communities, will get to benefit from fibre-to-the-home investment, deepening the digital divide;
- iii. jobs will be lost as a result of reduced investment in broadband infrastructure projects at the very time our economy needs jobs and investment the most; and
- iv. the competitiveness of our economy will be seriously undermined, as fewer businesses, particularly small and medium-sized businesses, will be able to harness the power of new broadband infrastructure to compete globally and domestically.

Telecom Regulatory Policy CRTC 2015-326, Review of wholesale wireline services and associated policies, issued 22 July 2015.

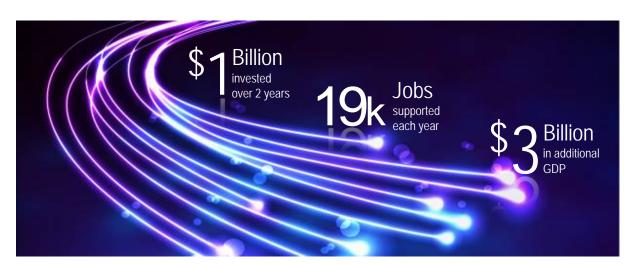
- E4. The CRTC's decision to favour resale over investment will inevitably result in Canada losing its broadband leadership position. Indeed that is exactly what has happened to Europe, which fell far behind other developed countries when it aggressively mandated access to next-generation networks and where policy-makers are now searching for ways to recover.
- E5. Bell does not bring this Petition to the Governor in Council lightly. Since the *Telecommunications Act* was introduced more than 20 years ago, the CRTC has issued more than 13,000 telecommunications related decisions, and we have taken this step only four other times. In each of these cases, we had a serious concern that a CRTC decision would do long-term damage to the country's telecommunications system by undermining investment and facilities-based competition for decades to come.²
- E6. This is one of the most critical regulatory decisions the CRTC has made since the introduction of local telephone competition in the 1990s. The long-term implications of the CRTC's decision require careful thought and reflection, given how fundamental broadband infrastructure is to the future of the Canadian economy. We believe such reflection will lead the Governor in Council to conclude that to now implement legacy resale regulation for brand new fibre-to-the-home networks that are still being built is fundamentally at odds with the country's goal of being a world broadband leader, with 21st century digital infrastructure in communities of every size supporting the creation of tens of thousands of new jobs and stimulating a thriving modern economy.
- E7. The decision to favour resale over investment was surprising, as it is inconsistent with Canada's long-standing policy of facilities-based competition and with the Policy Direction³ issued to the CRTC in 2006 based on the recommendations in a report commissioned from the Telecom Policy Review Panel by the Liberal government in 2005. It is also unfair, as it contradicts the CRTC's 2008 decision (reaffirmed as recently as 2011) to refuse to implement mandated reseller access for fibre-to-the-home networks a decision Bell and others have relied on to make long-term capital investment decisions. This Petition seeks to reverse the

The four decisions are: Order in Council P.C. 2009-2007 (the Governor in Council considers that the continued development and availability of broadband internet infrastructure is important for Canadians and the Canadian economy... [and] that it is critical that the regulatory regime... provides the proper incentives for continued investment in broadband infrastructure); Order in Council P.C. 2007-71 (the Governor in Council considers that facilities-based competition is a durable form of competition that delivers the greatest benefits to consumers, imposes competitive market discipline on incumbents and strengthens investment in telecommunications infrastructure); Order in Council P.C. 2006-0305 and 2006-1314 (referring back and then overturning the CRTC's VoIP decision); and Order in Council P.C. 1995-2196.

Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives, P.C. 2006-1534, issued 14 December 2006.

CRTC's decision, which effectively expropriates new fibre-to-the-home networks for the benefit of other companies (Reseller Internet Service Providers (ISPs)) that are not investing in infrastructure. In its decision, the CRTC placed an inordinate emphasis on resale competition, rather than taking a longer term approach that would ensure ongoing investment by facilities-based providers.

Building fibre broadband infrastructure creates jobs. Our roll-out in just three cities – Toronto, Quebec City, and Halifax – directly creates more than 4,500 jobs at our company and our suppliers. In the broader economy, the Toronto deployment alone could support up to 19,000 jobs⁴, something that in the right regulatory environment can be repeated again and again in communities across the country. These fibre-to-the-home network builds are some of the biggest infrastructure projects that will be undertaken in the country. They will be ongoing for years and will rely entirely on billions of dollars in private investment. The government can kickstart these projects by granting this Petition.



Source: Singer, Economic Impact of FTTH Deployment in Toronto.

E9. Since at least 1992 the Government, CRTC, and the Competition Bureau have all reiterated many times that the only way to sustainably deliver the price, quality, and innovation benefits of competition to consumers is through facilities-based competition. **This policy has been incredibly successful, yet the CRTC's decision is in direct opposition to it.** The decision makes it unlikely that large scale non-incumbent fibre-to-the-home networks will ever be built in Canada, or that many medium and most small towns and rural areas outside of Canada's largest urban centres will see the benefits of competitive fibre broadband networks.

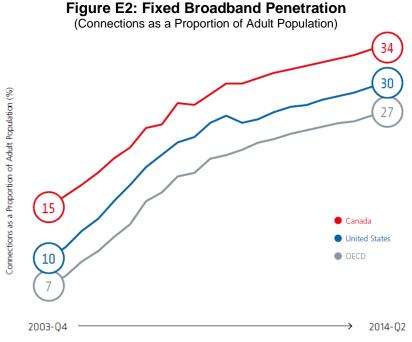
⁴ Hal Singer, *Economic Impact of FTTH Deployment in Toronto*, attached to this Petition.

E10. Figures E1 and E2 below demonstrate that Canada has led the way in broadband deployment. This world leadership position has been made possible through the willingness of facilities-based providers like Bell to invest. The CRTC's decision to mandate access to newly and not yet built fibre-to-the-home networks will erode this leadership position over time, just as past decisions of European regulators to mandate access to next-generation networks have caused many countries there to fall behind other developed nations in terms of investment, speed, and adoption of next-generation broadband.

(Average 2011-2013)
\$200
\$150
\$50
\$50
\$Legging to the last the las

Figure E1: Investment per Access Path

Source: OECD Digital Economy Outlook 2015, Table 2.30. Total communications access paths include analogue line + ISDN lines + DSL + cable modem + fibre + mobile.



Source: Eisenach, Broadband Market Performance in Canada: Implications for Policy.

E11. Figures E3 and E4 below show that Canadians have benefited from the build out of broadband infrastructure by facilities-based providers. Figure E3 shows that Canada is a world leader in terms of bandwidth consumption across its broadband networks, and Figure E4 shows that Canadians enjoy some of the fastest broadband connection speeds available in developed countries, ranking ahead of the United States and well ahead of the United Kingdom, Germany and Australia, a remarkable feat considering Canada's low population and challenging geography. The CRTC's decision puts these critical achievements at risk.

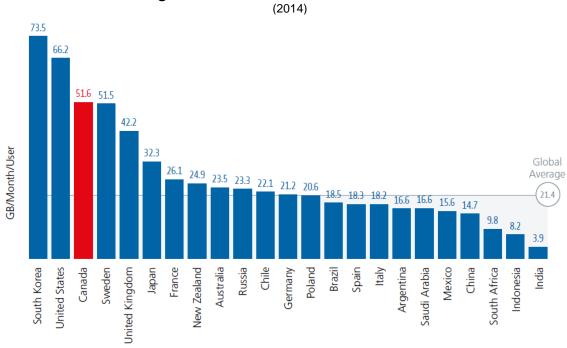


Figure E3: Internet and IP Traffic Per User

Source: Eisenach, Broadband Market Performance in Canada: Implications for Policy.

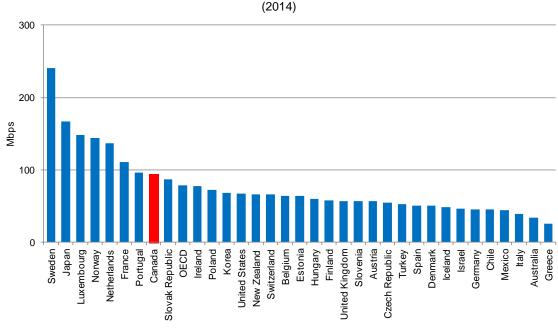


Figure E4: Average Advertised Connection Speeds

Source: OECD Digital Economy Outlook 2015, Table 2.39.

E12. The CRTC's decision is also inconsistent with the approach being taken in the rest of the world. Broadband leaders like the United States and South Korea have long rejected regulation of fibre-to-the-home networks, clearing the way for their deployment, while European authorities are now recognizing that their past decisions to regulate fibre-to-the-home have resulted in an investment crisis that is manifest in poor network quality and deployment, and from which it is taking years to recover.

E13. The impact that regulatory policy can have on broadband deployment is readily evident from the United States experience. Figure E5 demonstrates that when mandated access regulations applied to large facilities-based carriers in the United States, investment in next-generation broadband networks slowed to a crawl. But when these restrictions were lifted by the regulator, broadband investment by these same facilities-based providers exploded. Why? Because the removal of mandated access restored the business case for investing capital in broadband.

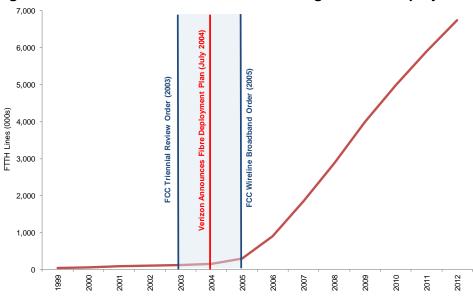


Figure E5: U.S. Decisions on FTTH Unbundling on FTTH Deployment⁵

The CRTC's Decision to Apply Legacy Regulation to Brand New Infrastructure is Inappropriate

E14. Bell and other broadband providers are in the early stages of building brand new ultra high-speed fibre-to-the-home infrastructure. Building these networks is difficult and capital intensive, and therefore risky. Once built, however, they will provide the foundation for a thriving digital economy for decades to come.

E15. Since 1880, Bell has been an incumbent in communications services delivered over legacy copper networks. But fibre networks are different. All potential service providers wishing to offer these new fibre-to-the-home Internet services, whether they are traditional telephone companies, cable companies, resellers, utilities, or other technology companies, begin from the same starting point. Specifically, fibre-to-the-home requires a brand new build using no legacy components. In fact, for Bell, the build out of fibre-to-the-home is a completely new build to replace our 135 year old legacy copper plant.

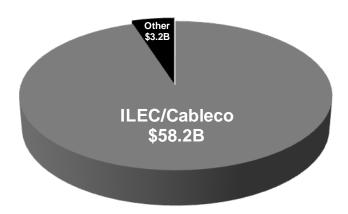
Nevertheless, in July the CRTC decided to apply the old regulatory rules applicable to legacy networks to these brand new fibre-to-the-home networks. In effect, this decision hands over to Reseller ISPs the most expensive parts of the new fibre-to-the-home networks in which

Based on Figure 4 of Tramont, Hanser and Gillen, *Telecommunications competition in the US: An assessment of wholesale regulatory policy and its consequences*, filed as Attachment 2 to the Intervention of Bell Canada in the proceeding leading to TRP 2015-326.

Bell and others must invest billions of dollars, contrary to the Policy Direction and long-standing Canadian policy supporting facilities-based competition.

- E17. Bell has already built fibre-to-the-home to more than two million homes, relying on the framework that did not give mandated resale access to these investments. Now, after more than six years down this road, just 90 days before a federal election the CRTC released a decision that has created significant investment instability in the midst of the deployment. Our Petition only asks that the rules that facilitated the investments we have made not be changed unfairly in the midst of our plans to build out fibre-to-the-home.
- These networks are being built using private resources without relying on public assets or public subsidies, unlike networks funded through federal government programs. There is no "regulatory bargain" when fibre-to-the-home networks are built that justifies expropriating these massive investments.
- E19. As Figure E6 below demonstrates, facilities-based providers like Bell have always led the way in terms of wireline investments in fixed broadband. The CRTC's decision is premised on the assumption that mandated access will encourage Reseller ISPs to invest in their own facilities. But this has not happened in Canada, even after the CRTC mandated access to earlier generation fibre-to-the-node (FTTN) networks in 2010. For example, in 2010 TekSavvy claimed that if it received a favourable decision from the CRTC on FTTN regulation it would invest in building fibre-to-the-home. Instead, after getting the ruling it was seeking and a significant wholesale rate cut, TekSavvy made no new investments and got out of fibre-to-the-home entirely. The evidence before the CRTC was clear that, after more than two decades of advancing this claim, Reseller ISPs have not translated the benefits they get from regulation into any material investment in next-generation Internet access facilities like fibre-to-the-home.

Figure E6: Wireline Capital Expenditures (2006-2014)



Source: IDC, Canadian Communications Service Provider Capex Budgets, 2013-2014.

E20. In this Petition we ask the Governor in Council to vary the CRTC's decision so that it does not extend legacy wholesale regulation to fibre-to-the-home nor, recognizing the stated desire for regulation to maintain competitive neutrality, to next-generation DOCSIS 3.1 cable networks. We would still have the obligation to provide Reseller ISPs access to our legacy broadband technology, where it exists (i.e., DSL and FTTN). Likewise, cable companies would still have an obligation to provide access to their legacy broadband (using DOCSIS 3.0 and providing broadband speeds up to 100 Mbps anywhere they have such plant today).

The CRTC's Decision Will Reduce Investment

E21. The CRTC's decision ignored overwhelming evidence that mandated access reduces investment. Instead, the decision states that the "negative impact on investment is not likely to happen to any significant degree, particularly in more urban areas" and that it "expects that the incumbent carriers will generally continue to invest in FTTP access facilities...in response to consumer demand, as well as to compete effectively and efficiently with the Cablecos."

E22. There should be no doubt that going forward, as a result of the CRTC's decision, each fibre-to-the-home investment opportunity will be reviewed and the pace and scale of our investment will unequivocally be affected. Where a project's projected return on investment is uncertain, capital will not be allocated to it. The CRTC's decision means that

⁶ Telecom Regulatory Policy CRTC 2015-326, *Review of wholesale wireline services and associated policies*, at paragraph 141.

investment will be stopped or delayed for years in areas where the return on investment can no longer be justified. This is simply the commercial consequence of the CRTC's decision to mandate network unbundling in order to foster resale competition. For example, based on empirical analyses, leading telecommunications economist Dr. Hal Singer estimates that, for Bell Canada in Ontario and Quebec alone (not factoring in other companies and other regions of the country), annual fibre-to-the-home investment could decline by up to \$384 million as a result of the CRTC's decision.⁷

- The significant impact of the CRTC's decision will be borne particularly by smaller towns and rural areas, where fibre-to-the-home deployment will be delayed or not take place at all. This will simply serve to deepen the digital divide.
- E24. The oil industry, auto sector, and BlackBerry can all attest that simply needing and wanting to compete is not enough if investments cannot earn a sufficient return then they will not be made.
- E25. This basic fact was quickly recognized by independent financial analysts that considered the CRTC's decision. To quote three of them:

CIBC World Markets: While there is plenty to parse through in the decision, our initial read-through sees a move towards offering access to incumbent broadband fiber/ networks, in the face of opposition from the established cable/telco players, who have long argued such a ruling would deter investments in high-speed access. Essentially, the government is playing chicken with the large players and their fiber capex budgets.⁸

Veritas Investment Research: The telcos have stated that mandated wholesale fibre access will discourage further IPTV investment. Based on our analysis, we don't believe that this is an empty threat to the government... **it would be prudent for the incumbents to at least slow the fibre build and re-assess the payoff.⁹**

Barclays: Just as other sectors are cutting investments (e.g. energy, mining); the telcos stand out as big supporters of the Canadian economy, investing \$8bn in annual capex and employing 127k people in the country. While it appears to make sense for the government to make headlines on driving competition ahead of the federal election in October, we believe the actual implementation of the new policies is at least a year away. The risk of the

Hal Singer, *Policy Brief: The Economic Impact of the CRTC's Decision to Unbundle Fibre-To-The-Premises Networks* [Singer Report], attached to this Petition, at page 6.

⁹ Veritas Investment Research, "Flash: Wholesale Internet Regulations" (23 July 2015), pages 2 and 4.

⁸ CIBC World Markets, "Cdn. Cable/Telecom - Wireline Wholesale Roaming Decision More Aggressive Than Expected - Not Positive For Incumbents, But Lots Of Moving Parts Here" (22 July 2015).

telcos delaying investments and/or cutting jobs in the current weakened Canadian economy as a result of new regulations is something we believe the government would be careful to avoid.¹⁰

E26. Today's digital economy requires a different approach to regulation; an approach which stimulates private sector investment and promotes competition among, and not at the expense of, those that are prepared to invest billions in private capital to future proof Canada's Internet infrastructure.

E27. This investment risk has been acknowledged in the United States. Blair Levin, appointed under the Obama administration to author the United States National Broadband Plan with a view to "achieving affordability and maximizing use of broadband to advance consumer welfare" and other social and economic goals, has explained that:

[E]valuating the economics of building a fiber network, [Google] concluded that building a network that it shared with other providers would not make economic sense, even on an unregulated basis. Google, therefore, decided to proceed with a proprietary model. If the government had required open access that required Google to share its infrastructure with competitors, Google Fiber would have been stillborn...

The lesson here is competition does not arise from the desire for it; it comes from rules that attract investment into competitive networks. 12

The CRTC's Decision Will Reduce Jobs and Growth

E28. Broadband investment creates jobs both directly, through the workforce required to complete a multibillion dollar infrastructure project, and indirectly by increasing Canada's productivity and competitiveness and creating new economic opportunities. In today's challenging economic climate, this private sector investment boost is needed more than ever.

E29. Experts estimate that a reduction in annual investment from Bell Canada of up to \$384 million will lead to up to 15,360 lost jobs and a \$1.2 billion annual reduction in gross domestic product (GDP). This is unfortunate, as regulation should be supporting our economic goals instead of undermining them.

¹³ Singer Report.

Barclays, First take on CRTC Decision on wholesale high-speed access: Little near-term impact, long term remains unclear (22 July 2015).

FCC, Connecting America: The National Broadband Plan at page XI, available at https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf.

Blair Levin, "What have we learned from Google Fibre?" *CNET* (31 July 2015) available at http://www.cnet.com/news/what-have-we-learned-from-google-fiber/.

The Policy Choice the Government Faces

E30. By granting this Petition, the Government can propel Canada's **continued** broadband leadership by supporting billions of dollars in infrastructure investment, creating thousands of jobs, and including in the broadband economy communities large and small, urban and rural, right across the country. The fibre-to-the-home networks built as a result will become foundational 21st century infrastructure that delivers enduring benefits to consumers and the economy. As Prime Minister-designate Trudeau has recognized:

Investing in infrastructure is vital to creating middle class jobs today and sustained economic growth for years to come. Every dollar spent on public infrastructure grows and makes our economy more competitive, while also creating jobs, strengthening our cities and communities, and improving our health, well-being, and quality of life.¹⁴

E31. The alternative is to allow the CRTC's decision to stand unaltered, **following the approach that has caused Europe to fall behind other modern economies when it comes to broadband infrastructure**. This will not produce any meaningful benefits for Canadians or the digital economy. The evidence before the CRTC was that decisions that favour Reseller ISPs do not result in any change in the retail rates paid by consumers and, despite their claims, actually result in Reseller ISPs abandoning any plans for investments in infrastructure like fibre-to-the-home.

E32. If the CRTC's decision is allowed to stand, network builders like Bell will reduce their investments in broadband infrastructure, meaning that Canadians outside the largest urban centres will increasingly be left behind, jobs will be lost at a time when they are needed most, the competitiveness of the Canadian economy will suffer, and ultimately Canada's broadband leadership position will be irreparably harmed.

E33. Bell and others are eager to make the investments necessary to build all-fibre ultra high-speed broadband infrastructure into large and small communities across the country. **But we cannot do so without regard for the regulatory environment**. Granting this Petition will provide the regulatory certainty required to extend our investments aggressively into additional communities. The alternative is a regulatory approach that has been tried, and has failed, in Europe and that will undermine Canada's long-standing policy of facilities-based competition, deter private investment, and force communities to increasingly turn to government funding to

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Liberal Party of Canada, Real Change: An Historic Investment Plan to Strengthen the Middle Class, Create Jobs, and Grow our Economy at page 3.

meet Canadians' growing demand for broadband.

E34. We ask the Governor in Council to support our investment in the infrastructure that will be the foundation of our digital economy by granting this Petition.

1.0 THE CRTC DECISION AND OUR REQUEST

Key Points

- Bell and other broadband providers have announced plans to invest billions in fibre-to-the-home as part of their commitment to building Canada's 21st century infrastructure. This investment in Canada's future is in its very early stages.
- The CRTC's decision, which was widely opposed, applies last century's rules designed for old networks built under monopoly conditions to completely new networks built under competitive conditions.
- We ask Cabinet to vary the CRTC's decision so that wholesale regulation does not extend to fibre-to-the-home or to next-generation DOCSIS 3.1 cable networks
- 1. Broadband providers like Bell Aliant, Bell Canada, Telus, MTS, SaskTel, Videotron, Rogers, Eastlink, Shaw, and others are in the early stages of building brand new ultra high-speed all-fibre network infrastructure to Canadians across the country. Over the next decades, these networks will support connection speeds of between 1 GB and 40 GB per second or more, empowering Canada's largest cities and rural and remote communities alike to thrive in the modern economy. These networks are a key part of Canada's 21st century infrastructure and a fundamental building block in the transition from a resource- and manufacturing-based economy to a world leading digital and knowledge economy. They are highly valued by consumers and businesses alike.
- 2. Without access to fibre-to-the-home, young Canadians in smaller and rural areas will not enjoy the benefits of new technologies and innovations like 4K television, ultra-high quality video streaming from Canadian services CraveTV and Shomi, and United States based Netflix, and enriched social media applications. Canadian families and seniors will not benefit from next-generation distance learning, telehealth and other online tools they need to participate fully in Canada's digital economy. And Canadian businesses, particularly small- and medium-sized businesses, will be unable to harness the power of the best broadband infrastructure, undermining the global competitiveness of the Canadian economy.

- 3. Building fibre-to-the-home networks is capital intensive and risky. Fibre-to-the-home was first launched in Canada on a widespread basis into a competitive broadband market in 2009, primarily in Atlantic Canada by Bell Aliant, which effectively bet its future on the investment. Bell Aliant was able to build fibre-to-the-home networks to over 65% of premises in its territory only because, based on Canada's policy of facilities-based competition and CRTC decisions in 2008 and 2011 refusing to apply mandated Reseller ISP access to these networks, there were no regulatory disincentives to this investment.
- 4. The rest of Canada is only now beginning to benefit from fibre-to-the-home investments. Today fibre-to-the-home networks are still not available to about four out of five Canadians. Closing this gap should be among our highest economic and social priorities and would be amongst the most popular for Canadians, and we and other companies have announced tens of billions of dollars of private investment in the coming years to do just that. But these investments will not be made without a viable business case. That business case is already extremely challenging and unhelpful regulatory intervention can easily turn it negative.
- 5. Unfortunately, in July the CRTC made the surprising decision to apply regulatory rules developed more than 30 years ago to these all-new ultra high-speed fibre-to-the-home networks now delivered in a competitive market. Those rules had previously only been applied to networks that used "legacy" copper and coaxial cable infrastructure that was built in a monopoly environment from a long bygone era. In 2008 and 2011 the CRTC had refused to apply the long outdated rules to fibre-to-the-home.
- 6. The CRTC's decision unfairly changes the rules, handing over to other companies (Reseller ISPs) the most expensive parts of the fibre-to-the-home infrastructure in which we and others are investing billions of dollars relying on the existing framework. Reseller ISPs would now be able to use our fibre-to-the-home networks to provide their own services. They do not have to invest in infrastructure themselves or contribute to the investments we and others make. Rather, they simply pay a regulated wholesale price set by the CRTC (which will never compensate for the up-front capital and risk of our investment). Bell, Telus, SaskTel, Rogers, Shaw, Videotron, Eastlink and others have all opposed this kind of regulation for NGNs.

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See e.g. Telecom Decision CRTC 85-19, *Interexchange Competition* (29 August 1985). This decision was released seven years before the *Telecommunications Act* was even created; telecoms at the time were regulated pursuant to the *Railway Act*.

- 7. By departing from Canada's long-standing policy¹⁶ of facilities-based competition, this decision puts private sector broadband infrastructure investment at risk. While some projects in the biggest cities may continue as planned, going forward all broadband infrastructure projects across the country will be reviewed and many will be delayed or never undertaken as a result of the CRTC's decision. This will further increase the digital divide between rural and urban communities and hamper the development of Canada's digital and knowledge-based economy.
- 8. In this Petition we ask the Governor in Council to vary the CRTC's decision so that it does not extend legacy wholesale regulation to fibre-to-the-home nor, recognizing the stated desire for regulation to maintain competitive neutrality, to next-generation DOCSIS 3.1 cable networks. We would still have the obligation to provide Reseller ISPs access to our legacy broadband technology, where it exists (i.e., DSL and FTTN). Likewise, cable companies would still have an obligation to provide access to their legacy broadband (using DOCSIS 3.0 and providing broadband speeds up to 100 Mbps anywhere they have such plant today).
- 9. Bell and others are eager to aggressively make the investments necessary to build all-fibre ultra high-speed broadband into large and small communities across the country. But we cannot do so without regard for the regulatory environment and its implications. Granting this Petition will provide the regulatory certainty required for us and other companies not only to meet the targets we have already announced, targets which are threatened by the CRTC's decision, but also to extend our investments into additional communities. We ask the Governor in Council to take advantage of this opportunity by unlocking this private investment.

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Beginning at least with Telecom Decision CRTC 92-12, Competition in the Provision of Public Long Distance Voice Telephone Services and Related Resale and Sharing Issues (12 June 1992).

Facts and Evidence

- Bell has invested \$2.5 billion in fibre-to-thehome networks since 2010.
- Prior to the CRTC's decision, Bell announced in June the launch of Gigabit Fibe in Toronto that has now begun and will ultimately reach 1.1 million homes and businesses in the city.
- Bell's Gigabit Fibe project in Toronto will be one of the biggest all-fibre network builds in a North American city.
- Bell has also announced plans to launch Gigabit Fibe in other cities in Ontario, Québec and the Atlantic provinces.

- Telus has announced plans to launch fibre-tothe-home networks in Edmonton, Vancouver, and other communities.
- Atlantic Canada is a world leader in fibre-to-the-home adoption as a result of the risky investment Bell Aliant made, relying on the previous rules that did not apply mandated access to fibre-to-the-home. Despite its many small communities, Atlantic Canada would rank an impressive 5th out of 33 OECD countries in the percentage of fibre connections in total broadband subscriptions.

2.0 THE BENEFITS OF BUILDING CANADA'S 21ST CENTURY INFRASTRUCTURE

Key Points

- Fibre-to-the-home is widely regarded among policy makers and local communities as crucial infrastructure for the competitiveness of a modern economy.
- Based on extensive empirical evidence, expert economists show that the CRTC's decision could result in between 2,880 and 15,360 job losses and a \$225 million to \$1.2 billion reduction in GDP.
- Unlike other sectors of our economy, Canadian telcos have announced billions of dollars in private capital investment during the current economic downturn; policy should encourage rather than discourage this investment.
- Even on its own terms, the CRTC decision promotes investment where it is not needed (transport) at the expense of fibre-to-the-home, where it is needed most.
- 10. Modern broadband infrastructure brings a range of economic and non-economic benefits to the communities in which it is built. It enhances quality of life, increases productivity in key

BCE Inc., News Release, "Bell Gigabit Fibe bringing the fastest Internet to Toronto residents with a billion-dollar+ network investment, creation of 2,400 direct jobs" (25 June 2015), available at <a href="http://www.bce.ca/news-and-media/releases/show/Bell-Gigabit-Fibe-bringing-the-fastest-Internet-to-Toronto-residents-with-a-billion-dollar-network-investment-creation-of-2-400-direct-jobs-1?page=1&month=&year=.

BCE Inc., News Release, "Bell Gigabit Fibe: Canada's fastest Internet service now available to 1.3 million homes" (10 August 2015), available at <a href="http://www.bce.ca/news-and-media/releases/show/Bell-Gigabit-Fibe-Canada-s-fastest-Internet-service-now-available-to-1-3-million-homes-1?page=1&month=&year="http://www.bce.ca/news-and-media/releases/show/Bell-Gigabit-Fibe-Canada-s-fastest-Internet-service-now-available-to-1-3-million-homes-1?page=1&month=&year=.

sectors of the economy, facilitates the emergence of new industries and new employment opportunities, attracts capital and talent, increases property values, and supports telecommuting and environmental sustainability.

2.1 <u>Fibre-to-the-home Prepares Large and Small Communities For The Economy of The Future</u>

- 11. Policy-makers in Canada and around the world have long recognized that investment in the best telecommunications network infrastructure lays the groundwork for citizens to lead and participate in a prosperous global economic future. As Prime Minister-designate Trudeau has said, "the future of our communities and by extension, the future success and prosperity of Canada relies on the smart adoption and deployment of data and technology... Canada's present and future prosperity also rests on our ability to attract people and investment from all around the world." ¹⁹
- The importance of telecommunications infrastructure is also reflected in the report of the expert Telecommunications Policy Review Panel, which explained:

The greatest impact of telecommunications in a modern knowledge-based economy is its role as an enabler of efficiency, productivity and innovation -- in all industry sectors and public services and in all forms of economic and social activity. For this reason, a world-class telecommunications industry is essential for enhancing Canada's competitiveness in global markets as well as for creating economic prosperity and improving social well-being and the quality of life in all parts of the country.²⁰

- This connection between broadband networks and broad economic advancements has also been reflected in federal initiatives to provide broadband to Canadians in the most remote communities and in the OECD's *Seoul Declaration For the Future of the Internet Economy*, in which Canada and other countries stated their desire to "stimulate sustainable economic growth and prosperity by means of policy and regulatory environments that support innovation, investment, and competition" in telecommunications.²¹
- Local communities know well the benefits of investments to extend fibre-to-the-home networks to more places. In the biggest city in the country, Toronto Mayor John Tory explained the importance of Bell's massive fibre-to-the-home investment:

Justin Trudeau, Speech to the Federation of Canadian Municipalities Conference (10 June 2015), available online at https://www.liberal.ca/justin-trudeaus-speech-to-the-federation-of-canadian-municipalities-conference.

Telecommunications Policy Review Panel, *Final Report* (March 2006) at page 1-4.

OECD, The Seoul Declaration for the Future of the Internet Economy (18 June 2008).

As we plan for the future, we need to invest in our city and put in place the infrastructure required to keep Toronto competitive. The rollout of Gigabit Fibe is a testament to Bell's commitment to investing in Toronto. This is Canada's largest gigabit Internet infrastructure project, creating 2,400 jobs for our city. I'd like to thank Bell Canada for investing in Toronto and delivering services that meet the needs of today and the future.²²

15. The same is true in smaller communities; the Federation of Canadian Municipalities confirms that "[t]elecommunications infrastructure is important to Canada's rural, northern and remote communities. Broadband networks contribute to economic growth by improving productivity, providing new products and services, supporting innovation in all sectors of the economy, and improving access to new markets in Canada and abroad."²³

Canadian Communities Understand the Economic Benefits of FTTH

"With FibreOp, it doesn't matter if you're in Deer Lake or Beijing, you have the technology to get it done." Ron Taylor, CEO, Newfoundland and Labrador Association of Technology

"[Bell's] substantial investment in [high speed fibre technology] in Peterborough is another strong indicator of our economic potential." Daryl Bennett, Mayor of Peterborough, ON

"[Bell deploying] new broadband fibre optic technology directly to homes and businesses further underlines that Kingston is one of the best places in which to live, work and do business." Jeff Garrah, CEO, Kingston Economic Development Corporation

"Access to world-class technology gives our rural business a huge advantage, and connects our people and businesses with global commerce" Christopher Clarke, Mayor of Region of Queen's Municipality, NS

"FibreOp brings the city...access to technology that will create opportunities for youth, businesses and all residents..." Terry Keating, Mayor of Salisbury, NB

"This innovative broadband network will meet the needs of our citizens and will make our community even more attractive for new investments... [the] investment means people in the municipalities, including Saguenay, will have access to an Internet and TV experience that is on par with what is available in large urban centres." Jean Tremblay, Mayor of Saguenay, QC

"It's great news that Bell Aliant chose Greater Sudbury for its first FibreOP

BCE Inc., News Release, "Bell Gigabit Fibe bringing the fastest Internet to Toronto residents with a billion-dollarnetwork investment, creation of 2,400 direct jobs" (25 June 2015), available at <a href="http://www.bce.ca/news-and-media/releases/show/Bell-Gigabit-Fibe-bringing-the-fastest-Internet-to-Toronto-residents-with-a-billion-dollar-network-investment-creation-of-2-400-direct-jobs-1?page=1&month=&year=.

Federation of Canadian Municipalities, "About rural broadband" available at http://www.fcm.ca/home/issues/rural-northern/rural-broadband/about-rural-broadband.htm.

expansion outside Atlantic Canada, making our community a leader in new technologies and providing our residents with access to the most advanced broadband technology in the world. Greater Sudbury will now have an added edge; making our community even more attractive for new investments." Marianne Matichuck, Mayor of Sudbury, ON

"With FibreOP we are jumping ahead of others when it comes to having access to enhanced telecommunications services." Tina Sartoretto, Mayor of Cobalt ON

"We are excited about the economic development potential that fibre to the premises offers, including opportunities to build on Edmonton's strengths in the areas of new technology, health care and education." Don Iveson, Mayor of Edmonton

"This investment represents a major vote of confidence in our economy that will help ensure Alberta remains a top choice for businesses to invest and create jobs... Our government looks forward to working with the City of Edmonton to realize the full economic and quality-of-life potential of this new communications infrastructure." Rachel Notley, Premier of Alberta

"We are all living in a growing, interconnected world where the latest technology can help local businesses succeed... [this investment] will transform Vancouver into a major hub of today's best communications infrastructure and connect homes with the fastest Internet connections possible." Christy Clark, Premier of British Columbia

"This investment will spur continued growth in our thriving technology sector by providing the exceptional connectivity, speed, and capacity that are needed to power our innovation economy." Gregor Robertson, Mayor of Vancouver

16. Examining the actual impact that fibre-to-the-home deployment has had within our territory, economists Hal Singer, Kevin Caves, and Anna Koyfman conclude that regions that benefit from a full fibre-to-the-home roll-out typically see an increase in employment of approximately 3%.²⁴

Hal Singer, Kevin Caves, and Anna Koyfman, *The Empirical Link Between Fibre-to-the-Premises Deployment and Employment: A Case Study in Canada* [Singer, Caves, and Koyfman Report], attached to this Petition.

2.2 The CRTC's Decision Will Reduce Fibre-to-the-home Investment and Deployment

Key Points

- The business case for investing in fibre-to-the-home infrastructure is already very challenging; economists, analysts, and our own experience all confirm that investment in many communities will no longer be viable as a result of the CRTC's decision.
- Regulators around the world have recognized the negative impact of mandated access on fibre-to-the-home investment and have either rejected it (e.g., United States, South Korea) or recognized it has failed and are searching for ways to get away from it (e.g., Europe).
- Unlike legacy copper-based networks, fibre-to-the-home is an entirely new investment that uses no legacy infrastructure.

2.2.1 <u>Legacy Regulation Undermines the Business Case for FTTH</u>

- The business case for investing in fibre-to-the-home is always challenging. Building a fibre-to-the-home network involves massive costs which must be incurred up-front, before serving a single customer. Unlike with the monopoly telephone networks Bell began building in 1880, and cable networks built many decades ago, these up-front costs may never be recovered. First, the company investing in fibre-to-the-home must win the intense competitive battle for broadband customers at retail against cable companies that have led the industry for more than a decade. Second, the company investing must earn three retail revenue streams (Internet, TV, and home phone) to support the business case. Third, even then the break-even point on the investment comes only many years down the road.
- 18. The CRTC's decision will delay or prevent entirely some of these investments, particularly in smaller towns and rural areas. We invest in fibre-to-the-home in the hope that we will be able to meet our customers' price and quality demands better than our competitors. But the CRTC's decision eliminates that rationale, as it would allow Reseller ISP competitors to simply arbitrage our new network rather than invest and build their own.
- 19. Under the terms of the CRTC's decision, Reseller ISPs will pay only a single variable mandated wholesale access fee per retail end-user, which can never compensate for the three

retail revenue streams that are lost as a result of mandated access, and on which our business case for investing in fibre-to-the-home is based. The reason is that the CRTC sets a wholesale rate that is below our retail rate for Internet access. By definition, this ignores the lost revenue streams from TV and home phone services that are fundamental to the business case for building fibre-to-the-home in the first place.

20. It is impossible for the CRTC to set a wholesale rate that adequately compensates those who invest in fibre-to-the-home networks for their investments; at whatever rate the CRTC sets, mandated access will necessarily reduce and slow fibre-to-the-home deployment. This is the inevitable consequence of a regulatory policy that favours resale competition over creating incentives for facilities-based investment.

Economist and Analyst Views on the Impact of Unbundling/Mandated Access

"Facilities-based providers invest half or more of their operating margins in their networks, much of it to ensure that they have the ability to handle the enormous increases in Internet traffic that are expected over the next several years. If regulators reduce these long run returns by mandating cheap access to incumbent networks to competitors who have not invested in their own networks, investors will choose to invest their funds elsewhere, and Canadian Internet infrastructure will languish and may not be able to accommodate the expected surge in Internet usage. European telecoms regulators at least have started to understand that forcing incumbents to share their networks with competitors at low rates usually harms consumers in the long run." Andy Baziliauskas and Frank Mathewson²⁵

"[M]any economists argued that open access rules could have the effect of discouraging investment in new networks by both incumbents and entrants: Incumbents would be reluctant to invest in new facilities knowing they would be forced to resell them at government-mandated prices, and entrants would see little reason to invest so long as they had the option of leasing facilities from incumbents. After more than 15 years of experience with open access regulation, a substantial body of empirical research has assessed its effects, and the results are not ambiguous: Mandated access has in general not led new entrants to invest in their own facilities, has discouraged investment by incumbents, and ultimately has slowed the deployment of new broadband facilities and lowered broadband penetration." Jeffrey Eisenach²⁶

"The telcos have stated that mandated wholesale fibre access will discourage further IPTV investment. Based on our analysis, we don't believe that this is an empty threat to the government... it would be prudent for the incumbents to at least slow the fibre build and re-assess the payoff." **Veritas Investment**

Andy Baziliauskas and Frank Mathewson, "Don't over-regulate the Internet: If VMedia and other entrants get their way, they will profit at the expense of consumers" *Financial Post* (11 August 2015).

Jeffrey Eisenach, Broadband Market Performance in Canada: Implications for Policy [Eisenach Report], attached to this Petition at page 40.

Research²⁷

"Just as other sectors are cutting investments (e.g. energy, mining); the telcos stand out as big supporters of the Canadian economy, investing \$8bn in annual capex and employing 127k people in the country. While it appears to make sense for the government to make headlines on driving competition ahead of the federal election in October, we believe the actual implementation of the new policies is at least a year away. The risk of the telcos delaying investments and/or cutting jobs in the current weakened Canadian economy as a result of new regulations is something we believe the government would be careful to avoid." Barclays²⁸"

"While there is plenty to parse through in the decision, our initial read-through sees a move towards offering access to incumbent broadband fiber/ networks, in the face of opposition from the established cable/telco players, who have long argued such a ruling would deter investments in high-speed access. <u>Essentially, the government is playing chicken with the large players and their fiber capex budgets</u>... there will surely be questions around what this means for recently announced fiber investments (including TELUS' \$1 billion investment in Edmonton, and BCE's \$1.1 billion pledge in Toronto)." **CIBC**²⁹

"There is strong evidence that the existing policy and regulatory framework [of mandated access in Europe] has not led to the levels of investment needed to advance Europe's digital infrastructure... In a fast-evolving market characterized by converging technologies as well as new advances...Past efforts at regulation, including the mandating of wholesale products and the setting of these products' prices in advance, have not had the desired result... A new approach is needed that supports network investment by multiple parties while safeguarding competition. First and foremost, it should allow prices to be set by commercial negotiations between network owners and access seekers." Boston Consulting Group³⁰

- 21. The CRTC's decision disregards the evidence on the record indicating that mandated access would stall investment and states instead that the "negative impact on investment is not likely to happen to any significant degree, particularly in more urban areas" and that it "expects that the incumbents carriers will generally continue to invest in fibre-to-the-home access facilities...in response to consumer demand, as well as to compete effectively and efficiently with the Cablecos." The CRTC's decision is wrong in this regard.
- What the CRTC does not acknowledge is that capital is a finite resource that will only be invested where there is a projected rate of return to justify that investment. If a particular project does not warrant a capital allocation, available capital will be allocated to another project that

Veritas Investment Research, Flash: Wholesale Internet Regulations, 23 July 2015, pages 2 and 4.

³¹ TRP 2015-326, paragraph 141.

Barclays, First take on CRTC Decision on wholesale high-speed access: Little near-term impact, long term remains unclear, 22 July 2015.

²⁹ CIBC World Market, "Cdn. Cable/Telecom - Wireline Wholesale Roaming Decision More Aggressive Than Expected - Not Positive For Incumbents, But Lots Of Moving Parts Here" (22 July 2015).

BCG, Five Priorities for Achieving Europe's Digital Single Market at pages 6 and 28-29.

warrants the resource commitment. This commercial reality is reflected in what occurred in 2010 when the CRTC mandated reseller access to FTTN network infrastructure. As a direct consequence of that decision, Bell deployed FTTN technology to 400,000 fewer homes than it had planned to before the CRTC made its decision. This regulatory cause and effect will again repeat itself in the wake of the CRTC's decision to mandate reseller access to new fibre-to-the-home networks. The simple commercial reality is that in any industry, simply wanting and needing to compete is not enough – if investments cannot earn a sufficient rate of return then they will not be made; a reality to which the oil industry, auto sector, and BlackBerry can all attest.

- Going forward, as a result of the CRTC's decision, each opportunity will be reviewed on a case-by-case basis. Certain large committed investments, typically in the largest urban areas like the investment we have already announced in the City of Toronto, will eventually proceed. But in smaller towns and rural areas, fibre-to-the-home deployment will be delayed or not take place at all, as mandated access eliminates the business case for investment.
- This is a risk that the CRTC dismisses despite past experience in Europe, the United States, and here in Canada in 2010 when the CRTC mandated access to FTTN infrastructure. In our view, the CRTC's decision to favour resale competition over long-term investment will inhibit our digital economy and deepen the digital divide.
- 25. This common sense view of the impact on investment is supported by the empirical economic evidence set out in the attached *Policy Brief*. Based on: (a) what actually happened in Canada when the CRTC regulated FTTN³² but not fibre-to-the-home networks, (b) a similar natural experiment in the United States, and (c) the consensus estimates in the economic literature, Dr. Singer finds that the investment that would be lost as a result of the CRTC's decision is likely between \$72 million (equal to six percent of \$1.2 billion) and \$384 million (equal to 32 percent of \$1.2 billion), each year or between \$360 million and \$1.9 billion over Bell's five-year investment horizon.³³

FTTN networks bring fibre to a "node" close to the subscriber's home but then rely on existing copper infrastructure to reach the subscriber's home. By contrast, fibre-to-the-home networks involve an entirely new fibre build all the way from the "Central Office" (where the fibre-to-the-home network connects to the core network) right to the subscriber's home.

³³ Singer Report at page 19.

Mandated Access Suppresses Investment

- The evidence suggests that the CRTC decision will reduce fibre-to-the-home investment by between 6% and 49% but Dr. Singer uses a range of 6%-32% to be conservative.
- In the two years following a 2010 CRTC decision to regulate FTTN, Bell deployed FTTN infrastructure to 400,000 fewer homes than it had planned prior to the decision.
- For Bell, fibre-to-the-home is between 33% and 186% more expensive to build than FTTN, so the impact will be even greater.
- When the FCC in the United States reversed the regulation of telco broadband networks in the United States between 2003 and 2005, annual investment increased by 24% and was sustained at that level. 34

2.3 CRTC Decision Will Reduce Jobs and Growth

There is a well-understood relationship between investment in broadband/fibre-to-the-home and job creation and economic growth. This relationship makes sense: building fibre-to-the-home networks requires engineers to design the network, construction crews to complete the civil work on roads and towers, and skilled technicians to install the network. It also requires goods and services from a range of suppliers. But the benefits go far beyond those directly associated with network construction: fibre-to-the-home provides the best broadband infrastructure to individual Canadians and small and medium sized businesses in communities across the country, giving them the capabilities they need to excel in this new economy. This competitive advantage is particularly important for small businesses, which must rely on mass-market network connectivity.

The economy and job market are changing. As the Government has recognized with its proposed new innovation agenda, "the global economy is increasingly competitive. New technologies are disrupting old economic models... this poses challenges to Canada, but it also, of course, offers new opportunities." Moving forward, good high-paying jobs will increasingly need to come from skilled areas like designing, installing, maintaining, and upgrading high-tech infrastructure like broadband, and developing and delivering the innovative services that depend on those broadband networks. Engineers and technicians to support a widespread fibre-to-the-home network and the services it will enable are the employment opportunities of the future.

See Tramont, Hanser and Gillen, *Telecommunications competition in the US: An assessment of wholesale regulatory policy and its consequences*, filed as Attachment 2 to the Intervention of Bell Canada in the proceeding leading to TRP 2015-326 at paragraph 71 and data summarized at paragraph 69.

Trudeau commits \$900M to boost high-tech innovation, fund startup incubators" CBC News (29 September 2015), available online at http://www.cbc.ca/news/politics/canada-election-2015-trudeau-winnipeg-innovation-1.3248391.

28. Based on empirical analyses, leading telecommunications economist Hal Singer estimates that "the CRTC's 2015 Decision could lead to a reduction of between 2,880 and 15,360 jobs in [Ontario and Quebec alone, along with] a reduction of between \$225 million and \$1.2 billion in gross domestic product."³⁶

Facts and Evidence

- Empirical analyses have shown that every \$1M reduction in broadband/fibre-to-the-home investment results in between 20 and 40 lost jobs (depending on whether spillover effects in industries like healthcare, energy and education are included).
- Similar analyses have shown that economic output (GDP) shrinks by approximately \$3.2M for every \$1M in lost fibre-to-the-home investment.³⁸
- Regions with full fibre-to-the-home deployment are associated with a 3% increase in employment compared to those that do not.³⁹

- Bell Canada's anticipated annual fibre-to-the-home investment in Ontario and Quebec of \$1.2 billion could decline by between \$72 million and \$384 million as a result of the CRTC decision.
- Telus has announced fibre-to-the-home investments of \$1 billion each in Edmonton and Vancouver and Telus, SaskTel and MTS are each investing in fibre-to-the-home in other communities as well. Applying the same analysis to these investments could nearly double the expected losses in jobs and growth that will result from the CRTC's decision over time.

2.4 <u>FTTH Investment Injects Billions of Dollars of Capital Into The Struggling Canadian Economy</u>

Now is not the time to discourage investment in industries that are otherwise willing to maintain it in the face of a collapse in oil prices, recession in Alberta, and sluggish growth across the country. Now is the time to encourage companies to invest with confidence in Canada's economic future. With the announcement of a \$20 billion capital investment plan this summer, it's obvious Bell does not want to sit on "dead money." And the jobs at stake in this Petition are on par with the cuts made this year by some of the largest Canadian oil sands producers or with the jobs lost across the entire Ontario manufacturing sector over the last two years.

³⁶ Singer Report at page 6.

³⁷ Singer Report at page 26.

³⁸ Singer Report at page 27.

³⁹ Singer, Caves and Koyfman Report at page 1.

⁴⁰ Singer Report at page 2.

John Shmuel, "Canada officially in a recession as GDP shrinks 0.5% in second quarter" *Financial Post* (1 September 2015).

Les Whittington, "Corporations' stockpile of 'dead money' tops \$500 billion: CLC report" *The Toronto Star* (29 January 2013), available at http://www.thestar.com/news/canada/2013/01/29/corporations_stockpile_of_dead_money_tops_500_million_clc_report.html.

30. As Canadian business leaders have noted:

As the commodity sector stumbles, there will be increased focus on other industries that can pick up the slack and help drive growth and jobs. "It's about innovation; it's about services," said John Manley, head of the Council of Chief Executives, which represents the country's largest corporations. There are vast opportunities in tradeable services — such as data management, telecommunications, financial services and consulting — as well as the production of goods, including manufacturing, agri-food and processing of raw resources, he said... Infrastructure spending is critical so long as it is targeted at productive assets, such as transportation, telecommunications and energy links⁴³

- 31. The CRTC states its decision may encourage "competitor investment in alternate transport facilities" that could contribute to "develop[ing] a more robust telecommunications system. Not only is the CRTC decision unlikely to result in any material new investments in transport by competitors, even if it did, these investments could not possibly offset the lost investment in fibre-to-the-home.
- The CRTC acknowledged in its decision that transport services are already competitive in light of the fact that they have been and can be widely duplicated. By contrast, fibre-to-the-home access facilities have not been built out in the vast majority of communities. Competitors will not invest in transport links that have already been widely duplicated but even if they did, it will hardly "develop a more robust telecommunications system" to encourage minor investments in something that is already in ample supply at the expense of major investments in something that is not. It is the introduction of fibre-to-the-home access links and the massive investment that entails, not any minor investment by Reseller ISPs in the duplication of existing transport links, that will transform the consumer experience and provide the greatest benefits to Canadians and the economy.

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Barrie McKenna, Shawn McCarthy, and Jeffrey Jones, "Rebranding the Canadian economy in the wake of the oil slump" *The Globe and Mail* (11 September 2015).

¹⁴ TRP 2015-326 at paragraph 139.

Facts and Evidence

- The entire Canadian oil sector is expected to reduce its capital investment by \$23 billion in 2015, the same year in which Bell on its own made a new capital commitment of \$20 billion over five years. 45
- The companies investing in fibre-to-thehome in Canada currently employ more than one in every 165 working Canadians.
- At the high end of the range, the jobs saved by granting this petition (15,360) would be greater than all of the manufacturing jobs lost in Ontario in the last two years.
- At the low end of the range, the jobs saved by granting this Petition (2,880) would be equal to all of the job cuts in Canada announced by Suncor, Cenovus, and Shell combined in 2015 as of July 30th.⁴⁷

3.0 THE POLICY CHOICE FOR GOVERNMENT

- This is certainly one of the most critical regulatory decisions Canada has faced in the communications sphere since the introduction of local telephone competition in the 1990s. The outcome will fundamentally affect the future of the Canadian economy. The best modern broadband networks will be critical 21st century infrastructure, supporting a thriving digital, information and knowledge economy creating well-paid, highly skilled jobs, giving Canadian businesses access to the infrastructure they need to remain globally competitive, and providing Canadians in urban and rural areas with access to new technologies like 4K television, ultra high speed video streaming from Canadian services CraveTV and Shomi and United States based Netflix, and next-generation distance learning, telehealth and other innovative online learning tools for years to come.
- 34. The decision is therefore deserving of careful thought and reflection, including consideration of its long-term impact from the broader perspective of jobs, the economy, and Canadians' desire to be world leaders.
- 35. Figures 1 and 2 below demonstrate that Canada has led the way in broadband deployment. This world leadership position has been made possible through the willingness of facilities-based providers like Bell to invest. The CRTC's decision to mandate access to newly and not yet built fibre-to-the-home networks will erode this leadership position over time, just as past decisions of European regulators to mandate access to NGNs have caused many countries there to fall behind other developed nations in terms of investment, speed, and adoption of next-generation broadband.

Barrie McKenna, Shawn McCarthy, and Jeffrey Jones, "Rebranding the Canadian economy in the wake of the oil slump" *Globe and Mail* (11 September 2015).

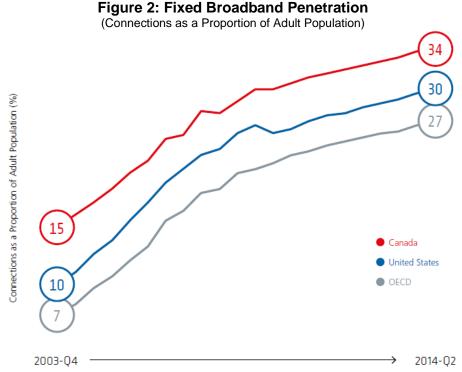
Statistics Canada. Table 282-0088 - Labour force survey estimates (LFS), employment by North American Industry Classification System (NAICS), seasonally adjusted, comparing August 2013 to August 2015.

Geoffrey Morgan, "Cenovus and Shell slash jobs and spending, Suncor profit surprises" *Financial Post* (30 July 2015), available at http://business.financialpost.com/news/energy/suncor-energy-inc-cenovus-energy-inc-and-shell-slash-jobs-and-spending-as-oil-carnage-continues? Isa=425f-9675.

(Average 2011-2013)
\$200
\$150
\$50
\$50
\$Integrated and the later that the later that the later than the later th

Figure 1: Investment per Access Path

Source: OECD Digital Economy Outlook 2015, Table 2.30. Total communications access paths include analogue line + ISDN lines + DSL + cable modem + fibre + mobile.



Source: Eisenach, Broadband Market Performance in Canada: Implications for Policy.

36. Figures 3 and 4 below show that Canadians have benefited from the build out of broadband by facilities-based providers. Figure 3 shows that Canada is a world leader in terms of bandwidth consumption across its broadband networks, and Figure 4 shows that Canadians enjoy some of the fastest broadband connection speeds available in developed countries, ranking ahead of, the United States, and well ahead of the United Kingdom, Germany and

Australia, a remarkable feat considering Canada's low population and challenging geography. The CRTC's decision puts these critical achievements at risk.

(2014)73.5 66.2 51.6 51.5 3B/Month/User Global 24.9 23.5 23.3 22.1 21.2 20.6 Average 18.5 18.3 18.2 16.6 16.6 15.6 14.7 21.4 Sweden Canada France Russia Chile Poland Mexico China South Korea **United States** Japan Australia Brazil Spain Italy India United Kingdom New Zealand Germany Argentina Saudi Arabia South Africa Indonesia

Figure 3: Internet and IP Traffic Per User

Source: Eisenach, Broadband Market Performance in Canada: Implications for Policy.

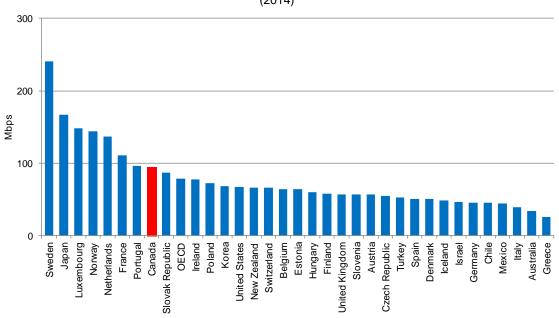


Figure 4: Average Advertised Connection Speeds (2014)

Source: OECD Digital Economy Outlook 2015, Table 2.39.

- 37. The policy choice the Governor in Council faces is clear. By granting the Petition the Government can benefit consumers in the short and long term, and propel Canada's broadband leadership by supporting billions of dollars in investment entirely from private resources, creating thousands of jobs, and including in the broadband economy communities large and small, urban and rural, right across the country. The fibre-to-the-home networks built as a result will become foundational 21st century infrastructure that delivers enduring benefits to consumers and the economy.
- 38. The alternative is to allow the CRTC's decision to stand unaltered, following the approach that has caused Europe to fall behind other modern economies when it comes to broadband infrastructure. If the CRTC's decision stands, competition will be less durable and effective and Canadians outside the largest urban centres will increasingly be left behind as fibre-to-the-home infrastructure projects in their communities are delayed or simply not undertaken.
- 39. Blair Levin, who was chief of staff to the Chairman of the FCC during the Clinton administration and then co-chaired President Obama's technology, innovation and government reform transition team before becoming Executive Director and the chief author of the United States National Broadband Plan, explained the choice that policy-makers face:

As Google Fiber... started evaluating [with the team developing the National Broadband Plan] the economics of building a fiber network, it concluded that building a network that it shared with other providers would not make economic sense, even on an unregulated basis. Google, therefore, decided to proceed with a proprietary model. If the government had required open access that required Google to share its infrastructure with competitors, Google Fiber would have been stillborn...

The lesson here is competition does not arise from the desire for it; it comes from rules that attract investment into competitive networks.

But it is not enough to simply steer clear of the dangers of unbundling or forcing companies to share their infrastructure with competitors. If government is going to rely on competitive facilities to deliver abundance, it has an obligation to adopt policies that affirmatively make such networks economically viable.⁴⁸

40. This view is now also shared by EU Commissioners, who have recently explained that:

We must make investments in the highest capacity networks rewarding and

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Blair Levin, "What have we learned from Google Fibre?" *CNET* (31 July 2015) available at http://www.cnet.com/news/what-have-we-learned-from-google-fiber/.

consider how regulation could increase incentives for incumbents and more recent competitors. We should reward those who take risks and build future-proof digital networks by letting them use that comparative advantage in competition with others. 49

3.1 Experience in the Rest of the World

- The experiment of applying old legacy mandated access regulation to NGNs has been tried before in other jurisdictions and it has failed.
- In the United States, the regulatory regime provided for mandated access to NGNs including fibre-to-the-home until 2003-2005. During that time, next-generation fibre networks were not extensively deployed because, as SBC Communications Inc. (now AT&T) explained, the "pervasive regulations and uncertainty concerning what regulatory rules will apply when [AT&T] deploys and provides broadband and advanced services has become an anchor on the company." Following the elimination of mandated access obligations beginning in 2003, ILECs in the United States began announcing initial plans to build out fibre networks and as mandated access was fully eliminated telcos and independent third parties like Google rolled out fibre networks in communities across the country.
- Figure 5 demonstrates that when mandated access regulations applied to large facilities-based carriers in the United States, investment in next-generation broadband networks slowed to a crawl. But when these restrictions were lifted by the regulator, broadband investment by these same facilities-based providers exploded. Why? Because the removal of mandated access restored the business case for investing capital in broadband.

Günther H. Oettinger, "Future proof telecom rules for a Digital Single Market" (11 September 2015), available at https://ec.europa.eu/commission/2014-2019/oettinger/blog/futureproof-telecom-rules-digital-single-market en.

See the *Triennial Review Order*, issued in 2003, the *Fiber-to-the Curb Order* and *Multi-Dwelling Unit Order* both issued in 2004, the *Triennial Review Remand Order*, adopted in late 2004 and issued in early 2005, and the *Wireline Broadband Order*, issued in 2005.

⁵¹ SBC Communications Inc., Quarterly Report to Shareholders 2001, page 1.

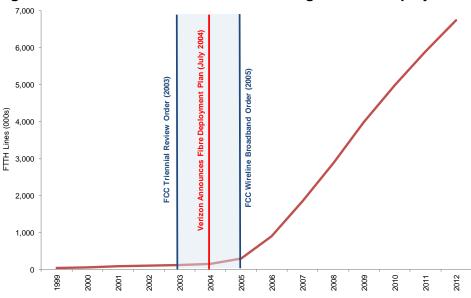


Figure 5: U.S. Decisions on FTTH Unbundling on FTTH Deployment⁵²

The Canadian and United States markets have a similar structure, with each benefitting from widespread facilities-based competition. The Chairman of the FCC appointed by President Obama explained at a recent conference the appropriate approach for a regulator in such a market:

We are arbiters of last resort, not first resort. We will not micromanage networks as was done in the pre-broadband days. This means no retail rate regulation, no network unbundling, and no tariffs. In short, no "utility style regulation." ... This point about private investment flows naturally into the second big theme of the conference: connecting the unconnected. In the United States, the primary means through which we achieve widespread deployment of robust broadband networks is private sector investment. ⁵³

Where it has been tried in Europe mandated access has resulted in minimal deployment of NGNs and "the situation is close to disastrous." As Dr. Renda explains, "[i]f mandating access to 'essential facilities' was a potentially justifiable approach for legacy copper networks, problems have become even worse for high-speed broadband networks," which have mostly not been built even today due to the decision to apply legacy regulations to them. As a result,

Based on Figure 4 of Tramont, Hanser and Gillen, *Telecommunications competition in the US: An assessment of wholesale regulatory policy and its consequences*, filed as Attachment 2 to the Intervention of Bell Canada in the proceeding leading to TRP 2015-326.

Tom Wheeler, Remarks Prepared for the International Institute of Communications Annual Conference, Washington, D.C. (7 October 2015), available online at https://www.fcc.gov/document/remarks-chairman-international-institute-communications-event

Andrea Renda, Regulating Broadband: Lessons From the European Union, and Implications for Canada [Renda Report] at page 3.

⁵⁵ Renda Report at page 2.

"Europe today lags behind the US, Canada, Japan and South Korea in terms of investment, speed, and penetration of fast and ultra-fast broadband." ⁵⁶

Regulators in Europe are now struggling to move away from this counterproductive policy choice (something which is more difficult to do than never setting down the road of mandated access to fibre-to-the-home in the first place). The European Commission has noted that mandated access "even for a fair remuneration[,] may undermine undertakings' incentives to invest and innovate and, thereby, possibly harm consumers." It has therefore proposed removing direct regulation of prices for wholesale access to NGNs like fibre-to-the-home when there is a facilities-based competitor present. This would certainly be the case in Canada given the ubiquitous overlap of telco and cableco infrastructure. Indeed, as Dr. Renda explains, even regulators in Europe would not impose mandated access on telcos in Canada given the prominence of cable broadband here.

Facts and Evidence

- The United States has rejected access regulation for fibre-to-the-home and Europe is moving away from its current model given the negative impact on infrastructure investment.
- In the United States "[d]ata show that FCC decisions issued between 2003 and 2005 [removing access regulation] led to a precipitous uptick in fiber and xDSL investment" and telco wireline broadband capital expenditures increased by 24% and continued at that level. 59
- Like the United States, South Korea has not imposed any regulatory obligation on fibre networks constructed since 2004.
- The European Commission has acknowledged that access regulation has not stimulated investment in high speed broadband, and is trying to introduce a more investment-friendly regulatory framework.
- Countries that have relied extensively on access regulation, like the United Kingdom, today feature 1% coverage of fibre-to-the-home (and zero coverage in rural areas).

3.1.1 FTTH is Different from Existing Regulated Legacy Infrastructure

Fibre-to-the-home networks are different from legacy networks in a number of ways that make legacy regulation inappropriate and likely to have a much greater negative impact on investment. First, there is no traditional "incumbency" advantage when building fibre-to-the-home networks. Networks that have traditionally been regulated have included copper loops or

Renda Report at page 2.

⁵⁷ See European Commission recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment - C(2013) 5761, 11 September 2013, available at t http://ec.europa.eu/digital-agenda/en/news/commission-recommendation-consistent-non-discrimination-obligations-and-costing-methodologies.

See Attachment 2 to the Intervention of Bell Canada in the proceeding leading to TRP 2015-326.

⁵⁹ Ibid.

⁶⁰ Renda Report at page 3.

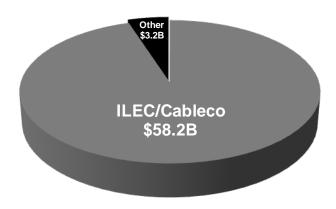
drop wires (for telcos) and coaxial cable (for cablecos), elements that had been built in a regulated monopoly environment that has long since ended. Fibre-to-the-home does not use any part of these old networks: from the equipment in the central office to the fibre optic cable entering each customer's home, every piece of the network is built specifically for this purpose and launched into an environment that already includes multiple competitors. None of the historic reasons for monopoly-era regulation apply here.

- 48. For the same reason, all potential service providers start from the same position when considering a fibre-to-the-home build. In fact, in some cases new entrants, unencumbered by legacy cost and technology issues, can actually have an advantage. This has seemed to be true at least in respect of Google Fiber in the United States.⁶¹
- 49. Another way in which fibre-to-the-home is different from regulated legacy infrastructure is that these networks are being built using private resources without relying on public assets or public subsidies, unlike networks funded through federal government programs. There is no "regulatory bargain" when fibre-to-the-home networks are built: there is no basis for expropriating these massive private investments. 62
- As Figure 6 below demonstrates, facilities-based providers have always led the way in terms of wireline investments in fixed broadband. The CRTC's decision is premised upon the assumption that mandated access will encourage Reseller ISPs to invest in their own infrastructure. But this has not happened in Canada, even after the CRTC mandated access to FTTN networks in 2010.

The following companies are also building fibre-to-the-home networks in Canada: Beanfield, Wightman, Bruce Telecom, Maskatel, Urban, OneGigabit, and Novus Communications.

In fact, to the extent there was any regulatory bargain, the bargain was that if a company chose to invest in fibre-to-the-home the government would not expropriate the benefits by mandating access – as confirmed in CRTC decisions in 2008 and 2011.

Figure 6: Wireline Capital Expenditures (2006-2014)



Source: IDC, Canadian Communications Service Provider Capex Budgets, 2013-2014.

3.2 No Corresponding Benefit for Canadians

Key Points

- The CRTC decision does not point to any benefits of mandating fibre-to-thehome access that would offset the lost investment, jobs, and contribution to Canada's economy.
- The CRTC decision chooses the perceived short term benefits of resale competition over the short and long term benefits of facilities-based competition, which is widely acknowledged to deliver greater and more enduring benefits to Canadians.
- The benefits of the CRTC's decision will accrue exclusively to a small number of ISPs in Ontario and Quebec and not to consumers.
- Given the crucial importance for Canadians and the future of Canada's economy of building fibre-to-the-home infrastructure, policymakers should expect to see certain and significant demonstrable benefits of mandating access before such a step would be taken. The Governor in Council must compare the potential for billions of dollars in lost investments, thousands of lost jobs, lower productivity across the economy, and a deepening of the digital divide against the limited benefits of mandating access to fibre-to-the-home as expressed by the CRTC decision.

3.2.1 No Benefits from Increased Competition

- The Canadian broadband market is intensely competitive as a result of the investment and competitive activity undertaken by the facilities-based competitors: telcos, cablecos, and satellite and wireless providers. This is confirmed by Dr. Renda in his report and by the fact that, given the extent of facilities-based competition in Canada, regulators in Europe would not mandate access in Canada at all, let alone for fibre-to-the-home.⁶³
- Only facilities-based competition provides all the benefits of a competitive market for consumers. Facilities-based competitors not only compete to have the lowest prices today but also to drive down costs, innovate, and increase quality over time, which those who do not invest in their own facilities cannot do. The government and regulators in Canada have long agreed that competition between facilities-based providers that have maximized investments in their own networks and services is the only way to ensure Canadian citizens and businesses have robust, timely and lasting access to new technologies and to ensure choice and affordability over the long term.⁶⁴ The CRTC's decision undermines rather than promotes facilities-based competition.

Facilities-Based Competition vs. Resale Competition

"Facilities based competition is much more beneficial to economic efficiency than is resale competition Facilities based competition creates important dynamic economic efficiencies as carriers compete to lower their costs so they can lower their prices. Carriers also compete to offer new services to consumers which are another important form of dynamic efficiency. To the contrary, resale competition does not cause these dynamic economic efficiencies to occur.... Facilities based competition eliminates the need for further regulation because market based

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Renda Report at page 2.

See e.g. Telecom Decision CRTC 92-12, Competition in the Provision of Public Long Distance Voice Telephone Services and Related Resale and Sharing Issues (12 June 1992) ("The Commission does not consider that resale and sharing, absent facilities-based entry, would provide a sufficiently sustainable form of competition"); Telecom Decision CRTC 2008-17, Revised regulatory framework for wholesale services and definition of essential service (3 March 2008) (The right "framework for wholesale services sends the correct regulatory signals to all TSPs, thereby increasing incentives for investment in, and construction of, competitive telecommunications network facilities."); Competition Bureau, Submission in CRTC 2013-551 (27 June 2014) ("Facilities-based competition is beneficial because such competition is most likely to lead to robust and effective long-term competition. This is consistent with the Federal Government's Policy Direction ... [and] with the objectives set out in section 7 of the Telecommunications Act... service providers that control their own end-toend networks have greater incentives for investment, innovation and cost efficiency than... resellers and providers that rely on unbundled ILEC network elements. Similarly, ILECs that are not forced to share their networks have greater incentives to invest and innovate at the network layer."); and Order in Council P.C. 2007-71 ("the Governor in Council considers that facilities-based competition is a durable form of competition that delivers the greatest benefits to consumers, imposes competitive market discipline on incumbents and strengthens investment in telecommunications infrastructure").

competition determines prices and services offered." Prof. Jerry Hausman, MIT⁶⁵

The Canadian broadband market exhibits all of the features of a competitive market, including intense rivalry and rapidly changing market shares. Evidence at the hearing, not addressed by the CRTC in its decision, showed that some of the lowest prices and best value services were offered in the Maritimes and in western Canada where Reseller ISPs are effectively not present. The Competition Bureau submitted based on the data available that "strong competition" exists and supported its 2008 position that mandated access was not necessary for a competitive broadband market. The CRTC has not explained how, in the face of all this evidence, it could conclude that an expansion of mandated access is necessary.

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Jerry Hausman, cited in Cable & Wireless Optus, Submission to the Productivity Commission's inquiry into International Telecommunications Market Regulation, available at http://www.pc.gov.au/inquiries/completed/international-telecommunication/submissions/5/sub005.pdf.

See the response to interrogatories of the Competition Bureau in the proceeding leading to TRP 2015-326, at Bureau(Primus)29Aug14-17.

- Canada's telcos and cablecos have invested over \$58 billion dollars in wireline networks since 2006,⁶⁷ and Canada is 3rd out of 33 OECD countries in terms of average investment per total communications access path (2011-2013).⁶⁸
- By 2013, 81% of Canadian households had access to broadband of 25 Mbps or more and 81% to LTE wireless networks.⁶⁹ The breadth of access and speeds will both have increased since then.
- Canada is 4th among G20 nations in terms of percentage of connections faster than 4 Mbps.⁷⁰
- Canada's broadband speed is higher than would be predicted based on population density.⁷¹

Facts and Evidence

- Canada has among the highest levels of broadband penetration in the world.⁷² Canada's wireline broadband penetration is higher than would be predicted based on population density.⁷³
- Quality adjusted prices have fallen by up to 60% since 2008⁷⁴ and broadband pricing in Canada is in line with international peers and cheaper than the U.S.⁷⁵ Again, taking population density into account, Canadian broadband prices are lower than predicted.⁷⁶
- Canada is a global leader in broadband usage measured in hours, and visits.⁷⁷ In 2014, the average Internet household generated 56 gigabytes per month of data, 4th in the G20.⁷⁸
- Demonstrating the competitiveness of the market, cable share of subscriber additions increased from less than 50% in 2002 to approximately 80% in 2008, and since then ILECs have battled back with their share of subscriber additions increasing from approximately 20% to approximately 60%.⁷⁹

3.2.2 Benefits Accrue Exclusively to a Small Number of Reseller ISPs

The evidence at the hearing showed that where the CRTC makes decisions that benefit Reseller ISPs (such as lowering wholesale rates), these benefits are not passed on to consumers. In the CRTC's hearing, Reseller ISPs were required to file evidence on how their retail rates changed following earlier reductions in the wholesale rate they pay.⁸⁰ In the vast majority of cases, their retail rates did not change at all, even when the CRTC reduced their

International Data Corporation (IDC), Canadian Communications Service Provider Capex Budgets, 2013-2014, Figure 34.

OECD, *Digital Economy Outlook 2015*, Table 2.30. Total communications access paths include analogue lines, ISDN lines, DSL, cable modem, fibre and mobile.

⁶⁹ CRTC, Communications Monitoring Report 2014, Tables 5.3.12 and 5.5.0.

Akamai. State of the Internet 2nd Quarter 2015.

Jeffrey A. Eisenach, *Broadband Market Performance in Canada: Implications for Policy* [Eisenach Report] at page 34.

Eisenach Report at page 3.

Eisenach Report at page 35.

Jeffrey Church and Andrew Wilkins, 2015, "Residential Wireline Telecommunications Services in Canada: Primary Exchange Services and Broadband 2015," Table 2.1.3 and Table 2.1.4, available at https://econ.ucalgary.ca/manageprofile//sites/econ.ucalgary.ca.manageprofile/files/unitis/publications/1-6291150/DEP Wireline Database 2015 March 25 2015.pdf.

Wall Communications Inc., *Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions:* 2015 Edition, March 2015, (Wall Report) available at http://www.crtc.gc.ca/eng/publications/reports/wall2015/rp1506wall.pdf.

Eisenach Report at page 32.

comScore Inc., Canada Digital Future in Focus 2015: The 2014 Digital Year in Review & Predictions for the Year Ahead, page 6.

⁷⁸ Cisco, Visual Networking Index (VNI) Forecast Highlights 2014-2019, available at http://www.cisco.com/web/solutions/sp/vni/vni forecast highlights/index.html.

See Attachment 2 to the Intervention of Bell Canada in the proceeding leading to TRP 2015-326, Figure 12.

See paragraphs 44 to 51 of the Reply Comments of Bell Canada in the proceeding leading to TRP 2015-326.

wholesale rates dramatically. In some cases, their retail rates actually increased. This emphasizes that it is Reseller ISPs, not consumers, that benefit the most from CRTC regulation.

- In the past, Reseller ISPs have sometimes claimed that the advantages they get from regulation allow them to later invest in their own networks. For example, in 2010 TekSavvy claimed that if it received a favourable decision from the CRTC on FTTN regulation it would invest in building fibre-to-the-home. Instead, after getting the speed matching it was seeking and a significant wholesale rate cut, TekSavvy made no new investments and got out of fibre-to-the-home entirely. The evidence before the CRTC was clear that, after more than two decades of advancing this claim, Reseller ISPs have not translated the benefits they get from regulation into any material investment in next-generation Internet access facilities like fibre-to-the-home.
- That this decision focuses on the demands of Reseller ISPs rather than what will benefit consumers is confirmed by the fact that fibre-to-the-home access will be introduced first only in Ontario and Quebec. The record clearly shows that this is where Reseller ISPs are already the most successful, without any need for fibre-to-the-home access. If a significant Reseller ISP presence in the market was necessary to deliver benefits to consumers (which it is not), the CRTC should have mandated fibre-to-the-home access across Canada.
- There is a fundamental unfairness in allowing established providers based in other areas of the country (such as MTS Allstream and Telus) to have forced access to Bell's fibre-to-the-home networks in Ontario and Quebec without having to reciprocate in their home provinces. To be clear, we are not seeking mandated access to their fibre-to-the-home networks; like us, they should be able to reap the benefits (and bear the risks) of their own fibre-to-the-home deployment. This regional imbalance does undermine the approach taken in the CRTC's decision, and illustrates the disproportionate impact this decision will have on those in Ontario and Quebec, particularly in smaller centres and rural areas, who will become the most likely to be left behind (and suffer the economic consequences) as 21st century digital infrastructure is being built out in the rest of the country.

3.3 Contrary to Well-Accepted Policy and the Interests of Consumers

Key Points

- The CRTC decision is at odds with well-established telecommunications policy in Canada and is out of step with the policies being adopted by regulators in other countries.
- The CRTC decision will ultimately be unpopular with consumers, who have demonstrated that they want the best services, not just more competitors.

3.3.1 Contrary to Canada's Policy and the Direction of the Rest of the World

- Ten years ago the Telecommunications Policy Review Panel, appointed by the previous Liberal government, concluded that market forces could achieve most policy goals and that "it should no longer be possible or desirable for regulators to 'micro-manage' the industry to achieve a planned industry structure." The Policy Direction was subsequently delivered in 2006, based on the Panel's report, to "mandate that the CRTC should rely on market forces to the maximum extent feasible and regulate, where there is still need to do so, in a manner that interferes with market forces to the minimum extent necessary." The Policy Direction was one element of a "broader telecommunications policy agenda to decrease regulatory burden and make regulation more efficient and effective through increased reliance on market forces." This position was supported by the Competition Bureau in 2008 and again last year. It remains the telecom policy for Canada yet the CRTC's decision provides no substantive explanation for undermining it.
- Not only is the CRTC decision contrary to Canada's existing telecom policy, it is out of step with the direction regulators are moving in the rest of the world. As described above, the United States rejected mandated access for NGNs more than a decade ago while European regulators are in the process of moving away from it.

83 Ibid.

⁸¹ Telecom Policy Review Panel, *Final Report* (2006) at page 3-3.

Regulatory Impact Analysis Statement of the Policy Direction.

3.3.2 Not in the Best Long-Term Interests of Consumers

- Interfering with policies that encourage facilities-based competition and investment in NGNs will inevitably fail to deliver what Canadians want, which is not just more companies selling the same services on the same networks, but more network and service choices that offer the best quality at the highest speeds.
- 62. Consumers demonstrate this demand for quality time and again in the telecommunications sphere, such as when they choose the best (and often most expensive) mobile devices like the newest Apple iPhone or Samsung Galaxy over cheaper alternatives. They want our country to have the best telecommunications technology in the world.
- Regulation must deliver to consumers what they want. Even if resale competition could deliver some perceived short term benefits, the question will quickly become "resale of what?" Consumers expect to be able to access the best networks from multiple facilities-based providers. When the CRTC's decision reduces investment, and consumers across Canada find that they are falling behind those in the largest cities here and across the United States, they will be understandably frustrated. Rather than accept such an outcome, Canada can be a broadband world leader by refusing to implement legacy mandated access rules to brand new fibre-to-the-home networks, clearing the way for the massive private investments required to build this infrastructure in communities of every size across the country.
- For all of the above reasons we ask the Governor in Council to vary the CRTC's decision so that it does not implement legacy wholesale regulation for fibre-to-the-home nor, recognizing the stated desire for regulation to maintain competitive neutrality, to next-generation DOCSIS 3.1 cable networks. We would still have the obligation to provide Reseller ISPs access to our legacy broadband technology, where it exists (i.e., DSL and FTTN). Likewise, cable companies would still have an obligation to provide access to their legacy broadband (using DOCSIS 3.0 and providing broadband speeds up to 100 Mbps anywhere they have such plant today). Granting this Petition will enable Canada to maintain its global leadership position in broadband; a leadership position that has been achieved through private sector investment by facilities-based providers.
- 65. All of which is respectfully submitted.