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2019 01 11

To: The Broadcasting and Telecommunications Legislative Review Panel
c/o Innovation, Science and Economic Development Canada
235 Queen Street, 1st Floor
Ottawa, Ontario
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Via email: ic.btlr-elmrt.ic@canada.ca

Subject: **Review of the Canadian Communications Legislative Framework – Comments**

1. Northwestel Inc. (Northwestel) is pleased to provide our Comments to the Broadcasting and Telecommunications Legislative Review Panel (the Panel) in response to the Panel's 24 September 2018 Call for Comments.

2. We appreciate the opportunity to participate in this important process, and to bring our unique northern perspective to the Panel. We hope that our input with respect of changes to the *Telecommunications Act* (the *Act*) will provide the Panel with insight into the importance and the challenges of providing leading-edge telecommunications services in Canada's Far North, and we thank the Panel in advance for their consideration of our Comments.

3. We have reviewed the Comments of BCE Inc. (Bell) in respect of the *Act*, submitted under separate cover today, and we support Bell's recommendations in their entirety. We serve some of Canada's most remote areas and harshest geographies, and we have taken this opportunity to bring our unique perspective to the Panel. In our Comments, we are providing three case studies in support of the changes recommended by Bell to the *Act* that demonstrate how the current legislative framework with its attendant regulatory rules has not served the interests of customers in the Far North, and how the changes proposed by Bell in their Comments today could have improved outcomes for northern customers.

4. We thank the Panel for the opportunity to provide our Comments in this process.

Yours truly,

[Original signed by C. Shaw]

Curtis Shaw
President, Northwestel

Attachment

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Responding to the New Environment: A Call for Comments Review of the Canadian Communications Legislative Framework

Comments

of

Northwestel Inc.

11 January 2019

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1.0 EXECUTIVE SUMMARY

ES1. We are pleased to provide our comments to the Broadcasting and Telecommunications Legislative Review Panel (the Panel). We have reviewed with interest the Panel's Call for Comments, including the themes for review and the specific questions as set out in the Terms of Reference. We are pleased to be able to provide our unique northern perspective on matters specifically related to the *Telecommunications Act* (the *Act*).

ES2. We note that we have reviewed the comments of BCE Inc. (Bell) submitted under separate cover today, and we support their comments and suggestions. It is important that Canada have effective legislative and regulatory tools in place to support increased innovation and customer choice. Our legislation, and the regulatory tools to support the goals of that legislation, should be calibrated to ensure that all Canadians, including and perhaps most significantly those in the Far North, are able to benefit from innovation and investment in state-of-the-art infrastructure and telecommunications services.

ES3. Canada is renowned for the challenges of serving a small population spread out over a vast geography; however, nowhere are these challenges more real than in Canada's North. Indeed, northern Canadians experience some of the greatest barriers in accessing advanced telecommunications services. In this submission, we recommend certain changes be made to the *Act* to allow Canada's regulatory framework to better support northern Canadians in overcoming these barriers. Specifically, we support changes to the *Act* to provide clearer guidance to the regulator to emphasize the benefits of a facilities-based preference for telecommunications regulation. We support the move from a presumption of regulation to a presumption that competitive forces are able to serve the needs of customers, including a proposed new regulatory framework to be incorporated in the *Act*, by which *ex ante* regulatory mechanisms (such as the requirements for tariffs and advanced approvals in sections 25 and 29 of the *Act*) be removed and replaced with a comprehensive framework to allow the Commission to address market failure. We also support the provision of guidance on the proper tests for establishing whether regulation is required, be it retail or wholesale; and new rate-setting rules. We also support updated policy approaches to address related issues that are not covered by the proposed changes to the *Act*, but are nonetheless related and important to the overall application of regulation of telecommunications services; specifically that the obligation to serve should be put into the *Act* but only contingent on a finding of unjust discrimination and finding of significant market power (SMP), and that there should be no open access obligations when granting any new subsidy, as such an obligation actually works contrary to the purpose of the subsidy, which is to deliver high-quality services to all customers.

ES4. Our support for these changes is not theoretical; we are providing three case studies where the current regulatory framework failed customers in the North.

ES5. Case study 1 looks at a failure in retail regulation with respect to our residential DSL Internet services. As a result of the regulator's requirement that we lower residential DSL retail prices to levels well below those that would cover our costs – a determination that the regulator later agreed was in error – we were forced to scale back investment in broadband Internet infrastructure that would have delivered 15 Mbps retail Internet services in 42 communities in our serving territory. Even though the Commission eventually agreed to amend its determination in view of the adverse impact the mandated below-cost rates and lack of revenues to invest in infrastructure had on our customers, the result of the Commission's original determination was a delay of at least one year in the network upgrades for the 42 affected communities. This was a direct impact to residential customers in our smallest communities with delays to ADSL upgrades as the result of Commission-ordered rate reductions. Under the changes to the *Act* proposed by Bell, and supported by us, the Commission would have been compelled to ensure that rates were set at a level that at least permitted us to recover our costs and enable us to continue to make investments promised to customers.

ES6. Case study 2 looks at a failure in wholesale regulation with respect of our Wholesale Connect service. The rates established by the Commission, which were significantly lower than we proposed, had a profound effect on the underlying business case for our continued investment in any fibre-based transport infrastructure. In this regard, the Commission failed to strike a fair and appropriate balance between fostering competition on the one hand, and encouraging investment and providing reasonable compensation for wholesale services on the other. Simply put, the rates were too low, and compelled us to cancel all planned fibre builds in 2013 and suspend any plans for future fibre builds contained in the modernization plan and instead build a new route with microwave technology. Again, the Commission later agreed that there was substantial doubt about the correctness of their original determination, but damage had been done. The fibre-dependent project was delayed for at least three years, similar to delays in deploying network upgrades as a result of a Commission determination noted above related to our retail DSL Internet services. Only when the consequences of their determinations caused hardship for our customers did the Commission then look for more equitable balancing of interests; a balancing that ought to have been a focus from the outset. Under the proposed Bell framework, the Commission may or may not have found that Wholesale Connect service should be mandated, but in the rate-setting exercise, the Commission would have almost certainly better evaluated the broad impact of its rate determinations including whether or not the rates would deter innovation and investment.

ES7. Finally, case study 3 examines failures in the use of subsidy to provide services to customers in the North. We currently receive a subsidy for each residential network access line (NAS) to compensate us for the difference between the cost to provision and maintain that line and the revenue we receive from the end-user of that line. This subsidy is being phased out, and there is no guarantee of a replacement mechanism to cover that revenue shortfall. Further, as noted above, we are providing residential DSL Internet services at mandated below-cost rates in these same areas. We can only cross-subsidize these below-cost services from other services (mostly business services in our larger communities) for so long before it becomes unsustainable. The framework we are operating under is untenable, and in the end, will preclude any investment in innovative technology or networks – there is no business case to invest if we are mandated to provide service under the obligation to serve and are likewise mandated to sell our retail services at rates that do not cover our own basic costs (and, at the same time, required to provide our wholesale services at bargain-basement rates to our competitors). Under the proposed changes, such a ruling is unlikely to occur.

2.0 INTRODUCTION

2.1 We Serve the North

1. We are the incumbent telecommunications service provider for northern Canada, serving 120,000 Canadians in 96 communities throughout the Yukon, Northwest Territories, Nunavut and Northern British Columbia (BC). Our corporate and operations headquarters are in Whitehorse and Yellowknife. We have a regional office in Iqaluit and provide local employment in more than 50 northern communities. We are one of the largest, continuous private sector employers in the North, with most of our nearly 600 employees living and working there. Unlike many large companies operating in northern Canada, our senior leadership, our operations and even some of our satellite teleport equipment are north of 60.

2. We have a significant economic impact on the communities we serve. Our annual direct economic impact through salaries, operations and capital investment is significant. We have invested more than $800M in telecommunications infrastructure across the North since inception.

3. Our operating area is distinct from any other in Canada for its extremely low population density, vast distances between communities and extreme climate, representing 40% of Canada's total land mass and 0.4% of its population. For context, 70% of our communities have less than 500 people, 81% of our communities have less than 500 business and residential wireline or fixed wireless access lines, and 29% have fewer than 100 access lines. We maintain approximately 5000 km of fibre optic cable and 8000 km of microwave radio in addition to satellite Earth-station facilities to serve this vast geography and small population, and we operate in some of Canada's harshest and most remote locations.

2.2 The High Cost of Serving the North

4. Maintaining this infrastructure is no small challenge for us. 43 of our 96 communities do not have year-round road access and of these communities, 30 have no road access at all. This means that equipment and supplies must be flown in, or brought in by ocean barge in the case of the eastern and northern Arctic.

Figure 1
Equipment Sealifts

5. Electricity is another significant cost input. Our commercial power costs in the North are significantly higher than the rest of Canada – 15 times higher than in equivalent consumption bands in Quebec. In Nunavut, commercial rates can be as high as $1.09/kWh. Moreover, rates in Nunavut are expected to go up with rates in Iqaluit increasing until they are equal to rates in other communities. While commercial power rates in the Northwest Territories and Yukon are lower than in Nunavut, they are nearly double the national average and climbing at a higher rate than inflation. As electricity is a key input cost to broadband service delivery, continued rate increases place significant upward pressure on residential and business rates.

6. Further, we must generate our own power at 90 of our 154 microwave sites, as no commercial power is available in these remote locations. 43 of our microwave sites are accessible by helicopter only. This means that fuel and equipment must be flown into these remote sites by helicopter. 42 of the road-accessible sites are only accessible by road for part of the year.

Figure 2
Remote Sites


7. Transportation and travel costs are also significant inputs to our operations. We service 96 communities which are spread across nearly 40% of Canada's land mass. In the most extreme case, Grise Fiord, Nunavut is 1,500 km from the nearest hospital in Iqaluit and 400 km to the nearest community (Resolute). Distance increases the costs to serve these communities; a lack of transportation options is also a significant cost input for any company operating in the North. Limited commercial flights into and out of remote communities often means air charters are required for both routine and emergency repairs, substantially increasing the cost of construction and maintenance. In real terms, this means that a technician may need to book a $20,000 charter flight to fix a single residential customer's phone line or modem.

8. To illustrate the challenges we face in serving northern communities, we may look to the example of the Charter community of Délı̨nę, Northwest Territories. Situated 550 km northwest of Yellowknife and consisting of a population of 510 people, Délı̨nę is provisioned with Internet service capable of 15 Mbps download speed. Like many small terrestrially-served communities in the North, we provision Délı̨nę with service via microwave radio transport to access the community. The community then interconnects on fibre running down the Mackenzie Valley and to points south via our points of presence at High Level, Alberta. Délı̨nę's microwave spur consists of three towers, one at Bear Rock, one at Wolverine and finally a tower at the Délı̨nę community site. The Bear Rock and Wolverine towers are located at remote mountain tops accessible only by helicopter, which in turn requires us to provision our own power while the Délı̨nę community site tower has access to commercial power. The infrastructure needed to serve in the North is highly expensive to build, maintain and operate.

9. Important to our ability to serve the remote areas of the Far North are our two largest centres, Whitehorse and Yellowknife. While these are small communities relative to cities in southern Canada, these two communities make up nearly half of our telecommunications market and, as such, we rely on revenues from these two communities (particularly from business services) to help cross-subsidize service in remote areas in order ensure the continuation of comparable services at comparable rates across all communities in the North; however, such cross-subsidization has limits and is not sustainable in the long term.

2.3 We Invest to Serve the North

10. Northerners deserve reliable, fast, cost-comparative telecommunications – and we strive to meet those objectives in a world where standards and expectations are growing at an unparalleled speed. We are proud of our efforts to modernize northern telecommunications, and proud of the opportunities we have had to partner with Federal, Territorial and Indigenous governments on bold, nation-building infrastructure investments across Canada's North. These partnership agreements and joint ventures occurred to meet the needs and capacity of our communities and are strong alternatives to traditional P3 models, which are not well suited to northern projects given our small population, limited capacity and higher development costs.

11. For example, the Yukon was the first jurisdiction in Canada to provide high speed Internet access in every community in 2002. Now, all non-satellite served Yukon communities have speeds of at least 15 Mbps, and by the end of 2019, we will have successfully brought broadband access to all of our operating-area communities but one – Bob Quinn, BC a community with less than ten households.

12. Northerners have benefitted from our significant corporate investment, as well as strategic investments by government partners. Funding envelopes that are dedicated to northern and rural telecommunications infrastructure development have been, and continue to be, essential in addressing the unique challenges of Canada's North – specifically its remote locations, high operating costs, high costs of living, limited access, small population base and limited human and financial resources. This is especially true for small fly-in communities. By working in partnership with various governments, we have managed to make real progress towards providing comparable Internet services at comparable rates across the North as those offered in rural southern Canada.

13. One investment we are particularly proud of is our modernization plan. Between 2013 and 2018, Northwestel invested more than $230M upgrading our network. Our 60 terrestrial-served communities now have smartphone capabilities and broadband download speeds of between 15 Mbps and 250 Mbps. We also provisioned 14 satellite-served communities with smartphone capabilities and broadband speeds ranging from 2.5 Mbps to 5 Mbps.

14. More recently, with the support of Innovation, Science and Economic Development Canada's (ISED's) Connect to Innovate program, our Tamarmik Nunaliit (Inuktitut phrase for "Every Community") project was launched which will provision all 25 Nunavut communities with 15 Mbps broadband and smartphone capabilities by the end of 2019.

15. The Mackenzie Valley Fibre Link (MVFL) is another recently completed private-public collaboration, transforming the communities it serves. In 2017, the Government of Northwest Territories, in partnership with us and Ledcor, provisioned the high capacity fibre network extending 1154 km across the Northwest Territories between McGill Lake and Inuvik. This significant investment brought higher speed Internet services at lower prices than would otherwise be available, and facilitates improved government programs and services, economic development opportunities and improved connectivity for residents along the line.

Figure 3
MVFL Fibre Cutting

16. The costs to build out infrastructure in the remote North are substantial, with none of the efficiencies or economies of scale available to service providers in the South. Tamarmik Nunaliit is a $120M shared investment – $50M from Canada and $70M from us – bringing improved services to 38,000 Nunavummiut. The MVFL is an $84M investment bringing improved services to 7,000 customers. Through these initiatives, the lives of northern Canadians incrementally step towards parity with their southern neighbours. But, they could not happen without Federal and Territorial investments that appreciate and respond to the uniqueness of doing business in the North.

3.0 <u>THE DIRECT IMPACT OF REGULATION ON INVESTMENT AND SERVICES IN THE NORTH</u>

17. From the above, it is clear that the costs of serving northern communities are very high. Further, the unique nature of our large geography and disperse population, and attendant limited resources, means that models that may work in southern Canada are not necessarily transferrable or workable in northern Canada. The infrastructure gap between the Far North and the rest of the country is significant, which impacts the cost of doing business, of remaining competitive, of being able to attract and retain staff and in ensuring the North reaches its full economic and social potential. Without significant and ongoing investments, northern Canadians will fall farther behind.

18. We have been able to make the investments noted above despite significant challenges posed by the regulatory framework applicable to us. This framework has, in fact, slowed or precluded us from investing in needed infrastructure, and in recent years, the Commission has engaged in rate-setting exercises that have artificially interfered in the marketplace and hindered our business, reducing the benefits that we can bring to northern Canadians. In this section, we provide three specific case studies that illustrate the impact of regulation on investment and services we offer:

a) In Section 3.1, we discuss a retail case with respect to our residential DSL Internet;
b) In Section 3.2, we discuss a wholesale case with respect of our Wholesale Connect Service; and
c) In Section 3.3, we will discuss an issue that is currently before the regulator with respect of subsidies.

19. In all cases, the decisions made by the regulator have had far-reaching impacts on our ability to invest in the infrastructure and services that our customers deserve. Even in cases where the regulator has acknowledged their error and made some attempt to repair the damage, these decisions either delayed or impacted investments that would have benefited northern Canadians.

3.1 Case Study 1: Failure of Retail Regulation - Residential DSL Internet in the North

20. In TRP 2013-711[1], the Commission determined that it was appropriate to re-regulate the previously forborne retail rates for our Internet services. We were directed to file tariffs accompanied by detailed cost studies demonstrating our costs of providing these services in order for appropriate retail rates to be set.

21. As part of our tariff approval process, we requested that the Commission make an exception to its general cost principle that the retail rate for a service should be set above the costs of providing the service. In light of the extreme challenges of providing service to remote regions of Canada's north (referred to by the Commission as high-cost serving areas (HCSAs)), the rates at which we were selling our retail Internet service were being offered at below-cost rates. In order to provide comparable service offerings across our territory, we were cross-subsidizing the provision of service in remote areas with services provided in more urban environments (namely, Whitehorse and Yellowknife).

22. While the Commission approved our request to offer services that are priced below-cost in remote areas, the Commission further required us to reduce the rates for our DSL services by an additional 10-30%:

> As noted above, certain of Northwestel's proposed residential Internet service rates do not pass the price floor test. Except for the provision of local exchange service in high-cost serving areas (HCSAs), the Commission's practice has been to require that rates pass the price floor test. Generally, this practice has been applied to services that, though regulated, are subject to a degree of competition, and for which the rates in question are sufficient to be considered just and reasonable as contemplated by the Act. However, the Commission considers that requiring Northwestel to re-price certain residential Internet service rates so that they pass the price floor test would negatively affect Northern Canadians.
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> ...

[1] Telecom Regulatory Policy CRTC 2013-711, *Northwestel Inc. – Regulatory Framework, Modernization Plan, and related matters*.

> Accordingly, the Commission **approves** Northwestel's proposed residential cable Internet service rates, but **directs** Northwestel to reduce its residential DSL Internet Lite and DSL Internet 2 rates by 10%, and to reduce its residential DSL Internet 5 and DSL Internet 15 rates by 30%.[2]

23. This decision requiring us to offer retail Internet services even further below our costs fails to consider the factors proposed by Bell, such as a reasonable rate of return, incentives for innovation and investment in the construction of networks, and the financial impact of regulating the rate on the telecommunications service provider (TSP) offering the service.

24. This was recognized by Commissioner Molnar in a dissenting opinion in which she rejected the Majority decision of the Commission to require us to offer retail Internet services further below our costs. As she stated:

> The decision of the Majority mandates price reductions for residential DSL Internet services that range from 10% to 30% of existing basic monthly charges. Not only are these reductions unwarranted and contrary to the Commission's long-established tariff approval processes, but I am concerned that they will produce consequences for Northern consumers that the Majority has not acknowledged. What's more, the decision of the Majority is based upon policy rationale that was not properly canvassed in this tariff proceeding and, in my view, that would be more appropriately considered in the upcoming review of basic services.
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> …
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> This proceeding is the only instance where the Commission reasserted its rate-setting jurisdiction over previously forborne retail services and was then requested to approve rates that are both below cost and in effect. I believe it would have been appropriate for the Commission to approve the existing DSL services at existing rates in order to avoid price increases for consumers. But I do not believe it is appropriate for the Majority to drive the prices further below cost, at least not in this tariff proceeding.
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> …
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> How Northwestel will offset the revenue lost through the mandated price reductions is also to be determined, but I have little doubt that the cost of the Majority's decision will be borne by Northern consumers. Although the Majority express the view that the price reductions would not significantly impact Northwestel's revenue or modernization plan, I question this conclusion. The revenue impact of the price reductions is not insignificant and is recurring. There is no reason to expect this impact to be borne by Northwestel's shareholders.
> Perhaps Northwestel will reduce its capital investment in what have become highly unprofitable DSL Internet services, at least in its most high-cost serving

2 Telecom Decision CRTC 2015-78, *Northwestel Inc. – Tariffs for terrestrial retail Internet services*, paragraphs 23 and 28.

> areas. Perhaps Northwestel will delay elements of its Modernization Plan. Perhaps it will request an exogenous adjustment, which would allow the company to recover the lost revenue from other regulated services, including other Internet services. Whatever the outcome, it will be telecom service users in the North who will live with the consequences.

25. Indeed, these costs have had a significant impact on the services that we have been able to offer to northern Canadians. As a result of the specific decision noted above, we were forced to scale back investment in broadband Internet infrastructure that would have delivered 15 Mbps retail Internet services in 42 communities in our serving territory unless the Commission reviewed its determination in Decision 2015-78 and permitted us to recover some of the forgone revenue through another mechanism. While the Commission found, in Decision 2016-36[3], that they had erred in their original Decision 2015-78 and eventually permitted us to recover a subset of those forgone revenues[4]. The result of the Commission's original determination was a delay of at least one year in the network upgrades proposed in our modernization plan for the 42 affected communities. This was a direct impact to residential customers in our smallest communities with delays to ADSL upgrades as the result of Commission-ordered price reductions.

26. The Commission's original determinations in Decision 2015-78 demonstrate a short-sighted regulatory approach. The Commission stated:

> …the additional fees may deter or prevent certain consumers in the North from participating in the digital economy. In addition, the Commission considers that the markups for DSL business Internet services are sufficient to allow the rates for those services to cover the local loop cost for stand-alone DSL service without additional fees.[5]

27. The Commission added that requiring us to apply the same rates to customers in HCSAs as those in non-HCSAs "would further the Commission's goal of ensuring that Northern Canadians are provided Internet access at reasonable prices."[6]

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3 Telecom Decision CRTC 2016-36, *Northwestel Inc. - Application to review and vary certain determinations in Telecom Decision 2015-78 or approve an exogenous adjustment for retail Internet services*.

4 In Decision 2016-36, the Commission itself found that "there is substantial doubt as to the correctness of the determination in Telecom Decision 2015-78 to deny Northwestel's proposal to charge an additional fee for stand-alone digital subscriber line (DSL) Internet service. Under its Modernization Plan, Northwestel was to deploy 15 megabit-per-second Internet service to the 45 communities remaining to be upgraded to that service. The Commission varies its determination and approves a stand-alone residential DSL Internet service surcharge of $20 per month in certain high-cost communities." As a result of this determination, we were able to proceed with and have since completed the network upgrades in these communities to enable 15 Mbps retail Internet services.

5 Decision 2015-78, paragraph 48.

6 Ibid, paragraph 49.

28. As we pointed out at that time,

> …we acknowledge that the Commission's decision has led to lower prices for Internet services in the North; the measures in Decision 2015-78 may not actually bring affordable Internet to Northern Canadians, since the funding to upgrade the terrestrial DSL Internet network is at risk. It is one thing to worry that the rates are too high, and therefore undermine the ability of Canadians to participate in the digital economy, but before one worries about the rates, one must first have to make sure the services are available. Decision 2015-78 does not meet that policy objective test because it undermines the incentive to invest."[7]

29. Today, the burden of subsidization of below-cost communities lies with Internet customers in Whitehorse and Yellowknife, with northern businesses bearing the majority of the cross subsidy. We do not believe this is a fair burden to place on other sectors of the economy and has a direct impact on northern economic development and a direct cost to northern businesses.

30. As the Panel moves forward with its work in reviewing the *Act*, it must take a longer view of the desired results that was taken in the case above; namely, the regulatory tools and legislative framework for the future need to ensure that incentives to invest in infrastructure and advanced broadband networks by facilities-based companies operating in the areas they serve are supported. We discuss, in Section 4.1, how the proposals made by Bell and supported by us could have helped mitigate this situation prior to affecting our ability to deliver high-quality broadband services to the Far North.

3.2 Case Study 2: Failure of Wholesale Regulation – Wholesale Connect Service

31. Regulatory decisions taken in the wholesale area can have far-reaching impacts in the retail space. In our own case, the Commission has – since 2013 – created ongoing issues in our retail space and affected our ability to invest by the mandating and repricing of our Wholesale Connect service.

32. As we noted above, on 3 July 2012, we filed a comprehensive network modernization plan with the Commission[8]. The modernization plan was essentially a five-year capital investment plan, which included targeted investments intended to achieve specific customer

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[7] Northwestel Inc., *Application to review and Vary Telecom Decision CRTC 2015-78 or to Approve an Exogenous Variable for Retail Internet*, paragraph 26.

[8] Pursuant to the Commission's determinations in Telecom Regulatory Policy CRTC 2011-771, *Northwestel Inc. – Review of regulatory framework* (TRP 2011-771).

service goals in such areas as enhanced calling features, Internet and wireless. The plan also included investments in underlying transport network infrastructure to create diversity and additional capacity, which benefits competitors and facilitates local competition. This transport network investment included upgrades to add needed capacity in many communities, as well as funding to support strategic transport projects to add more capacity and/or route diversity. The majority of these strategic transport projects relied on cost sharing with third parties. However, these capital expenditures were based and dependent upon the assumption that we would receive sufficient revenues from the upgraded facilities to economically justify the investment. In creating a long-term capital investment plan, perhaps the single most important factor that will dictate whether the plan can actually be achieved is the availability of cash, which is a function of revenue. Any significant change in projected revenue will have a trickle-down effect on capital budgets.

33. About the same time as we were rolling out the modernization plan, we proposed Wholesale Connect rates to enable competitors to purchase capacity on our networks to deliver services to their end-users in the North[9]. However, when the Commission issued its approval of our Wholesale Connect service in Order 2013-93[10], the approved rates were considerably lower than we anticipated and constituted a material reduction in our projected revenues. As a result, the goal posts for our modernization plan were moved, and created doubt concerning our financial ability to meet the capital spending targets contained in the modernization plan, which were based on revenue assumptions that were substantively altered by regulatory fiat.

34. Even more importantly, quite apart from the impact on the modernization plan, the rates established in Order 2013-93 had a profound effect on the underlying business case for our continued investment in any fibre-based transport infrastructure. In this regard, the Commission failed to strike a fair and appropriate balance between fostering competition on the one hand, and encouraging investment and providing reasonable compensation for wholesale services on the other. Simply put, the rates were too low, and compelled us to cancel all planned fibre builds in 2013 and suspend any plans for future fibre builds contained in the modernization plan. As a result, we determined that we would invest in other types of technologies instead of fibre, because we faced less risk in recovering our investment when using those other technologies. While we took this drastic step, we also applied to the Commission to review and vary its determinations in Order 2013-93 to permit us to provide Wholesale Connect at rates that were

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9 Northwestel Tariff Notice (TN) 883/A

10 Telecom Order CRTC 2013-93, *Northwestel Inc. – Wholesale Connect* Service.

compensatory and would enable us to continue to invest in fibre. In TRP 2013-711, the Commission varied its determinations in Order 2013-93 and approved higher final Wholesale Connect rates, noting correctly that:

> …these determinations will result in rate increases for competitors using Northwestel's Wholesale Connect service. However, the Commission considers that the Wholesale Connect service rates approved in this decision are just and reasonable and more appropriately balance the need to ensure that Northwestel is reasonably compensated for its costs and continues to invest in its fibre networks with the need to ensure that markups are not so high as to prevent competitors from providing competitive alternatives in the marketplace.[11]

35. But, damage had been done[12]. Fibre-dependent projects, such as a $3.5M fibre build between Stewart Crossing and Dawson City, were delayed for at least three years, similar to delays in deploying network upgrades as a result of a Commission determination noted above related to our retail DSL Internet services. The Wholesale Connect decision drove rates to a point that we could not justify investing in fibre and forced us to instead invest in microwave technology. Only when the consequences of their determinations caused hardship for our customers did the Commission then look for more equitable balancing of interests; a balancing that ought to have been a focus from the outset.

36. However, and coincidentally in conjunction with the completion of our investments under the modernization plan, rate decreases for Wholesale Connect service mandated by the Commission have continued. In a series of public notices, decisions, and applications beginning in January of 2015 and resolving on a final basis in August of 2018, the Commission mandated final – lower – Wholesale Connect rates, resulting in rates that are now anywhere from **33% to 84% lower** than when we introduced the service[13].

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11 TRP 2013-711, paragraph 158.

12 See, for example, https://www.whitehorsestar.com/News/crtc-decision-puts-crimp-on-nwtels-plans

13 Telecom Order CRTC 2018-338, *Northwestel Inc. – Wholesale Connect service – Final rates*. On 28 January 2015, we filed to introduce two new higher speeds of Wholesale Connect, including in support of our filing updated costs. As a result of this filing and interventions from our competitors, the Commission launched Telecom Notice of Consultation CRTC 2016-180, *Review of the rates for Northwestel Inc.'s Wholesale Connect service* (TNC 2016-180). As a result of TNC 2016-180, in Decision 2016-443 paragraph 57, we were required to submit new costs studies for all of our Wholesale Connect speeds. The Commission received an application from Northwestel, dated 6 February 2017, in which the company requested that the Commission review and vary certain determinations set out in Decision 2016-443. On 27 April 2017, the Commission approved interim Wholesale Connect rates, and then the Commission denied our review and vary request in Decision 2017-287 on 17 August 2017. On 31 August 2018, the Commission approved final Wholesale Connect rates in Telecom Order CRTC 2018-338.

37. The impact of these lower rates is twofold – there is an immediate impact of lowering the rates that we charge wholesale customers using the service; however, there is also a cross-impact on our retail space where we must lower the prices of our retail service, V-Connect Service, in order to remain competitive with wholesale customers using our own underlying wholesale service. Effective 29 November 2018, the Commission approved decreases to our retail V-Connect services[14], which will have a significant annualized impact on our ability to invest and innovate, in addition to the decreases directly attributable to Wholesale Connect service.

38. Mandating wholesale access has had significant impact on our ability to invest in our infrastructure. It has caused us to rethink deploying cutting-edge technology, namely fibre, in the North, and has caused delays in network enhancements to the detriment of customers in the North. Competitor use of underlying wholesale services, particularly on a resale basis, does not trigger investment in competitive networks. Investment overall in the North is stymied. We discuss in Section 4.2 how the changes proposed by Bell and supported by us could have helped mitigate this series of missteps.

3.3 <u>Case Study 3: The Impact of Subsidies in the North</u>

39. Subsidies are a required element for TSPs providing service in the North, but the way those subsidies are structured, administered, and maintained are key elements; what works in the South may not transfer to the North, where economies of scale, limited population and resources all impact the ability to offer services on an ongoing basis.

40. Subsidies take one of two basic forms: one-time and ongoing. One-time subsidies are generally used to offset significant one-time costs, such as high construction costs for a particular element of infrastructure. Ongoing subsidies assist in off-setting the high cost of providing services that is characteristic of providing service in northern remote communities.

41. In TRP 2018-213[15], the Commission initiated the elimination of subsidies to provide local voice service to residential customers in high-cost serving areas across Canada, in favour of broadband. The result of this elimination will be a reduction in our revenues of 6% - a material impact on our company. Further, the Commission did not make any immediate provision to

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14 Telecom Order CRTC 2018-436, granting interim approval to Northwestel Tariff Notice 1034. Final approval was granted in Telecom order CRTC 2018-486.

15 Telecom Regulatory Policy CRTC 2018-213, *Phase-out of the local service subsidy regime*.

compensate any company for the loss of these subsidies, although the Commission is considering proposals[16]. As it stands today, we will begin to lose subsidy starting January 2019, and there is no mechanism to either compensate us for the very high costs of providing service in these remote communities (which we have illustrated above are very expensive to serve) or to relieve us of the obligation to provide service absent a subsidy. This will force us to cross-subsidize these services from other services we sell; services that we have already demonstrated are under downward price pressure due to Commission mandated rate setting on wholesale and retail services.

3.3.1 <u>The Competitive Environment in the North</u>

42. Competition in the North is affecting our ability to cross-subsidize services that we offer in remote areas. Until now, we have relied heavily on the services we sell in our two larger communities, particularly to business customers, to generate the revenue needed to offset the high costs of providing service; however, with the emergence of competition – especially in the mobile wireless sector – this ability is not just imperilled, it is lost. To be clear, this is not a criticism on policies that allow competition. Rather, it is simply a plea for policy makers to recognize that the market is changing, and the way we were able to operate in the past (through cross-subsidization of services from higher mark-up business services in our less rural centres) is not sustainable in the near term.

43. With respect of our residential DSL Internet rates, which we discussed in Section 3.1, in order to fund the provision of these services at mandated below-cost rates, we rely on revenue contribution from business Internet services. As identified by Commissioner Molnar in her dissenting opinion to Decision 2015-78:

> Northwestel provided detailed costing information, scrutinized by the Commission, that demonstrates that the aggregated markup for the company's portfolio of Internet services is not excessive. **These cost studies also demonstrate a very significant degree of cross-subsidy between Northwestel's Internet customers**. [emphasis added]

44. In the past, the revenue shortfall incurred from below-cost residential DSL was compensated for by a cross-subsidy from business Internet and other services sold in our largest communities. With respect of other services sold, as we noted above in Section 3.2,

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[16] The Commission is reviewing proposals for compensation, amongst other matters, in the process initiated by Telecom Notice of Consultation CRTC 2018-214, *Review of the price cap and local forbearance regimes* (TNC 2018-214).

rates for Wholesale Connect have dropped precipitously (i.e., a 100 Mbps circuit has gone from $15,279/month in 2012 to $1,488/month, a decline of 90%). Those large capacity data services will not be able to provide the revenue needed to sustain any cross-subsidy.

45. In respect of business retail Internet services, to date we have not reduced prices to meet the opened up competition because we rely on business revenues to cross subsidize the residential customers in HCSAs; however, for the reasons we discuss below, it is not sustainable to rely on business Internet services to continue to subsidize losses on our DSL services that stem from mandatory pricing of such services below cost.

46. Others have claimed that higher priced business Internet service impacts business decisions to purchase higher speed packages to meet business requirements and even whether or not businesses choose to purchase Internet – particularly small businesses. A survey conducted by Yukon Information Technology Industry Society (YITIS) in 2012 to businesses in the Yukon found that the largest factor cited by 79% of businesses as "the biggest IT challenges your business deals with" was the price of Internet.[17]

47. Our business Internet DSL package prices continue to be approximately 100% to 300% higher than the prices of comparable packages in the South. For example, in DSL-served communities, our Business Internet 15 service, which provides 15 Mbps download and 1 Mbps upload with a 200 GB cap, is priced at $299.95/month. Telus' most comparable offer is a 15 Mbps service with unlimited usage for $65.00/month[18]. Télébec offers 15 Mbps download and 1.5 Mbps upload for $89.95/month, with unlimited usage. These comparably high rates in the North appear to be impacting small business adoption of faster speeds in our serving territory, adversely affecting the uptake of higher speed broadband Internet services by businesses in the North and potentially affecting their productivity vis-à-vis their southern competitors.

48. In fact, it appears that business customers in the North are choosing to take lower speed tiers than businesses in the South. We believe that the most significant factor as to why northern businesses are choosing slower speed Internet is the high cost of Internet in the North relative to southern Canada, as we have no evidence that northern businesses have any less need to participate in the digital economy than their southern counterparts. All of these factors, when taken together, indicate that for reasons similar to those used by the Commission to lower

[17] Yukon ICT Sector Strategic Plan March 2013, page 29.
[18] https://www.telus.com/en/ab/business/internet/office-internet?linktype=ge-meganavs.

our residential DSL rates in Decision 2015-78, we are now in a situation where we are compelled to lower the rates for business Internet services in order to ensure the continued participation of businesses in the Far North in the digital economy. Simply put, this means that the additional revenues from these services will not be available to cross-subsidize the mandated below-cost residential DSL Internet rates imposed by the Commission.

49. We are likewise facing significant challenges in our local voice market from mobile wireless substitution. We do not directly offer mobile wireless services; however, we see the direct impact of mobile wireless adoption in our wireline business. Indeed, we see the same trends that are being observed in the South are even more pronounced in the North.

50. Canadians have adopted mobile wireless services at very high rates. The Commission itself has acknowledged this in many of its recent determinations. For example, in TRP 2017-91[19], the Commission stated:

> According to the 2016 CRTC *Communications Monitoring Report*, Canadians are increasingly shifting toward mobile devices for their communications needs. More Canadian households reported subscribing to mobile telephone services (85.6%) than to landline telephone services (75.5%). In addition, the number of wireless service subscribers increased to nearly 30 million in 2015. [20]

51. In TNC 2015-134[21], the Commission noted that over 20% of Canadian households rely only on mobile wireless services[22]. In fact, Statistics Canada found in the Survey of Household Spending in 2016 that 66.8% of households had a landline, while 87.9% had a cell phone. In response to the same survey, 32.6% of households reported having only a cell phone and no landline in 2016, compared with 10.0% of households in 2010.[23]

52. In the 2018 Communications Monitoring Report (CMR), the Commission notes that "[o]ver the last decade, the percentage of households with landlines has decreased, while the percentage with mobile phones has increased (Figure 1.2). Fewer households are subscribing to both services – in 2016, almost a third (32.5%) of Canadian households were mobile-only households and 11.4% were land-line only."[24]

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19 Telecom Regulatory Policy CRTC 2017-91, *Implementation of the National Public Alerting System by wireless service providers to protect Canadians.*

20 TRP 2017-91, paragraph 11.

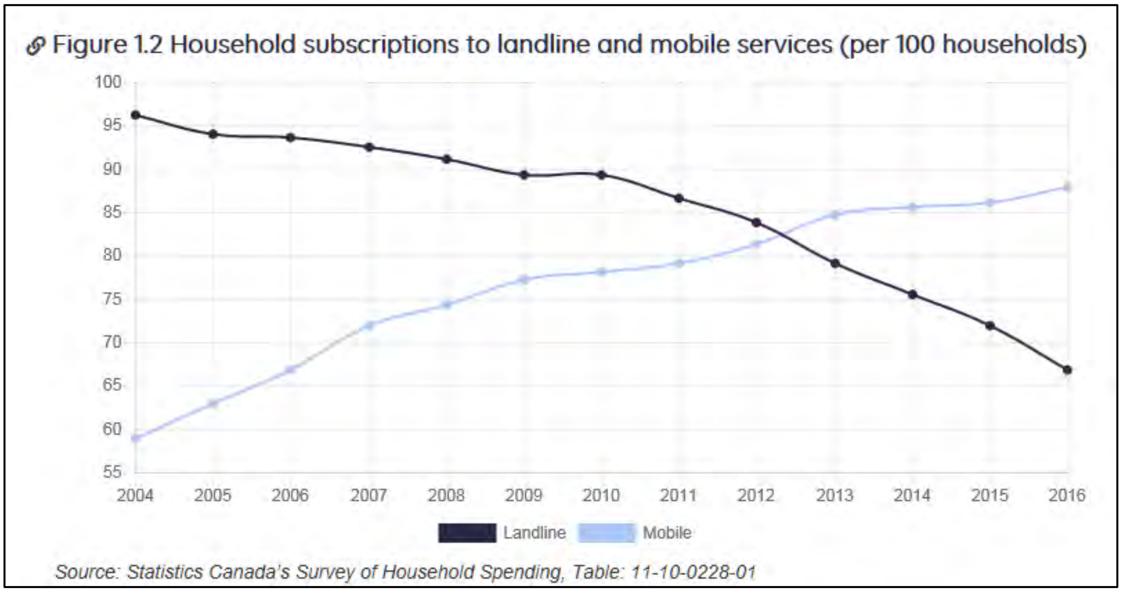
21 Telecom Notice of Consultation CRTC 2015-134, *Review of basic telecommunications services*.

22 TNC 2015-134, paragraph 8.

23 Statistics Canada, Survey of Household Spending, released 13 December 2017 https://www150.statcan.gc.ca/n1/daily-quotidien/171213/dq171213b-eng.htm.

24 2018 Communications Monitoring Report, Figure 1.2, https://crtc.gc.ca/eng/publications/reports/policymonitoring/2018/cmr1.htm#s10ii1.

Figure 4
Household subscriptions to landline and mobile services
(per 100 households)



53. There is no question that wireless substitution is playing a more significant role in the telecommunications market in Canada today than it ever has, and that the impact of wireless substitution is only forecast to grow, and quite significantly, as wireless networks move to long term evolution (LTE) and 5G technology in the near term. While voice over Internet protocol (VoIP) is certainly an option for many, and there are many companies offering VoIP service to residential customers at very attractive rates, it is wireless substitution that is truly shaping the local service market today and going forward across all areas, and particularly in the North. 77% of our communities have at least one mobile wireless service provider, and 50% of our communities representing 66% of our total lines have access to two mobile wireless providers. Line losses, primarily to mobile wireless, are increasing. Our total residence NAS has declined by 45% from 2007 to present; indeed, the community of Fort Nelson, BC has shown a decline of 76% in that time period. The territorial capitals of Whitehorse and Yellowknife have had sharper declines in landline penetration than larger centres in southern Canada. At the end of 2018, if we compare our total residential voice lines to the total number of households, only 29% of households in Yellowknife had a landline phone with the majority of customers moving to a wireless or VoIP provider.

54. All of this illustrates that the market is changing, and the way we were able to operate in the past (through cross-subsidization of services from higher mark-up business services in our less rural centres) is not sustainable in the near term, let alone the long term, and it does not support an environment that will encourage network investment and technology growth.

3.3.2 The Need for Subsidy in the Far North

55. Ongoing subsidy, particularly in regions that are served by satellite backhaul, will be needed on an ongoing basis; otherwise, our ability to continue to provide modern services at reasonable prices for northern Canadians is not assured. We rely on satellite backhaul to provide telecommunications services to regions that have no access to terrestrial transport networks, including some of the most remote areas of our serving territory. Without satellite services, people who live in these communities would be entirely cut off from other regions of the country and the world. Satellite backhaul services are expensive both to establish and to use.

56. The Commission has set a universal service objective broadband target speed of 50 Mbps download and 10 Mbps upload[25]. The costs of the satellite capacity needed to make these targets are extreme. These high costs are a significant factor that prevents us from offering customers the more advanced services that they demand. Without ongoing subsidy, it is doubtful that customers in these areas will ever be able to subscribe to advanced telecommunications services at high speeds at any price, let alone at a price that is comparable to what a customer in southern Canada would pay.

57. For telecommunications, in many remote communities including much of Canada's remote North, it is not reasonable that the Commission's service objective of 50 Mbps download and 10 Mbps upload will occur naturally given the low population density and the high cost of operating telecommunication networks in these regions. The cost to provision Internet service both on the access side within the local community as well as on the backbone transport make this exceedingly difficult to achieve.

58. While fixing the broadband situation may appear as simple as laying more fibre, increasing competition or forcing prices lower, improving connectivity in Canada's remote North will require collaborative solutions that encompass the complexity of the region. Distance,

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[25] Telecom Regulatory Policy CRTC 2016-496, *Modern telecommunications services – The path forward for Canada's digital economy*, paragraph 80.

geographic challenges, high input costs and low population densities make it challenging to find a business case where telecommunications service providers can recover their investments. This challenging business case is made significantly more adverse by structural mechanisms that drive market conditions. An example of this is the requirement to provide wholesale access. In the Far North, there is simply not enough revenue from local services to support one service provider let alone two or more in most communities.

59. To achieve these aspirational targets, large infrastructure development through public-private partnerships will be required. Cutting-edge technologies that northern residents and businesses need to participate in the digital economy on a global basis such as fibre to the home, 5G wireless, long-haul terrestrial fibre, subsea fibre, (i.e., between Nuuk, Greenland and Iqaluit, Nunavut), or low earth orbit satellites will not be supported without substantial shifts in the regulatory framework in the coming years.

60. These projects are nation building. They will require hundreds of millions of dollars in infrastructure development and strong collaboration between all levels of government, Indigenous organizations and the private sector. They are also the only way Canada – and especially the Far North – will meet its economic and social potential.

61. If northern Canada is to be fully engaged in the digital economy with reliable data and Internet services comparable to the South, public broadband programs must be supported by a legislative framework and regulatory tools that enable investment specifically to address the construction and ongoing operation of broadband networks within the context of a vast geography and sparse population with a limited business case to support future investment; that is, through some form of subsidy. To maximize total investment with the private sector, companies need certainty and a reasonable rate of return.

3.3.3 Subsidy Failures in the North

62. How those subsidies are administered in the North is also important. There are a number of companies offering telecommunications services in the North, and many receive some form of subsidy; however, only we have the obligation to serve all customers in our serving territory.

63. The obligation to serve is a requirement on the incumbent local exchange carrier (ILEC) to provide voice service to all customers in that ILEC's traditional serving territory. New entrants launching service in competition with the ILEC do not have this requirement. This means that new entrants can choose to only serve those areas that make the most business sense: downtown cores, pockets of higher-density homes, or wherever the business case to serve is positive. ILECs do not have that luxury – we are currently mandated to serve all customers, and we are being compelled to do so at a loss.

64. In 2018, we received $46.83 a month in subsidy for each residential NAS to compensate us for the difference between the cost to provision and maintain that line and the revenue we receive from the end customer of that line. As we already noted above, this subsidy is being phased out, and there is no guarantee of a replacement mechanism to cover that revenue shortfall. Further, as we pointed out earlier, we are providing residential DSL Internet services at mandated below-cost rates in these same areas. We can only cross-subsidize these below-cost services from other services (mostly business services in our larger communities) for so long before it becomes unsustainable. The framework we are operating under in untenable, and in the end, will preclude any investment in innovative technology or networks. You cannot invest if you are selling your services at rates that don't cover your own basic costs.

65. How subsidies – either one-time or ongoing – are administered in the North is important. Experience has demonstrated that subsidizing competitive entry has not led to sustainable competition or innovation in the North, and therefore how any subsidy is structured, awarded and administered in the North needs to be cognizant of this reality.

66. In one specific case, SSi Micro (an Internet provider in the North) received federal funding to build out infrastructure in all Northwest Territories' communities and in some cases in direct competition with us. After subsidies ended, there was not a large enough market for two providers resulting in SSi Micro terminating service with little or no notice to customers.[26] [27]

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[26] SSi Micro pulls AirWare internet out of 3 N.W.T. communities (https://www.cbc.ca/news/canada/north/ssi-micro-pulls-airware-internet-out-of-3-n-w-t-communities-1.2737913).

[27] 23 July 2014, Deh Cho Drum - Nahanni Butte Internet users in Nahanni Butte and Trout Lake have one less option to choose from, now that SSi Micro has dropped its AirWare service. Nahanni Butte finance officer Roxanne Konisenta said the band is looking at options to replace AirWare and will need to arrange service with another company before 10 Aug 2014. She said there has been little detail provided on the service change. "It's going to be a big change. The locals in the community are going to have to figure out what they're going to do in their own homes for Internet service," she said. "I'm not sure how aware (the community) is of AirWare no longer providing service." She said she received an from SSi Micro in June notifying her of the service changes, but fears many community members who may not check their frequently would have missed the memo. SSI Micro announced to its customers that the shutdown would commence on 19 July 2014. Aside from Nahanni Butte and Trout Lake, affected communities include Colville Lake, Déline, Lutsel K'e, Paulatuk, Gameti, Sachs Harbour, Ulukhaktok and Wekweeti.

This is a classic case where subsidized competition in communities that are already priced below cost is not sustainable nor is it beneficial to customers.

4.0 PROPOSALS TO REVISE THE *ACT* AND UPDATE POLICY MAKING

67. We recognize that the regulator ultimately has the ability, and responsibility, to make these decisions, that the regulator can make errors, and that the *Act* cannot reasonably prevent every such error. We believe, however, that the *Act* must provide clearer guidance to the regulator to emphasize the benefits of a facilities-based preference for telecommunications regulation. The Panel has specifically sought comments from parties concerning what regulatory reforms could be adopted to reduce the barriers that Canadians face in accessing advanced telecommunications networks. We note that Bell has proposed a number of changes that would help support facilities-based providers. We have reviewed these recommendations and support them as modifications to the regulatory framework.

68. We will, however, discuss how the amendments proposed by Bell and supported by us could have helped mitigate the ramifications of the case studies we presented above; specifically, we will discuss the benefits of the following proposed amendments:

d) The proposal to change from a presumption of regulation to a presumption that competitive forces are able to serve the needs of customers, including a proposed new regulatory framework to be incorporated in the *Act*, by which *ex ante* regulatory mechanisms (such as the requirements for tariffs and advanced approvals in sections 25 and 29 of the *Act*) be removed and replaced with a comprehensive framework to allow the Commission to address market failure;

e) The proposal to provide guidance on the proper tests for establishing whether regulation is required, be it retail or wholesale; and

f) Proposals for rate-setting rules, which is an area that the *Act* is currently silent on.

69. We believe these changes would assist northern Canadians in obtaining increased access to the advanced infrastructure they require. While we will not reiterate the arguments already made by Bell, we discuss how these amendments to the *Act* could have improved the outcomes for customers in the Far North in the case studies we have presented to the Panel.

4.1 Remove the Presumption for Regulation and Reassess When and How to Impose Wholesale Regulation

70. In our view, this new framework provides the Commission with necessary guidance surrounding how to intervene in the marketplace to best support the interests of customers. Under Bell's recommendations, Commission intervention would be premised on findings of unjust discrimination/undue preference (concepts that are already fixtures of the *Act* today). Where a service provider believes that another telecommunications service provider has engaged in actions resulting in unjust discrimination/undue preference, a complaint may be filed with the Commission demonstrating the unjust discrimination/undue preference. The Commission would be empowered to assess and make determinations on the application.

71. Where the Commission finds that unjust discrimination/undue preference has occurred, the Commission would consider certain factors prior to intervening. These factors are different whether the complaint relates to a retail service or a wholesale service. Where a complaint relates to a retail service, the Commission would need to assess whether the service provider engaged in the actions complained about has assessment of SMP. Where the service provider does not have SMP, no regulatory action is necessary. However, if the service provider does have SMP, then the Commission could intervene to mandate and/or rate regulate the service, as it deems necessary.

72. In the case of a wholesale service, the Commission would consider a different set of factors. Under the Bell proposal, prior to intervening to address unjust discrimination/undue preference, the Commission would need to additionally find that: 1) the relevant service is a required input for a wholesale competitor to compete in the downstream market; 2) the wholesale service provider has SMP in the relevant upstream market, such that denying access to the facility would result in the substantial lessening of competition in the relevant downstream market; and 3) it is not practical for the wholesale customer to duplicate the functionality of the facility. We support these recommendations: without such findings, Commission intervention is not necessary to address the applicant's complaint, as the practice in question could not have an anti-competitive impact in the market.

73. Additionally, Bell recommends that the Commission be required to perform a final assessment of factors designed to weigh the benefits of intervention against the potential longer-term negative impacts to facilities-based investments and innovation that intervention

could have. These factors would mitigate the risk of the Commission over-regulating the market, reducing benefits to customers.

74. Under Bell's test, if any of the following conditions are present, the Commission should refrain from intervening in order to foster facilities-based competition over near-term market impacts: 1) the owner of the facility does not or is unlikely to have significant market power in the relevant downstream market that uses the facility; 2) mandating access is not the most effective means to control the market power of the wholesale service provider; 3) competition is likely sufficient to protect the interests of end-users without mandating access to the facility; 4) mandating access could undermine the level of innovation or investment in advanced or emerging networks; or 5) where mandating access is not likely to have a substantial positive impact on competition in the market that uses the facility. Where any of these conditions is present, the Commission should decline to regulate in favour of the longer-term benefits afforded by facilities-based competition.

75. We support these factors. If we assess the first two case studies, which are matters that the Commission has already reached a determination on, we can readily see that the outcomes under a different legislative framework would likely have been quite different.

76. With respect of our retail residential DSL Internet service, as outlined in Section 3.1, if Bell's proposed new framework had been in place when the Commission were examining the issue, it would have begun by asking if there was a complaint of unjust discrimination/undue preference such that the Commission would need to assess whether we, as the service provider had SMP. If not, then no regulatory action was necessary. The Commission would have been compelled to undertake this assessment even before ordering us to file tariffs for our retail Internet services. It is likely that an examination of the facts would have revealed that there was, in fact, no situation of undue preference or unjust discrimination, and therefore no SMP and no requirement to regulate. However, even if the Commission had found that there was a need to rate-regulate the service, they would do so subject to the rate-setting guidance which is further discussed in Section 4.2.

77. As we discussed in Section 3.2, the recent Wholesale Connect decision, which has had a material impact on our business, will impact the amount of funds available for investment back into our networks and services. We submit that if a framework such as we are endorsing had been in place prior to the establishment of Wholesale Connect service, let alone the permutations of the rate-setting exercises undertaken since 2015, that the Commission would

have been able to much more effectively evaluate many aspects of the proposed service. The drastic rate reductions imposed on Wholesale Connect service have impacted our retail service and reduced the funding available to provide services in remote areas, let alone invest in our networks of pursue innovative solutions for customers in the North.

78. In the case of Wholesale Connect service, it is clear that conditions to require mandated access were and likely remain unmet. The mandating of Wholesale Connect service at increasingly lower rates (from 2015 to present) undermines our ability to invest in our networks and stifles innovation. Both wholesale and retail (downstream) market prices have been driven down by this action, and we have not seen any competitive investment as a result of this decision that would benefit our customers in the North. Reductions in business rates have impacted the level of cross subsidy to the smallest northern communities, which has serious implications on broadband service quality and availability to northern customers. Under the proposed Bell framework discussed in the following section, the Commission may or may not have found that Wholesale Connect service should be mandated, but in the rate-setting exercise, the Commission would have almost certainly better evaluated the broad impact of its rate determinations including whether or not the rates would deter innovation and investment.

4.2 Proposed Changes to the *Act*

79. Bell has recommended certain changes be made to the *Act* to recognize facilities-based competition. Specifically, Bell has recommended that Canada's telecommunications policy objectives be renewed to foster innovation and investment in Canadian telecommunications.

80. While Government policy has clearly been to favour innovation through the promotion of facilities-based competition, we agree with Bell that the current Telecommunications Policy Objectives have not captured this principle (as Bell notes, the language currently set out in section 7(c) merely directs the Commission to regulate "to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications" and is silent on how to do this). This lack of direction has resulted in numerous Commission decisions and regulatory actions that have undertaken to develop extensive regimes that rely on resale competition. The benefits of such resale competition for Canadians are unclear, while there has been measurable harm to the ability of facilities-based competitors to invest in innovation and network development, reducing the quality of our national infrastructure.

81. As part of Bell's proposed framework, Bell has also recommended that further guidance be provided to the Commission concerning the factors that should be considered in setting a just and reasonable rate, should the Commission determine that it is necessary to do so.

82. For these reasons, we support revisions to the *Act* to foster facilities-based competition. This is not to say that the *Act* should prevent rulings to promote wholesale access, but that the *Act* should provide a clear preference for facilities-based competition. Decisions of this nature are not in the longer-term interests of Canadians, and run counter to the Government's stated policy goals.

83. As parties looks north and identify investment priorities, focus should be on initiatives that demonstrate public benefit and leverage investment by, and opportunities for, the private sector. As well, when updating the *Act* to support the development of public policy and program funding models, consideration must be given to the unique characteristics of the North, including the large geography, sparse population, and very high costs to serve.

84. In the *Act* today, the Commission is empowered under section 37(1)(a) to require a Canadian carrier "to adopt any method of identifying the costs of providing telecommunications services and to adopt any accounting method or system of accounts for the purposes of the administration of this *Act*". While the Commission has certain standard principles that are followed in establishing rates for services – for example, a rate for service is generally required to be set above costs, and carriers are entitled to earn a reasonable return on services – the framework in the *Act* is extremely broad and allows the Commission to adopt any rate setting practices.

85. As part of its proposed section 27(11), Bell has provided language as follows:

> **27(11)** When determining whether a rate is just and reasonable, the Commission shall take the following factors into account:
> (a) The variable and fixed costs to provide the service;
> (b) A contribution to carrier fixed and common costs;
> (c) A reasonable rate of return;
> (d) Incentives for innovation and investment in the construction of networks;
> (e) A risk premium when applicable;
> (f) A real option value to wholesale customers when applicable;
> (g) The costs already incurred by the Telecommunications Service Provider to build the facilities to provide the service;
> (h) The financial impact of regulating the rate on the Telecommunications Service Provider offering the service;

(i) The time value of money; and
(j) Any applicable regulatory obligations.

86. It is entirely appropriate for the framework in the *Act* to require the Commission to consider these factors, as these factors are designed to ensure that rates are set in a manner than contemplates the need for facilities-based providers to invest in their networks in order to provide Canadians with access to advanced services.

87. In order to better promote the interests of Canadians, we recommend that further guidance be provided to the Commission through the regulatory framework set out in the *Act* to ensure that rate setting exercises result in just and reasonable rates that reflect the longer-term interests of Canadians and that do not prevent necessary investment in advanced infrastructure.

88. Using the guidance as set out above, it is clear to see that in each case study we have presented in Section 3, the outcome could have been improved – in all likelihood quite dramatically – by the application of the rate-setting principles above in conjunction with the change to a non-presumption of regulation.

89. For example, in the case of residential DSL Internet rates discussed in Section 3.1, it is immediately apparent that the Commission would have reached a very different rate for these services. Today, these rates are mandated at below-cost levels, which would have been precluded by the application – at a minimum - of the principles in (a), (b), (c), (g) and (h). The Commission would have been compelled to ensure that rates were set at a level that at least permitted us to recover our costs and enable us to continue to make investments promised under the modernization plan – investments that were cancelled pending a review by the Commission of its error.

90. As discussed in section 3.2, with respect of Wholesale Connect service, the application of even just the principle in (d) above, with respect to incentives to innovate and invest, would have led to a very different outcome. We were compelled to cancel promised fibre-base infrastructure builds because of the ***disincentive*** to invest in fibre-based services. This resulted in cancelling a fibre build to Dawson City, Yukon in summer of 2013, and forced us to invest in less efficient microwave-based infrastructure.

4.3 Proposed Policy Updates

91. In addition to specific changes to the *Act*, there are certain policy considerations that we recommend be updated in light of the realities of serving customers the current competitive environment in Canada, and specifically the North, to coincide with the proposed changes to the *Act*. In this section, we address both the obligation to serve which may be modified by the Bell proposed changes to the *Act*, and the appropriateness of wholesale obligations as a part of any subsidy award.

4.3.1 The Obligation to Serve

92. Under the existing *Act*, the ability of the Commission to impose an obligation to serve on carriers is unclear. Commentators have discussed these issues at length about the interaction of the common law obligation to serve and the *Act*.[28] Historically, the Commission has effectively maintained an obligation to serve through its tariff requirements for ILECs. Under the Bell proposed changes to the *Act*, the Commission would be given the ability to mandate the provision of both a retail (see ss.27(5)) and a wholesale (ss.27(6)) service. Yet, neither could be done without first finding the TSP possesses SMP in the relevant market. Thus, there could no obligation to serve without a finding of both SMP and unjust discrimination.

93. In our view, there should be no obligation to serve simply by default. For example, in our recent submission to a Commission proceeding on voice rates and obligations (TNC 2018-214), we proposed that the Commission remove any obligation on ILECs to provide voice service if there is a competitor already receiving government subsidy in that same area to build broadband networks. Where broadband exists there likely is no need for a voice obligation as there are many over-the-top voice providers that can serve customers using a broadband connection. As such, it is highly doubtful that an ILEC facing voice competition from wireless competitors and from Internet substitutes can be said to have SMP in voice. It is especially egregious for a regulator to impose or maintain an obligation to serve for voice on an ILEC without any subsidy, when the regulator or government is subsidizing a competitor to build a broadband network in that same area.

[28] See for example Michael H. Ryan, *Canadian Telecommunications Law and Regulation*, loose-leaf, (consulted in January 2019) at 304 (Duty to Serve).

94. Under the proposed changes, such a ruling would not be possible. No obligation to serve could be imposed without a factual finding of SMP; a finding we submit could not be made for an ILEC providing voice in the face of a broadband competitor.

4.3.2 Subsidy Applications and Mandated Open Access Commitments

95. As mentioned above, expanding broadband access to the North will, in many areas, require subsidies. We suggest that the Panel give consideration to how those subsidies are structured – specifically we oppose the imposition of wholesale access requirements as a condition of receiving subsidy. We submit that if the goal is universal access, that subsidies should be directed to the proper outcome for the end customer (quality, speed, and price) and not simply to subsidize competition. This policy has proven unsustainable in the past in Canada's Far North.

96. A TSP that bids for a subsidy to provide broadband (or other) services in a region knowing that there is no wholesale obligation will be able to seek a subsidy that assumes a higher level of retail penetration than if wholesale access is mandated. As such, the applicant TSP can be expected to bid for a lower level of subsidy. In contrast, where there is a wholesale obligation, an applicant TSP will have to assume that it will lose retail market share – and thereby retail market revenues to a wholesale competitor. Unless one believes that the wholesale competitor will actually grow the market (a dubious proposition generally and highly improbable in the context of the Far North), then the impact of mandating wholesale can only be to reduce the profitability (and therefore increase the required subsidy) for the bidder. As such, if a policy maker mandates wholesale obligations as a condition of subsidy, it will be requiring a higher level of subsidy – and by extension – it will be subsidizing competition. We believe the goal of subsidies should be to bring more access to higher quality, affordable services to all Canadians, not to subsidize competition.

97. Of course, without the prospect of competition, consumers could be vulnerable. It is for this reason that we recommend retail price commitments from subsidy recipients as the best mechanism to ensure consumers are protected. It is better to subsidize an entity and have retail price commitments (such as matching obligations whereby TSPs that receive subsidy are required to match their retail rates in the subsidized areas to rates they offer in competitive but similar areas) from the TSP who receives subsidy than to increase the amount of subsidy needed in order to have a competitive market. As illustrated above by the example in section

3.3.3 of a TSP ceasing to offer broadband service once its subsidy ran out, subsidizing competition does not work in the long run.

98. While we recognize that it is attractive to policy makers to require wholesale access as a condition of receiving subsidies (it seems initially to be a fair approach), we question whether this is really in the long-term interest of communities and the policy makers (who often have limited funds to be shared amongst many different locations in need). Mandating wholesale or open access generally creates two fundamental problems: (i) it acts as a disincentive for potential bidders; and (ii) it drives up the costs of the subsidy. In the North, the ability of the very small and dispersed market to sustain competitive entry is highly questionable, and policy makers' overall aim – to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada – may be better served through retail regulation and not through mandated wholesale access.

99. Of course, if the wholesale obligation is imposed as a condition of receiving funding, then it should be adhered to. We have applied and received government funding contingent on open access obligations. In such situations, we will wholly comply with those obligations. However, we suggest to the Panel that it recommend that in future programs these obligations not be included in funding and subsidy models for the reasons set out above.

100. Another key policy consideration is that subsidies should only be provided to entities that can deliver services over the long term and are invested in the entire serving territory. Governments should work with providers that are qualified to deliver on commitments over the long run.

5.0 CONCLUSION

101. We support the Panel's process, and are pleased to provide our comments to assist the Panel in evaluating changes to the *Act* that are designed to deliver benefits to customers, including those in the Far North. As noted, we have reviewed the comments of Bell submitted under separate cover today, and we support their comments and suggestions. The changes proposed contemplate an effective legislative framework with appropriate regulatory tools that will support innovation and investment by facilities-based providers in the infrastructure and networks needed by all Canadians. We support the move from a presumption of regulation to a presumption that competitive forces are able to serve the needs of customers, including a proposed new regulatory framework to be incorporated in the *Act*, by which *ex ante* regulatory

mechanisms be removed and replaced with a comprehensive framework to allow the Commission to address market failure. We also support the provision of guidance on the proper tests for establishing whether regulation is required, be it retail or wholesale; and new rate-setting rules. We also support the proposal that the power to impose an obligation to serve should be contingent on a finding of unjust discrimination and finding of SMP, and that there should be no open access obligations when granting any new subsidy, as such an obligation actually works contrary to the purpose of the subsidy, which is to deliver high-quality services to all customers. Regulation should always have as its goal the delivery of high-quality services to all Canadians, including those living and working in Canada's Far North.

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