PETITION TO THE GOVERNOR IN COUNCIL

FOLLOW-UP TO TELECOM ORDERS 2016-396 AND 2016-448 – FINAL RATES FOR AGGREGATED WHOLESALE HIGH-SPEED ACCESS SERVICES, TELECOM ORDER CRTC 2019-288

TELUS COMMUNICATIONS INC.

NOVEMBER 13, 2019
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**Appendix A:** TELUS Application to Review and Vary Telecom Order CRTC 2019-288, November 13, 2019

**Appendix B:** Expert Report of Dr. Jason Whalley and Paolo Gerli, November 12, 2019
1.0 INTRODUCTION AND EXECUTIVE SUMMARY

1. Broadband Internet deployment is recognized around the world as critical infrastructure for 21st century development. Broadband Internet is linked not only to economic success, but also to broad and wide-ranging policy outcomes for the environment, healthcare, and rural development. These policy outcomes are central to the objectives of the Government of Canada.

2. To date, billions of dollars have been invested in network infrastructure in order to deploy networks that deliver broadband Internet to Canadians across the country. These investments in network construction have been made by Canadian telephone and cable companies, known as facilities-based carriers.

3. When telecommunications regulation encourages facilities-based carriers to invest in network infrastructure, Canadians reap the broad socio-economic policy benefits that flow from the widespread deployment and adoption of broadband Internet networks. However, the opposite is also true: regulatory policies that destabilize or threaten future investment in infrastructure hinder the ability of Canadians to realize these policy benefits.

4. Currently, facilities-based carriers are mandated to share their infrastructure with direct competitors known as resellers. Resellers do not build their own infrastructure. Instead, they provide Internet service to their customers by connecting to the network infrastructure that is financed, built, owned and operated by facilities-based carriers. International experience, and sustained empirical evidence across time and countries, has demonstrated that mandated wholesale access policies drive down investment in broadband networks, depress digital adoption, and lead to poorer outcomes across a wide range of social and economic policy fields.

5. The wholesale rates that resellers pay to access the infrastructure that facilities-based carriers build are set by the Canadian Radio-television and Telecommunications Commission (the “Commission”). With respect to wholesale rates for aggregated high
speed Internet access services, interim rates were set at levels sufficient—if not always
optimal—for continued investment in broadband infrastructure since 2016.

6. In a surprising and destabilizing decision, on August 15, 2019, the Commission
slashed the 2016 interim rates and reset them so low as to threaten future investment
in the infrastructure necessary to deliver quality broadband Internet to Canadians
across the country (the “Decision”).¹ The Commission also ordered that these
dramatically low rates apply retroactively to March 2016, and consequently, that
facilities-based carriers pay hundreds of millions of dollars to these resellers. Resellers,
in turn, have no obligation to use these payments to issue retroactive credits to their
customers. The payments are a windfall to the resellers, with no corresponding benefit
to their customers.

7. The immediate cause of the low rates in the Decision is multiple costing errors made
by the Commission in determining the rates. While not the subject of this petition,
these costing errors are explained in more detail in TELUS’ review and vary
application filed with the Commission attached as Appendix A. However, these
costing errors are merely a symptom of a broader policy failing so vital as to warrant
Governor in Council intervention: the Commission’s unwillingness or inability to
engage with, and consider, the broader socio-economic interests of Canadians across
the country in a way that furthers, rather than hinders, the Government of Canada’s
stated policy objectives.

8. Telecommunications services—and their regulation—have policy impacts beyond just
the communications industry. Broadband Internet drives positive policy outcomes for
the environment, healthcare and rural-development. The Commission has in every
respect failed to take these considerations into account. By embracing mandated
wholesale access policies and setting rates that depress future investment, the
Commission is compromising the positive policy outcomes that broadband Internet
can deliver, especially for Canadians in rural and remote areas. The Commission is

¹ Follow-up to Telecom Orders 2016-396 and 2016-448 – Final rates for aggregated wholesale high-speed
charting a path not only disconnected from, but counter to, the Government of Canada’s broader policy agenda. In these circumstances, it is the duty of the Governor in Council to remedy this critical shortcoming and ensure that the Commission takes into account the broader interests of the public at large when determining its policies and regulations. At present, there is no coherence between the Commission’s narrow pursuit of its resale and pricing policies and the Government of Canada’s larger goals for the nation—particularly in healthcare and environmental matters. The Governor in Council needs to act to ensure that the Commission furthers, rather than frustrates, broader goals for the nation.

9. It is therefore imperative that the Governor in Council exercise its power under section 12 of the Telecommunications Act, refer the Decision back to the Commission for reconsideration in light of broader policy considerations, and vary the Decision to eliminate retroactive ratemaking, all as further particularized in Section 8 of this petition. This relief will allow the Governor in Council to efficiently remedy the destabilizing effects of the retroactive order, while also affording the Commission the opportunity to determine how precisely, within its framework, to best operationalize this policy guidance.

10. In considering whether to grant this relief, there are four key points for the Governor in Council to keep in mind when reading this petition.

11. First, when implemented in a manner that stimulates investment in broadband infrastructure, telecommunications policy is transformational, with economic and social impacts felt throughout the country. Consistent with the Government of Canada’s policy objectives, broadband infrastructure drives significant benefits in environmental policy, health policy, and rural and agricultural development. To illustrate this point, TELUS commissioned a report from Dr. Jason Whalley, Professor of Digital Economy, and Paolo Gerli, Lecturer, both of the Newcastle Business School,

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3 Telecommunications Act, S.C. 1993, c. 38, [Telecommunications Act], s. 27(1).
to review the literature on the benefits of broadband Internet in these four areas (attached as Appendix B).\(^4\) In particular, the Whalley-Gerli Report concludes that:

i. **Broadband adoption improves environmental outcomes**, as it enables telecommuting, cloud computing, and the emergence of “smart solutions.” These activities reduce greenhouse gases, improve energy efficiency, decrease traffic congestion, and change the way in which energy is generated and consumed. One US study found that over a 10-year period, telecommuting could reduce greenhouse gases by 600 million tonnes. Another UK study estimated that the use of cloud computing will eliminate around 1 billion kWh of electricity consumption, and save 0.24 million tonnes of CO\(_2\) by 2024.

ii. **Broadband adoption improves healthcare outcomes**, as elderly Canadians and those living in rural and remote areas can benefit from accessible care, shorter wait times and personalized medical attention. There are also financial benefits. For example, a New Zealand study estimated national healthcare savings of NZ$5.9 billion (approximately CDN$4.9 billion) resulting from the use of broadband supported technologies.

iii. **Broadband adoption helps rural and remote communities** by increasing productivity in the agricultural sector, fostering economic development, building social cohesion, and improving access to healthcare. The benefits of “smart solutions” to the agriculture sector have the power to be transformational: these solutions can monitor farm equipment, provide data to farmers to shape investment decisions, analyze crop yields, monitor fertility cycles, automate farming processes, and track the outbreak of disease in crops and herds.

12. Second, while investment in broadband infrastructure can lead to transformational policy benefits, the opposite is true as well: dramatically low rates for wholesale access will depress future investment in broadband infrastructure, particularly in rural and

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remote areas. This will, in turn, lead to lower levels of network quality and innovation. To date, the Commission has largely implemented policies and regulations that encourage investment in network infrastructure and competition between facilities-based carriers. This has spurred network deployment across the country, and enabled sufficient investment in rural and remote areas, despite the relatively higher cost of investment due to Canada’s low population density and challenging geography. However, the mandated access policies and low rates exemplified in the Decision will compromise the socio-economic benefits of broadband Internet explained above, especially in rural and remote areas where the already challenging broadband business case may be completely eliminated. Moreover, such regulation is unjustified in Canada’s already competitive broadband marketplace. Instead of mandating artificially low wholesale rates, the Commission should rely on market forces and allow consumers to determine market success.

13. Third, by applying the rates retroactively, and requiring hundreds of millions in payments to resellers, the Commission has destabilized regulation and increased the risk for future investments in broadband infrastructure. Rate setting is intended to foster stability in the regulatory process, yet the Decision does the opposite. This instability is compounded by the fact that the Commission took three years to set the final wholesale rates. Regulatory uncertainty raises the cost of capital for facilities-based carriers who invest in broadband infrastructure, without any risk sharing on behalf of the resellers who purchase access at harmfully low rates. The result is decreased investment in broadband infrastructure, as capital-intensive projects are put on hold, and access to capital markets is compromised.

14. Fourth, the Decision is inconsistent with the telecommunications policy objectives set out in the Telecommunications Act and with both the 2006 and 2019 Policy Directions from the Governor in Council. Among other things, the 2006 Policy Direction

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6 Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives, SOR/2006-355 (the “2006 Policy Direction”); Order Issuing a Direction to the CRTC on
mandates the Commission to “rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives” and “when relying on regulation, use measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives.” The 2019 Policy Direction mandates the Commission to “ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas” and to “enable innovation in telecommunications services”. For the reasons set out above, the Decision does exactly the opposite of what is required by both Policy Directions.

15. Fifth, the Decision sets a dangerous precedent. The Commission’s determination that dramatically low, retroactively applied wholesale rates are “just and reasonable” as required by section 27(1) of the *Telecommunications Act* is particularly troublesome. The Commission has commenced multiple proceedings in which it may consider imposing new wholesale access obligations (for example, through mandating access for mobile virtual network operators) or will consider rates for existing wholesale obligations (for example, disaggregated wholesale high-speed Internet access to fibre-to-the-premises facilities). The unfortunate result, if not corrected now, is that the Decision will have a lasting and detrimental impact on future regulation, as Canada is on the cusp of hybrid wireless-wireline 5G networks and billions of dollars of investments are needed to make this a reality.

16. For the reasons set out below, the Commission has failed to take into account the broader interests of the nation, and has failed to take into account the range of policy interests impacted by its Decision to set, retroactively, low wholesale rates. The Decision thus warrants Governor-in-Council intervention to ensure the Government of Canada’s policy agenda is furthered—not fettered—by telecommunications regulation.

2.0 BACKGROUND TO THE DECISION AND GOVERNMENT’S ROLE

2.1 Background to the Decision

17. In 2010, the Commission mandated that telephone and cable companies provide wholesale high-speed Internet access (“HSIA”) to direct competitors, known as resellers.7 In general, resellers do not build or provide their own infrastructure. Instead, they connect their customers to network infrastructure that is financed, built, owned and operated by facilities-based carriers. Based on cost studies prepared by facilities-based carriers, the Commission sets the rates resellers pay for network access. The Telecommunications Act mandates that rates for network access, like all rates for telecommunications services, be “just and reasonable.”8 To meet this test, rates must be just and reasonable both to the company providing the service, and to the purchaser of the service.9

18. In 2011, the Commission set wholesale rates for HSIA provided over copper and coaxial cable using a technology known as “fibre-to-the-node” (“FTTN”).10 In 2016, the Commission reversed course and decided the rates were not just and reasonable to resellers, and converted the once final rates to new, lower “interim rates”.11 The Commission also initiated a proceeding to determine the final rates.

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7 Wholesale high-speed access services proceeding, Telecom Regulatory Policy CRTC 2010-632, August 30, 2010.
8 Telecommunications Act, s. 27(1).
19. The Commission took nearly three years to render the Decision on the final rates. On August 15, 2019, in Telecom Regulatory Policy CRTC 2019-288, the Commission set unprecedented low rates for wholesale access, even lower than the 2016 interim rates. The interim rates set by the Commission in 2016 were up to 89% lower than what the facilities-based carriers had proposed to charge at that time. As a result of the Decision, the final rates are now 15-43% lower than the 2016 interim rates for monthly capacity, and 3-77% lower for access rates (depending on the facilities-based carrier). For TELUS, on average, the final rates are 30% lower than the previous interim rates.

20. The Commission also ordered the final rates be applied retroactively to March 2016 (when the rates were first made interim). As a result, facilities-based carriers must now pay hundreds of millions of dollars to resellers in retroactive payments, with no corresponding benefit to customers. Resellers have no obligation to use these retroactive payments to issue credits to their own customers, and can simply add them to their profits. This is a transfer of significant capital from companies who invest in Canada’s networks to companies that do not.

21. The immediate cause of the low rates in the Decision is a series of critical costing errors made by the Commission, and TELUS has separately applied to the Commission to remedy the most critical such errors. A copy of TELUS’ application is attached as Appendix A. However, the technical errors that the Commission made are only a symptom of a larger problem, namely, the Commission's unwillingness or inability to engage with, and consider, the broader socio-economic interests of Canadians across the country in a way that furthers, rather than hinders, the Government of Canada’s stated policy objectives. It is this broader problem that forms the subject matter of this petition.

2.2 The Decision Warrants Government Intervention

22. The Telecommunications Act vests broad decision-making authority in the Governor in Council. Section 12 provides that within one year of a decision by the Commission,
on petition, the Governor in Council may “vary or rescind the decision or refer it back to the Commission for reconsideration of all or a portion of it”. Section 12 thus “implies the decision-making of Cabinet, a body of diverse policy perspectives representing all constituencies within government.”

23. The Governor in Council’s role is supervisory rather than appellate in character, having “the power to do what the Courts cannot do which is to substitute his views as to the public interest for that of the Commission”. In that sense, the Governor in Council reviews Commission decisions fresh or de novo, and “is not burdened with any standards or guidelines”.

24. While the threshold for government intervention is admittedly high, it is warranted in this extraordinary case. The Decision is a marked departure from the Commission’s duty to engage the socio-economic interests of the public at large. The Supreme Court of Canada observed that:

“Because of the importance of the telecommunications industry to the country as a whole, rate-making issues may sometimes assume a dimension that gives them a significance that extends beyond the immediate interests of the carrier, its shareholders and its customers, and engages the interests of the public at large. It is also part of the duty of the regulator to take these more far-reaching interests into account.”

(Emphasis added)

In this case, the Commission disregarded that duty by either ignoring or failing to take into account these far-reaching public interests. International experience and sustained multi-year, multi-country empirical literature reviews have demonstrated that

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14 CSP Foods v. Canada (Canadian Transport Commission), [1979] 1 FC 3 at 9-10 (CA).


mandated access policies drive down investment in networks, depress digital adoption, and lead to poorer outcomes across a wide range of social and economic policy fields. By setting low rates that depress future investment in broadband Internet, and retreating from its commitment to facilities-based competition, the Commission is charting a path not only disconnected from, but counter to, the Government of Canada’s broader policy agenda.

25. The Governor in Council has stated that its jurisdiction is animated when the range of factors affecting the policy issues is wider than that which the Commission could reasonably be expected to consider. Jurisdiction must also be animated when the Commission fails to consider critical policy issues. It is therefore incumbent upon the Governor in Council to ensure that the Commission’s decisions are consistent with the broader interests of the country, as it is uniquely positioned to ensure that Commission action is imprinted with, and in furtherance of, the broad, national policy perspectives represented at Cabinet.

26. The remedy that TELUS seeks is consistent with the concerns that animate Governor in Council action, as well as the institutional competence of the Commission. With respect to retroactive ratemaking, a variance will allow the Governor in Council to efficiently remedy the destabilizing effects of the retroactive order. With respect to the broader policy problems with mandated wholesale access at such low rates, an order not varying the Decision, but instead referring it back to the Commission, will allow the Governor in Council to exercise its supervisory duty to take into account broader policy perspectives, while also affording the Commission the opportunity to determine how precisely, within its framework, to best operationalize this policy guidance.

3.0 INVESTMENT IN TELECOMMUNICATIONS INFRASTRUCTURE BENEFITS THE ENVIRONMENT, HEALTH POLICY, AND RURAL DEVELOPMENT

27. Information and communications technologies (“ICT”) are expanding in speed and availability at astonishing rates, fueled by massive investments, and bringing the wide-
ranging benefits of broadband connectivity to millions of people.\textsuperscript{20} As companies invest in ICT, governments have increasingly seen positive affects across a range of policy fields. In Canada, three such fields have recently figured prominently in the political and policy discourse: the environment, healthcare, and rural development. The Whalley-Gerli Report illustrates the transformative potential of strong and sustained investment in broadband infrastructure.

3.1 \textit{“Fighting and Preparing for Climate Change”}

The Government of Canada has committed to take ambitious action to fight climate change, in part by committing Canada to net zero emissions by 2050.\textsuperscript{21} To achieve this goal, Canada requires significant investment in broadband infrastructure, which enables telecommuting, cloud computing, and the emergence of smart solutions.

i. \textbf{Telecommuting} has the potential to reduce greenhouse gas emissions as fewer cars are on the road, office construction is reduced, and businesses use less energy. A UK study suggested that telecommuting, underpinned by faster broadband, would reduce the distance travelled by UK commuters by 2.3 billion kilometers by 2024.\textsuperscript{22} An American study found that over a 10-year period, telecommuting could reduce greenhouse gases by 600 million tonnes.\textsuperscript{23} A recent study comparing energy savings from ICT-related activities between the United States and the five largest European Union Member States highlighted the significant environmental role that telecommuting can play, finding that 85% of the savings are attributable to telecommuting.\textsuperscript{24}

\textsuperscript{20} Robert W. Crandall, \textit{Investment in Next Generation Networks and Wholesale Telecommunications Regulation}, September 15, 2008 at p.4.
ii. **Cloud computing** benefits the environment by dramatically reducing paper storage. A UK study estimated that the use of cloud computing will eliminate around 1 billion kWh of electricity consumption, and save 0.24 million tonnes of CO$_2$ by 2024.$^{25}$ Environmental benefits also arrive from the use of online file storage, streaming music, sharing films online, and web banking and shopping. Research from Sweden suggests that faster Internet connections underpinning cloud computing increases the environmental benefits achieved.$^{26}$

iii. The **smart solutions** that form part of the Internet-of-Things reduce emissions associated with transportation and improve the energy efficiency of buildings. For example, ‘smart meters’ and ‘smart grids’ can change the way in which energy is both generated and consumed, improving efficiency and reducing consumption on the one hand and facilitating the growth of energy renewables on the other.$^{27}$

iv. Finally, the **wireline fibre connections** that underpin HSIA service reduce emissions. Research suggests that adopting an all fibre approach to broadband infrastructure deployment will substantially reduce greenhouse gas emissions across the EU. In fact, greenhouse gases are estimated to fall 88% per gigabit compared to a mix of cable and copper.$^{28}$ Another report states that the adoption of a full fibre connection will save 330 tonnes of carbon per person over a 15-year period. When this figure is applied over 100 towns and cities in the UK, an estimated 2.3 tonnes of CO$_2$ will be saved over the course of 15 years.$^{29}$

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3.2 “Building Stronger, Healthier Families”

29. The Government of Canada has committed to building stronger, healthier families. ICT, supported by broadband, can lead to greatly improved health policy outcomes. For example:

i. ICT can **tailor healthcare solutions to the specific needs of individual patients**. Remote monitoring of patients reduces the number of hospital visits, improves patient quality of life, and decreases patient and hospital costs. Doctors’ appointments and prescriptions can be obtained online. As patient data are collected and shared between healthcare professionals, it enables thorough, collaborative and innovative medical solutions. At the same time, ICT reduces time spent on bureaucratic tasks, frees up additional time for healthcare professionals to spend with patients, and improves data accuracy. TELUS is a leader in this space through its TELUS Health division, which leverages the power of ICT infrastructure to transform healthcare and improve health outcomes for Canadians.

ii. The application of ICT to healthcare also **saves money**. A New Zealand study estimated savings of NZ$5.9 billion (approximately CDN$4.9 billion) resulting

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from the use of ICT. An American study found that the economic benefit of telemedicine across the 24 mid-western hospitals varied from between $20,000 to $1.3 million per year, with the average gain being over $500,000 a year.

3.3 “Investing in Rural Success”

ICT, powered by fast and reliable broadband connections, also promises to greatly improve economic development, social cohesion, and healthcare in rural and remote areas, as well as increase revenues and productivity in the agricultural sector.

i. Broadband supports rural economic development. For example, telecommuting makes a variety of jobs accessible for those living in rural communities that would otherwise be unavailable without leaving the community. Broadband also allows creative industries to establish themselves in rural areas, overcoming the challenges associated with remoteness. Businesses are able to remain competitive by accessing distant markets by widening their geographic footprint. Research has found that rural communities close to urban areas (where broadband is more readily available) have a higher incidence of new firm formation.

ii. Broadband contributes to social cohesion and the empowerment of women in rural communities. Broadband facilitates communication between individuals who live in rural areas, allows the unique heritage and cultural characteristics of

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rural areas to be recorded and shared,\textsuperscript{39} increases civic engagement,\textsuperscript{40} and makes accessible a range of services, including financial, health and social services.\textsuperscript{41} Further, the adoption of ICT empower women. In examining how technology has been adopted on farms in Australia, not only was it found that women are more frequent users of ICT than men, but that its use elevated their status both within the farm and wider community.\textsuperscript{42}

iii. Broadband is also critical to “\textbf{smart agriculture}”. Smart agriculture devices can monitor farm equipment, enabling pre-emptive maintenance to occur, and provide data to farmers to shape their investment and operational decisions. It can analyze crop yields, identify where specific plant species are growing, monitor fertility cycles, and track the outbreak of disease in crops and herds. It can be applied to the use of fertilizers, to ensure that they are correctly applied to the areas that most need them. Farming processes can also be automated, reducing the need for labour on the one hand and improving animal welfare on the other.\textsuperscript{43}

\section*{3.4 \textit{“Building Strong Communities, Creating Jobs”}}

Finally, the Government of Canada has promised to build strong communities and create jobs. Investment in broadband infrastructure drives significant \textbf{job growth}. The

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construction of new communications facilities is itself a strong driver of new jobs. Other job growth in turn occurs as companies build their online presence and develop new innovative services and products.  

For its part, TELUS employs over 13,000 people in Alberta and British Columbia alone, and recently announced a $16 billion investment in Alberta that is expected to create 5,000 jobs. TELUS has also committed to invest $4.7 billion throughout British Columbia between 2017 and 2020. A significant part of this investment is a commitment to Indigenous communities, of which TELUS has connected 40 in British Columbia alone since 2013.

32. Increased broadband investment and adoption will only strengthen the potential for Canada to realize on these positive policy outcomes. But outmoded regulation that removes the business case to invest will threaten this progress. The Governor in Council now has the opportunity to truly invest in Canadians and foster an investment climate that will ensure the transformational nature of broadband Internet takes hold.

4.0 LOW RATES DEPRESS INVESTMENT, PARTICULARLY IN RURAL AREAS

4.1 Facilities-Based Competition Drives Investment

33. Mandating wholesale access and setting harmfully low wholesale rates is an irresponsible departure from the Commission’s otherwise successful track record of endorsing facilities-based competition, which the Commission itself considers the “ideal and most sustainable form of competition” because it drives investment,

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45 TELUS, *TELUS investing $16 billion in Alberta, connecting more homes and businesses to fibre and preparing for the future of 5G*, September 24, 2019.

46 Review of wholesale wireline services and associated policies, Telecom Regulatory Policy CRTC 2015-326, para. 5.
innovation, cost-efficiency and is “most likely to lead to robust and effective long-term competition.”

34. In a recent study, the Competition Bureau recognized the importance of facilities-based competition and associated investments in expanding and improving network infrastructure. Facilities-based carriers “engage in an important form of dynamic competition, working to outdo each other in order to offer the highest speeds and most reliable networks”. Importantly, the Competition Bureau warned of “the potential negative effects that a wholesale access regime can have on the incentives for facilities-based carriers to make the necessary investments to ensure that Canadians are served by world class communications networks.”

35. As a result of the Commission’s focus on facilities-based investment, over the past decade, the six largest facilities-based carriers have invested more than $67 billion to maintain, upgrade and expand their wireline networks. TELUS alone has invested $7 billion in wireline infrastructure since 2016. These are generational investments, with lengthy payback periods.

36. Study after study, including multiple international comparisons, have shown that jurisdictions that focus on service-based competition (as opposed to facilities-based competition) and promote policies like mandated access, promote less investment, fewer innovative technologies and poorer consumer outcomes. In contrast, the same evidence demonstrates that facilities-based competition leads to increased broadband penetration, as it stimulates capital spending and the deployment of broadband

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49 TD Securities Inc., We See Good Odds of the CRTC Decision Being Revised/Overturned, September 4, 2019.
networks.\textsuperscript{50} This research is not controversial. It is accepted by regulators and policymakers around the world.

37. The Decision is a shift away from facilities-based competition. This is particularly detrimental in a country like Canada, which has one of the lowest population densities in the world and very challenging geographical features, all of which considerably raise the cost of building and maintaining broadband networks compared to smaller and denser peer jurisdictions. This is particularly important to TELUS, since much of its operating territory is in rural British Columbia, Alberta and Eastern Québec, which is mountainous, remote and sparsely populated.

38. The Commission’s decision in \textit{Review of wholesale wireline services and associated policies}, Telecom Regulatory Policy CRTC 2015-326 ("TRP 2015-326") serves as a revealing case study about how fair and sensible wholesale access regulations can promote investment. In July 2015, the Commission mandated access to fibre-to-the-home/premises ("FTTH" or "FTTP"), a technology that brings fibre-powered Internet directly to a consumer’s house (as opposed to FTTN, which only takes fibre to an aggregation point and relies on copper to get the customer’s premises). The Commission decided that mandated access to FTTH would be implemented in phases, starting first by mandating access from Bell, Rogers, Vidéotron and Cogeco in Québec and Ontario.\textsuperscript{51} In practice, this means that TELUS is not yet required to offer wholesale access to FTTH at mandated rates.


\textsuperscript{51} The Commission then held separate proceedings to determine: (1) the appropriate structure for the implementation of a disaggregated wholesale system (Telecom Decision CRTC 2016-379) and (2) the interim wholesale rates to be applied to the new structure (Telecom Decision CRTC 2017-312). The decision on final FTTH wholesale rates is still forthcoming.
39. This delay in implementation has permitted TELUS to continue investing, and was recognized as important by financial analysts. For example, one analyst noted that “[w]hile TELUS is equally committed to deploying FTTH over the longer term, it will not be impacted by the initial transition given its Western Canadian footprint potentially deferring mandated FTTH access for years.”

40. As predicted, TELUS’ investment in Western Canada and Eastern Québec has continued to thrive because of the Commission’s decision to delay the implementation of wholesale FTTH access in TELUS’ incumbent serving territories. TELUS has increased infrastructure spending from approximately $1.7 billion per year in 2010 to over $3 billion per year in 2017. Recently, in September 2019, TELUS announced that it plans to invest $16 billion in Alberta through to 2023, an investment that is expected to create 5,000 jobs for Albertans. A significant portion of this money will benefit rural and remote communities. For example, in October 2019, TELUS pledged $190 million of that amount to operations and infrastructure investment in Grande Prairie, Alberta. As a result of this investment, fibre deployments have now been completed in more than half of TELUS’ operating area. This deployment is also critical to the implementation of 5G technology, as a strong 5G network is predicated on a strong fibre network, and TELUS expects to launch its 5G network in 2020.

41. The importance of proper costing was also critical in financial analysts’ assessment of TRP 2015-326, much of which stressed that investment would continue precisely because the Commission was likely to impose fair rates:

   i. “…[W]e believe the risk of an “unfair” tariff regime being implemented on FTTH for the incumbents is relatively low.”

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52 RBC, CRTC Releases Wholesale Wireline Decision, July 22, 2015.
53 Western Canada is not immune from the harmful effects of the Decision. It is expected that resellers will “ramp up efforts in all areas if access to fast, next generation broadband networks remains at low price points with minimal capex obligations.”
54 My Grande Prairie Now, TELUS pledges $190 million for Grande Prairie infrastructure, October 31, 2019.
ii. “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. As such, we would be surprised if the wholesale pricing is set at a level that would result in the telcos significantly altering their current fiber strategy.”

iii. “We expect the new pricing structure will provide a “reasonable rate of return” for incumbents – similar to the current arrangement for wholesale wireline pricing.”

42. In contrast, as a result of the low rates in the Decision and the Commission’s investment-depressing policies, financial analysts are now concerned that the final rates are too low, and that broadband investment will now suffer. TD Bank estimated that if the Decision stands, “[t]otal investments per annum in wireline/cable infrastructure in 2021 and beyond would be estimated to decline by about $1.68 billion in aggregate for the six publicly-traded telecom and cable companies.”

The National Bank of Canada noted that the Decision is “a curious calculus by regulator amidst market realities, challenges & coming 5g […] It’s interesting to observe the regulator looking to aggressively reduce wholesale Internet rates at a time when significant wireline spending is still occurring and another meaningful cycle of wireless spend is just ahead.”

43. And as predicted, facilities-based carriers have announced a reduction in planned capital expenditure in communications infrastructure, some of which are directly attributable to the Decision. For example:

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


TD Securities Inc., *We See Good Odds of the CRTC Decision Being Revised/Overturned*, September 4, 2019. The six publicly-traded telecommunications and cable companies include Bell, Rogers, TELUS, Shaw, Quebecor and Cogeco.

i. Bell announced that it has reduced the scope of its broadband Internet buildout for rural communities by 20%, affecting approximately 200,000 households.60

ii. Eastlink announced it will cut $50 million, or about 25% of its planned capital investments for the year, and scale back on rural connectivity improvements.61

iii. Rogers indicated it will conduct a review of all future investments in rural and remote communities.62

iv. Vidéotron has filed an application with the Commission to cease offering its fastest Internet speed service to its retail and wholesale customers in Québec.63

44. While TELUS has not yet announced any capital expenditure cutbacks, investment is and remains modular. A continued move away from facilities-based competition towards rates that do not justify investment—especially the generational investments needed to build out fibre and 5G facilities—will inevitably lead TELUS and other companies to re-evaluate planned investments. Simply put, TELUS cannot commit to continue building infrastructure if the country’s telecommunications regulator insists on making it unprofitable to do so.

4.2 Retail HSLA is already subject to strong competition from established resellers

45. Not only are lower rates destructive to investment, but they are also entirely unnecessary to promote competition. While the Commission stated in a news release that the low wholesale final rates set in the Decision will encourage more competition in the broadband market,64 this statement is incorrect and contradicts all credible evidence on the matter. Depending on location, Canadians have a choice among several types of broadband providers, including telephone companies, cable

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60 Bell, CRTC wholesale decision impacting investment in rural broadband networks, August 19, 2019.
62 Rogers, Rogers Disappointed by CRTC Decision on Final Broadband Wholesale Rates, August 19, 2019.
64 CRTC, CRTC promotes competition for broadband Internet services by setting lower wholesale rates, August 15, 2019.
companies, national wireless carriers, regional wireless carriers, regional facilities-based providers and resellers. Canadians also benefit from wireline broadband prices that are lower than those in similar countries throughout the world (despite Canada’s geographical and topographical disadvantages). It should come as no surprise, then, that the Economist Intelligence Unit recently ranked Canada the most competitive of 100 countries studied in its measurement of the concentration of the marketplace for Internet service provision.

46. In any event, before the Decision was made to cut wholesale rates even further, resellers were already firmly entrenched in the Canadian broadband industry. In its 2019 market study, the Competition Bureau found that where resellers have tended to focus their marketing efforts, they have acquired a substantial market share: 16.1% in the Greater Toronto and Hamilton area, 18.4% in the Southern Ontario region, 18.6% in the Montreal area, and 16.6% in the National Capital region. Thus, to the extent resellers have lower market share in certain areas, the obvious solution is for them to improve their marketing rather than seek to rely exclusively on regulatory arbitrage. Consumers are aware of resellers, some of which have been active for decades, and increasingly choose them over facilities-based carriers. Companies do not stay in business that long if they cannot attract customers.

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67 Competition Bureau Report, pp. 18-22.

68 Ibid.

69 Dippon Market Study, paras. 81-82.
47. This point was not lost on the Commission in the past. In speaking out against the Decision, David Colville, the former Vice-Chair of Telecom at the Commission, stated:

   My response to the resellers, who most often complained that the wholesale price was too high, was that we (the Commission) would allow resale to take place, however, it was not our mandate to guarantee their survival. I was not prepared to force facilities-based carriers to offer their services below cost simply to keep the resellers alive. That, in my view, is simply uneconomic and distorts an already competitive market. It is unreasonable, unfair and unbalanced.\(^{70}\)

48. In the end, the final rates established in the Decision not only threaten to dramatically decrease investment, but are entirely unnecessary to support competition, in light of the successes of resellers in recent years.

5.0 BY MAKING RATES RETROACTIVE FOR THREE YEARS, THE DECISION HAS DESTABILIZED REGULATION AND INCREASED RISK ASSOCIATED WITH INVESTMENT

49. In addition to setting unreasonably low wholesale rates, the Commission applied the final rates retroactively to March 2016, despite having recognized that retroactive ratemaking introduces regulatory uncertainty.\(^{71}\) On the latter point, the Commission is undoubtedly correct: retroactive ratemaking destabilizes the regulatory climate and unnecessarily increases the risk to future investments.

50. The Commission’s Decision to apply the final rates retroactively to 2016 is bad policy for three reasons. First, it penalizes facilities-based carriers for making sustained broadband investments during the time interim rates were in place. During this time, facilities-based carriers continued to invest heavily in communications infrastructure throughout the country. By ordering the rates retroactive to 2016 and ordering a one-time retroactive payment in the hundreds of millions of dollars, the Commission in effect told facilities-based carriers they were wrong to have invested during the three-


\(^{71}\) Review of costing inputs and the application process for wholesale high-speed access services, Telecom Decision CRTC 2016-117, at para. 105.
year interim rate period, and instead should have ceased investment for a three year period, and waited for a final Commission decision. Had facilities-based carriers waited for three years to invest, the result would have been dramatically poorer broadband deployment today.

51. Second, there is no corresponding benefit to consumers from the retroactive payment. Resellers—who by their very business model do not invest in new facilities in any way comparable to facilities-based carriers—are under no obligation to use the retroactive payments to offer rebates to their customers, and have given no indication that they intend to do so. Instead, resellers will enjoy a windfall, lining the pockets of their owners at the expense of their customers and facilities-based carriers.

52. Third, retroactivity promotes regulatory uncertainty, and as a result, increases the risk associated with future investments. In 1989, the Supreme Court of Canada confirmed the authority of the Commission to issue retroactive rate orders. In its decision, the Supreme Court held that “the added flexibility provided by the power to make [retroactive] interim orders is meant to foster financial stability throughout the regulatory process.” Here, the Commission has used its power to engage in retroactive ratemaking to the exact opposite effect, not in service of stability, but rather in direct conflict with it. Without regulatory stability, access to capital markets will be compromised. Investment in communications infrastructure requires ready access to third-party investors (either via debt or equity issues). Canadian companies must already compete in the global capital market for such large amounts of capital. Investors will shy away from the Canadian telecommunications industry if they cannot rely on a stable regulatory framework that promotes economic efficiency. As noted by TD Securities, “If Canada continues down this path of not only mandated access, but also seemingly very low rates [...] valuations and access to capital for Canadian telecoms are likely to suffer.” The Competition Bureau similarly stated that “[t]he

72 CRTC v. Bell Canada [1989] 1 S.C.R. 1722 (emphasis added). The 2006 Policy Direction similarly requires the Commission “to use only tariff approval mechanisms that are as minimally intrusive and as minimally onerous as possible.” See 2006 Policy Direction, s. 1(c)(i).

73 TD Securities Inc., Has the CRTC Gone Too Far?, August 20, 2019.
uncertainty associated with longer regulatory reviews can have significant negative
effects on the marketplace, whereby both wholesale-based and facilities-based
competitors are equally unsure of how regulatory rules will be established, and what
impacts these rules may have on their businesses.”74 The Bureau accordingly wrote
that “[a]t a high level, one of the best ways to ensure vigorous competition in
broadband services is […] working to minimize regulatory uncertainty”.75

53. These negative consequences are compounded by the fact that the Decision took three
years to set the final rates. When the Commission first set the interim rates in 2016,
the Commission stated that it would “assess the extent to which, if at all, retroactivity
will apply when new cost studies are submitted in support of revised wholesale HSA
service rates.”76 The new cost studies were submitted in 2017, yet the Commission
failed to make a decision until August 2019.

54. Retroactive ratemaking—especially with a three-year time lag—is destructive to
investment, with no corresponding benefit to customers, and the Decision should be
varied to remedy this problem.

6.0 THE DECISION IS INCONSISTENT WITH THE TELECOMMUNICATIONS
ACT AND POLICY DIRECTIONS

55. The Decision is inconsistent not only with the transformative policy outcomes above,
but also with the objectives of the Telecommunications Act and the Governor in
Council’s own directions to the Commission on how to implement these objectives.

56. Section 7 of the Telecommunications Act sets out a number of telecommunications
policy objectives, including: “to facilitate the orderly development of a
telecommunications system”; “to render reliable and affordable telecommunications
services of high quality accessible to Canadians in both urban and rural areas”;
“to foster increased reliance on market forces […] to ensure that regulation, where

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74 Competition Bureau Report, p. 56.
75 Ibid.
76 Review of costing inputs and the application process for wholesale high-speed access services, Telecom
required, is efficient and effective”; and “to encourage innovation in the provision of telecommunications services.”

57. The 2006 Policy Direction in turn requires the Commission to “rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives”; and to “use measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives.” The Decision violates the 2006 Policy Direction because it is overly intrusive, and thus fails to rely on market forces to the maximum extent feasible, and, to the extent that some interference with market forces is appropriate, the Decision is disproportionate in that it will depress investment and introduce regulatory uncertainty without any clear benefit to consumers.

58. While the 2019 Policy Direction does not apply to the Decision pursuant to subsection 11(3) of the Telecommunications Act, the Decision is nevertheless inconsistent with it as well. The 2019 Direction requires the Commission to consider the extent to which its decisions “ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas”; and “stimulate investment in research and development and in other intangible assets that support the offer and provision of telecommunications service.” For all the reasons set out above, the Decision accomplishes exactly the opposite.

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77 Telecommunications Act, s. 7(a), (b), (f) and (g).
78 2006 Policy Direction, s. 1(a)(i)-(ii).
79 The Telecommunications Act, s. 11(3) provides that: “An order made under section 8 does not apply in respect of a matter pending before the Commission on the day on which the order comes into force if (a) final submissions have been filed in respect of that matter; and (b) less than one year has expired since the period for filing final submissions ended.”
80 2019 Policy Direction, s. 1(a)(ii) and (vii).
7.0 GETTING THE DECISION RIGHT IS IMPORTANT FOR FUTURE PROCEEDINGS

59. The Commission’s conclusion that low, retroactively applied wholesale rates for FTTN technology are “just and reasonable” is particularly dangerous, as it has the potential to have a lasting and detrimental impact on future investment decisions.

60. The Commission has announced its intention to review the regulatory framework for wholesale wireline services in 2020-2021, in which the Commission “plans to examine the state of interconnection and various wireline wholesale services to ensure that the associated arrangements are facilitating the development of a competitive Canadian telecommunications market, while balancing the incentives to invest in innovative networks.”81 Separately, the Commission also intends to review the approach to setting wholesale service rates to “establish a more transparent and efficient rate-setting process while seeking to ensure that wholesale rates continue to be just and reasonable.”82 Also, in early 2020, the Commission will complete its review of the regulatory framework for the mobile wireless market and (if mandated) hear submissions on the rates for mobile virtual network operators to access wireless infrastructure.83 Last, the Commission will soon render a decision on the final rates for disaggregated wholesale access to HSIA facilities over FTTP in TRP 2015-326.

61. As the Commission looks to set rates for these services, the threat of lengthy retroactive ratemaking will chill investment. This is particularly pertinent as Canada is on the cusp of hybrid wireless-wireline 5G networks and at a time when new forms of facilities-based broadband competition are rapidly developing, including low earth orbit satellites and 5G-based fixed wireless access.84 Facilities-based carriers will not invest to the same degree if they are faced with the prospect of having to pay hundreds of millions of dollars to their competitors years after having invested in new facilities.

82 Ibid.
The most damaging impact of the Decision may therefore be yet to come if the Commission’s new approach to ratemaking is permitted to stand.

8.0 CONCLUSIONS AND RELIEF SOUGHT

62. Broadband Internet deployment and adoption can enable transformational policy outcomes for Canada. This petition highlights some of the benefits in the environmental, healthcare, rural sectors. Additional benefits can be realized across almost all areas of social and economic life. Investment in broadband infrastructure that provides Canadians the ability to realize these benefits thrives in a regulatory environment that fosters and promotes facilities-based competition. This time-tested policy has spurred network deployment across the country and enabled investment in rural and remote areas, despite the higher cost of investment from Canada’s low population density and challenging geography.

63. TELUS and other facilities-based carriers are committed to Canada’s broadband success across the country. Indeed, TELUS alone has invested $7 billion in wireline expenditures in the last three years alone. However, the poor policies and low rates exemplified in the Decision will inhibit the ability of Canadians to realize these benefits, and the impact will likely be felt most strongly in rural and remote areas where the already-challenging business case for investment will be eliminated. Such harmful regulation is unnecessary in an otherwise competitive broadband market. As a result, this destabilizing regulation puts at risk the investment in broadband infrastructure necessary to ensure Canada’s competitiveness on the world stage.

64. The Government of Canada has set important policy goals for Canadians, including those in the environmental, healthcare and rural sectors. Indeed, it has promised to “invest in Canadians”.

85 The Decision, by threatening the continued and sustained investment in broadband Internet, fails to take into account these broader policy goals and interests of Canadians across the country. The Commission has thus rendered a Decision which frustrates, rather than furthers, the country’s policy agenda. The

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Governor in Council now has the opportunity to restore consistency and coherence with the broader federal policy landscape, which has been undermined by the Commission’s myopic pursuit of low wholesale rates.

65. For the above reasons, TELUS requests the following relief:

1. An Order pursuant to section 12 of the *Telecommunications Act* referring the Decision back to the Commission for reconsideration and setting out the following details, which are material to the reconsideration:

   i. the Commission shall conduct its review of the wholesale high-speed access regulatory framework (the “Framework”) that it was already planning for 2020 before initiating any future review of wholesale wireline rates or issuing any decisions on wholesale wireline rate proceedings presently before the Commission; and

   ii. the Commission’s approach to its review of the Framework proceedings and decisions that emerge from the Framework shall be informed by the need to:

      a. ensure that facilities-based carriers in Canada have sufficient incentives to invest in the deployment of advanced telecommunications technologies that are fully competitive with the most advanced technologies used in other countries;

      b. recognize the importance of facilities-based competition to progressive environmental policy, healthcare, agricultural policy, and the future economic and social development of rural and remote communities throughout Canada;

      c. avoid the destabilizing effects of retroactive ratemaking; and

      d. achieve the policy objectives set out in section 7 of the *Telecommunications Act* in a manner consistent with the Order.
Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives, SOR/2006-355 and the Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation, SOR/2019-227.

2. An Order pursuant to section 12 of the Telecommunications Act varying the Decision and establishing as final rates the rates for aggregated wholesale high speed Internet access in place immediately prior to the release of Telecom Decision CRTC 2016-117, Review of costing inputs and the application process for wholesale high-speed access services on March 31, 2016, which, for clarity, shall have no retroactive effect.