

**Department of Finance Canadian Radio-television and Telecommunications
Submissions**

1. Call for comments – Telecommunications in the Far North, Phase II, Telecom Notice of Consultation CRTC 2022-147, Initial comments of the Government of the Northwest Territories, 6 October 2022.
2. Further comments of the Government of the Northwest Territories, 10 February 2023.
3. Opening Statement of the Government of the Northwest Territories, 17 April 2023.



Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

***Call for comments –
Telecommunications in the Far North, Phase II,
Telecom Notice of Consultation CRTC 2022-147,
8 June 2022***

**Initial comments of the
Government of the Northwest Territories**

6 October 2022

1. Executive Summary

1. The Government of the Northwest Territories (“GNWT”) is pleased to participate in *Telecommunications in the Far North, Phase II*, Telecom Notice of Consultation CRTC 2022-147 (“Notice” or “TNC 2022-147”).
2. Appendix 1 to the Notice provided 39 questions ordered into ten topics. The GNWT’s initial comments on this proceeding are substantially in the form of its responses to those questions. This Executive Summary presents a high-level overview of key proposals included in those responses, relating to the themes of:
 - Indigenous reconciliation and engagement matters;
 - potential disruptions to Northern telecommunications policy;
 - affordability and subsidies; and
 - reliability and competition.

A. Indigenous reconciliation and engagement matters

3. Indigenous households constitute at least half of the customer base within the NWT, but have much lower access to broadband services than their non-Indigenous counterparts, for multiple reasons. Indigenous persons face the affordability challenges faced by the NWT as a whole, but Indigenous Northerners also face specific challenges, such as those related to historical disadvantage, and in particular are likelier to have incomes below the poverty line. Higher pricing in the Far North therefore affects Indigenous households disproportionately and exacerbates the affordability challenges they face.
4. The GNWT’s responses to the questions posed by the Commission highlight the ways the Commission could redress these Territory-wide and Indigenous- and low-income-specific inequalities. A first proposal for the CRTC to establish a competitively-neutral portable subsidy in the Far North could help ensure service providers offer equitable pricing, which would have an outsized positive benefit on Indigenous households. A second proposal, a targeted affordability programme, either through meaningful Northern participation in the current Connecting Families programme or a mandated equivalent, would further benefit Indigenous households in particular.
5. However, actions such as these are not a complete programme for addressing the equality and equity gaps in telecommunications services faced by Indigenous peoples. The development of supplementary interventions, customized to the conditions of specific Indigenous households, communities, and peoples will also be needed. The research and consultation that such interventions call for will require that Indigenous governments, organizations and communities to participate in processes that will be effective and respectful of Indigenous requirements. Indigenous governments and communities, including those in the NWT, must be meaningfully and directly consulted before committing to any specific actions that may affect them.

6. The CRTC's regulatory framework should, therefore, formalize the seeking of Indigenous peoples' ongoing involvement, and prioritize respect for their collective self-expression. However, knowing the broad and deep efforts required for the CRTC to implement the principles reflected in the United Nations Declaration on the Rights of Indigenous Peoples (the "**Declaration**"), the GNWT submits that the required ongoing engagement by the CRTC likely falls short of what can be accomplished as just one component of this proceeding. The GNWT has therefore encouraged the CRTC to convene, in parallel to the current proceeding, a self-standing process on the CRTC's role in implementing the Declaration principles both in respect of the Far North and across the rest of Canada.
7. A dearth of nationally comparable, telecommunications-specific data regarding both Indigenous people and the Far North is a continuing related challenge. The GNWT encourages the CRTC to undertake and to approach agencies with which it cooperates, including Statistics Canada, to start to or continue to undertake more disaggregated data surveys and collection related to affordability and access gaps in the Far North.
8. These suggested initiatives would not take place in a vacuum. Activities related to Indigenous rights, treaties, agreements and negotiations in the Far North are significant and ongoing. The CRTC should take care to ensure these are reflected in this proceeding. The NWT is the site of several settled Aboriginal rights agreements; the CRTC should work to ensure Indigenous governments recognized by these agreements have a full and fair opportunity to speak to how these agreements should be reflected.
9. However, economic reconciliation must also be advanced beyond treaty matters and the economic benefits accruing to Indigenous households and small business from equitable pricing across the NWT and from a targeted affordability programme. This should include sustainable efforts to train community members, and hiring targets for Indigenous training and employment. Indigenous recommendations as to how service providers and industry stakeholders can better meet the needs of Indigenous communities should be reviewed, tested and, where appropriate, formalized through guidelines that ensure Indigenous languages, cultures, resources, and needs are both engaged and required to be engaged.
10. The GNWT similarly supports the active review of requirements that service providers engage meaningfully with Indigenous peoples and communities, and local communities generally, in providing or planning to provide services.

B. Potential disruptions to Northern telecommunications policy

Learning from COVID-19

11. The ability in the Far North to access services online became more important than ever during the COVID-19 pandemic. Gaps and disruptions in service, long experienced in the Far North at frequencies and to degrees that the Commission would not accept in Southern political and media capitals, became highlighted.

12. The goal of Northern telecommunications policy must be more than simply to optimize how Northwestel is regulated. If anything, the people of the Far North are more reliant on remotely-delivered communications services than many Southerners. Northern telecommunications policy must reflect this in its objects and purposes. The goal must be to deliver affordable, high-quality broadband and mobile services choices to the Far North that are at least equitably priced with, as full-featured as, and as respectful of local autonomy, choice, and entrepreneurship as those in the South. Resilient, high-quality networks are fundamental to achieving those policy goals.

Integrating new forms of satellite system

13. Even as existing satellites reach end-of-life, new satellite systems in the Low and Middle Earth Orbits (“LEO”; “MEO”) are coming online, delivering users more capacity, better response times, and improved coverage. Broadband prices in the NWT are too high, so we strongly support any lower pricing, any improved quality, and any broader range of choices that can come of these developments, in the context of the diverse, competitive Northern telecommunications service markets that the GNWT hopes to see continue to emerge.
14. A Northern telecommunications policy demands an ecosystem in which large well-funded, and well-subsidised new foreign entrants can co-exist with the incumbent, Northwestel. These markets must also be accessible by smaller and larger domestic participants, homegrown competitors, and Indigenous-owned businesses. The goal is to ensure MEO/LEOs help create a market that meets the needs of Northerners on both the supply and demand sides.

C. Affordability and subsidies

15. Telecommunications services were, long before COVID-19, integral to many Northerners in ways not always appreciated in the South. They shape our ability to communicate with one another and the world, and our ability to access information and goods and services not available locally. They create opportunities for healthcare, social services, education, training, and employment, for which our needs are often acute. In remote environments, they present a form of proximity not otherwise easily accessed or reproduced.
16. However, Northerners pay dearly for this connectedness. Broadband prices are much higher in the NWT than in Southern Canada. Some of our residents and small businesses have the economic means to pay these higher prices, but in a country that aspires to equity, they should not have to. For most Northerners, including many Indigenous persons and their communities and peoples, these higher prices constitute an economic hardship. Too many go without, resulting in take-up rates much lower than Southern Canada, in particular among low-income households and residents in some of our smaller communities. It is in this context that GNWT welcomes the Commission’s focus on affordability in the Notice.

17. The GNWT welcomes the possibility of the Commission developing an affordability “standard” or “guidance” to improve the depth, breadth, and frequency of collection and publication of timely, nationally comparable telecommunications-specific data for the Far North and allow the CRTC to apply such data to assess, monitor, and design programmes to address affordability concerns.
18. Affordability is fundamentally multi-dimensional, so multiple indicators, rather than a single metric, are likely needed to inform a CRTC-specified affordability standard. This multiple-indicator approach could include both equity- and hardship-based lenses to illuminate higher prices across the Far North in general and how prices impact low-income, rural and Indigenous households in particular.
19. The first perspective relates to how higher prices in general across the Far North impact all households and small businesses negatively by imposing an inequitable economic burden relative to that faced by Southerners. In this context the GNWT makes a first proposal that the CRTC should consider an ongoing, portable, competitively-neutral operating subsidy payments for Internet services across the Far North. The objective of this high-cost-related subsidy would be to reduce Internet access prices in the Far North so that they are equitable with those in Southern Canada. The funding for this new subsidy programme could come from the National Contribution Fund.
20. The second perspective relates to how prices impact low-income, remote, and Indigenous households. Studies suggest that many as half of those without home broadband access in our smaller communities do not buy it because of price. To address this, the GNWT first of all invites Northwestel to consider following the lead of its Southern counterparts, including its corporate affiliates, by committing in this proceeding to participate in the Connecting Families program that provides eligible low-income families and seniors with a designated Internet access service at below-market prices. However, in the absence of Northwestel’s firm commitment to join Connecting Families, the GNWT’s second proposal is that the CRTC should implement a distinct program for the Far North. Such a targeted affordability programme could be expected to have many of the same features as Connecting Families, but be portable, competitively-neutral, and be funded by the National Contribution Fund.

D. Reliability and competition

Competition

21. The GNWT has underlined the importance of a Northern telecommunications policy reset, which should focus on equitably-priced services, at quality levels and with features comparable to those delivered in the South. It should safeguard choice in providers, including foreign entrants, domestic incumbents, and homegrown entrepreneurs. Choice in providers is not a junior partner to the objectives of equitable price and quality. Rather, competition and choice help ensure improved pricing and quality by holding entrenched players’ feet to the fire. They allow subscribers to avoid the frustration of being locked in.

22. It is clear that the comparatively high costs of serving communities in the Far North mean that the combination of competition, entrepreneurial local entry, and improved price and quality that Northerners need will not result from unregulated markets alone. The GNWT has therefore indicated support for mandated wholesale High Speed Access (“HSA”), which it expects would reduce entry barriers and further reduce prices.
23. Wholesale HSA can allow competitive service providers to provide meaningful competition by paying a fair rate for the “last-mile” access portion of existing networks, rather than immediately building new ones. The model provides for more efficient use of scarce access facilities, particularly in an already-subsidized operating environment, while increasing local entrepreneurship and competitive entry opportunities.
24. HSA, if mandated in the Far North, could work alongside GNWT’s equity- and affordability-related subsidy proposals. For example, for a particular wholesale HSA-served household, the corresponding high-cost-related portable operating subsidy would apply to the wholesale HSA provider. The HSA provider then would apply the subsidy to its wholesale price it charges the retailer, which would then be able to provide its customer the lower final Internet retail price. This combination of mandated HSA, competitively-neutral portable subsidies, applicable for both retail and wholesale services; and affordability criteria to keep all of these in check, should result both in more affordable retail rates, and more robust competition.

Quality and reliability

25. The quality and reliability of Canadian telecommunications services have, in 2022, been the object of significant scrutiny. Many Southerners found themselves cut off both from broadband and mobile services, including 9-1-1 access, and from services which rely on communications infrastructure to function. For many Northerners, the reactions to high-profile outage conditions had a familiar ring.
26. Quality of service (“QoS”) conditions are already attached to the significant subsidies extended to build broadband services throughout the NWT. These conditions must be maintained, monitored, and made known so Northerners understand what service standards to expect. Further funding should also be tied to meeting service standards, including the GNWT’s two funding proposals to promote equity and affordability. This will incentivize investment in network elements that improve quality of service and reliability, such as the Great Slave Lake fibre redundancy project which, the GNWT submits, the CRTC ought to consider carefully for Broadband Fund support.
27. The CRTC should tie specific, measurable reliability standards to the proportion of households in a community that rely on a given service provider. In this way, QoS must become a cost of doing business made subject to clear metrics monitored systematically. When outages occur, the CRTC should have monitoring systems in place that note and automatically register these, and initiate a well-specified, clearly-established process for alerting those affected, identifying its root cause, and ensuring that the root cause is remediated.

2. Background

28. The Government of the Northwest Territories (“GNWT”) is a long-time participant in proceedings before the Canadian Radio-television and Telecommunications Commission (“CRTC” or “Commission”). We have consistently made submissions in support of services for the Northwest Territories (“NWT”) that compare favourably to those available to Southern Canada in respect of affordability, quality, and reliability, including redundancy; and that provide for genuine choice of service providers and promote local and Indigenous entrepreneurship, including the innovation and competitive discipline that contestable markets impose.
29. The GNWT’s submissions in the first phase of the Commission’s current multi-proceeding process, initiated by *Call for comments—Review of the Commission’s framework for Northwestel Inc. and the state of telecommunications services in Canada’s North*, Telecom Notice of Consultation CRTC 2020-367, 2 November 2020 (“TNC 2020-367”), were in the same spirit. The GNWT was in this regard pleased to note, in *Call for comments – Telecommunications in the Far North, Phase II*, Telecom Notice of Consultation CRTC 2022-147, 8 June 2022 (“Notice” or “TNC 2022-147”), the Commission’s openness to defining and elaborating a Northern telecommunications policy that could take the principles set out in the preceding paragraph into account.
30. At the same time, we note that this Notice raises a number of issues that are not unique to Northwestel’s serving territory, including:
 - measuring affordability, and achieving it in respect of broadband pricing in high-cost serving areas, in a competitive context;
 - measuring the reliability, redundancy, and service quality of broadband and mobile services—and enforcing standards that avoid, detect, and remediate outages in service of a more reliable telecommunications system; and
 - ensuring culturally-appropriate service and engagement frameworks and, more broadly, working towards reconciliation with Indigenous peoples and implementation of the United Nations Declaration on the Rights of Indigenous Peoples (the “Declaration”).
31. The GNWT’s intervention proceeds principally through its responses to the Notice’s questions, set out below (**Section 3**), followed by a concluding note (**Section 4**).

3. Responses to questions

32. The following sets out GNWT’s responses to the 39 questions set out in Appendix 1 to the Notice, which the Notice groups under 10 headings.¹ For certain questions—

¹ For convenience we have reproduced the relevant questions (indicated by “Q”) ahead of the related answer (cross-referenced with “A”) but, for economy of space, have not reproduced the related preambles, which can be found in the Notice.

particularly those of a relatively operational or technical nature—its responses are less detailed, on which the GNWT looks forward to reviewing other parties’ initial submissions, to which it reserves the right to comment further on any particular matter.

Reconciliation with Indigenous Peoples in the Far North (Q1-Q5)

Q1 What actions should the Canadian Radio-television and Telecommunications Commission (CRTC) take to ensure that the principles of equity and substantive equality are appropriately addressed in its evaluation of possible regulatory outcomes in this proceeding?

33. Indigenous peoples make up half the Northwest Territories’ population.² One might expect that, barring strong disinterest in making use of telecommunications services, that Indigenous subscribers would therefore account for roughly half of the telecommunications customer base.
34. That is not the case. Residential Internet access is far less available to Indigenous households in the NWT (63 percent) than to their non-Indigenous counterparts within the NWT (94 percent), or in southern Canada (94 percent)³. On its face, this situation does not meet the principle of substantive equality as defined by the CRTC, either within the NWT or as between the NWT and southern Canada. Truly equal outcomes, through equal access and opportunities that meet Indigenous households’ unique needs and circumstances, have not been achieved.
35. The reasons for this inequality are multiple. Indigenous persons face the same affordability challenges faced by the NWT as a whole, including residential and small-business-facing Internet prices that are much higher than in Southern Canada.⁴ But Indigenous Northerners also face specific challenges, such as those related to historical disadvantage and colonization. Incomes of Indigenous people are, on average, one-third lower than those of non-Indigenous people;⁵ in particular, Indigenous people are also likelier to have low incomes.⁶ Higher pricing in the Far North therefore affects

² Statistics Canada 2021 Census, reported in NWT Bureau of Statistics “newstats” of September 21, 2022 “Indigenous Peoples – 2021 Census” (https://www.statsnwt.ca/census/2021/Census_IndigenousPeoples.pdf).

³ Please see Table 5 in response to Q9.

⁴ Please see Table 1 in response to Q9.

⁵ Statistics Canada. Table 98-10-0281-01, “Income statistics by Indigenous identity and residence by Indigenous geography: Canada, provinces and territories” (<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=9810028101>).

⁶ Statistics Canada, 2021 “Low-income statistics for the population living on reserve and in the North using the 2016 Census” (<https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2021005-eng.pdf>).

Indigenous households disproportionately and exacerbates the affordability challenges they face.

36. The GNWT's responses to the questions posed by the Commission highlight means by which the Commission could redress these Far North-wide and Indigenous- and low-income-specific inequalities. GNWT's first proposal of a competitively-neutral portable operating subsidy for Internet services, described in response to Question 19, would have an outsized positive benefit on Indigenous households by reducing their relative higher economic burden. A targeted affordability programme, either through meaningful Northern participation in the Connecting Families programme or a mandated equivalent, as also described in response to Question 19, would further benefit Indigenous households in particular.
37. However, actions such as these are not a complete programme for addressing the equality and equity gaps in telecommunications services that have resulted from Indigenous peoples' systemic disadvantages. The development of targeted, achievable interventions, customized to the conditions of specific Indigenous communities and households requires making a compelling case for Indigenous governments, organizations, and communities to be consulted and to participate in designing approaches that will be effective and respectful of Indigenous requirements. Indigenous governments and communities, including those in the Northwest Territories, must be meaningfully and directly consulted before committing to any specific actions that may affect them.

Q2 What actions should the CRTC take to apply the principles established in the United Nations Declaration on the Rights of Indigenous Peoples to its evaluation of possible regulatory outcomes in this proceeding?

38. The GNWT agrees that the CRTC's regulatory framework should formalize the seeking out of Indigenous peoples' ongoing involvement and lead role in guiding the improvement of telecommunications services to address the needs of Indigenous communities. It is fundamental that mutual respect and trust become the basis for productive and effective relationships between Indigenous governments and peoples and federal, provincial, and territorial governments, including agencies like the CRTC, particularly as their complementary roles and responsibilities mean they will always need to work closely together.
39. In October 2019, the GNWT committed to implementing the United Nations Declaration on the Rights of Indigenous Peoples ("**Declaration**") in the NWT as part of the mandate of the 19th Legislative Assembly. The GNWT continues to carry this work forward in cooperation with the NWT Council of Leaders, which includes all Indigenous governments in the NWT. Broad and deep efforts will, likewise, be required for the CRTC to implement the principles reflected in the Declaration. Doing so would require ongoing engagement that likely goes further than what can be accomplished as just one component of the current proceeding. The GNWT strongly encourages the CRTC to

convene a self-standing process on its role in implementing the Declaration's principles. That process should unfold in parallel to the current proceeding,

40. The seven suggestions noted at paragraph 54 of the Notice are, in the GNWT's view, a reasonable starting point:
 - consult Indigenous peoples as early as possible;
 - provide clear, detailed information on what is being considered;
 - give Indigenous peoples reasonable time to prepare their views and respond;
 - seek to understand Indigenous peoples' views through meetings and discussions;
 - be open to changing its approach;
 - explain how Indigenous peoples' views or interests were considered when decisions are made; and
 - limit impacts to Indigenous or treaty rights, and discuss compensation if the impact to rights cannot be limited.
41. Certain related recommendations of the Broadcasting and Telecommunications Legislative Review Panel would support and enhance this starting point. The Commission should "engage with Indigenous Peoples and communities on how broadband expansion should be implemented in Indigenous communities and other related issues, such as Indigenous ownership of broadband networks."⁷ The Commission should, further, consider constituting a Rights of Indigenous Peoples Working Group, to help guide its approach to undertaking this engagement, and to "meet[ing] with representatives of Indigenous Peoples and communities outside of [a] Committee structure."⁸ Such a Working Group would not replace the need for broader engagement, nor represent the diversity of First Nations, Métis, and Inuit nations. Rather, it would act as a bridge—and help foster closer informal ties between the Commission and Indigenous persons while doing so.
42. To make these a starting point for reconciliation, however, requires sustained engagement and institutional entrenchment. The GNWT therefore recommends that the Commission consider what revisions are required to the *CRTC Rules of Practice and Procedure* and to the existing Broadband Fund application guide, and what terms of reference to pursue for a Rights of Indigenous Peoples Working Group, in order to implement these approaches.

⁷ Recommendation 26.

⁸ These are an adaptation of the approach, in the BTLR report's Recommendation 15, that a broader Public Interest Committee be created. In the GNWT's view, a focussed working group inviting the participation of Indigenous persons is an important step towards creating a space for dialogue directly within the Commission's context.

Q3 What actions should the CRTC take to apply the First Nations principles of OCAP® and the principles established in the National Inuit Strategy on Research to its evaluation of possible regulatory outcomes in this proceeding?

43. A fundamental challenge, both in the Far North and in relation to Indigenous peoples in particular, is the current dearth of granular and nationally-comparable, telecommunications-specific data. Specific metrics are needed that would assist in assessing and monitoring affordability and access gaps faced by NWT residents, including Indigenous people, as highlighted in our response to Question 1.
44. In this context, the GNWT encourages the CRTC to undertake, and to approach agencies with which it cooperates, including Statistics Canada, to undertake more disaggregated data surveys and collection. These would enhance capacity to assess and monitor affordability and other important objectives across the breadth of the NWT and the Far North more generally.
45. There are a number of important aspects to the collection and analysis of telecommunications and related data as it relates to Indigenous peoples generally, and to OCAP principles. The GNWT's call for more and better data collection includes more granular and frequent collection of data on Internet access. For example, the recently-completed Northern Canada Internet Use Survey ("NCIUS") study undertaken by Statistics Canada that included the NWT for the first time has provided us with relatively granular insight into Internet access across the NWT and the corresponding access gaps or inequalities.⁹ One of the innovative aspects of the NCIUS was the ability to present disaggregate data, including Internet access by Indigenous and non-Indigenous identity respondents. This allows us to quantify the Indigenous/non-Indigenous gap and thus to begin to formulate adequate responses.
46. The GNWT understands that the OCAP principles were designed in response to negative experiences based on a specific type of Indigenous-focused research, including research that was not requested by participants, over which participants had no control, and which was directly or indirectly harmful. OCAP thus places a high priority on collective community rights and interests in the information collected in such research and as such "is an expression of First Nations jurisdiction over information about their communities and its community members."
47. In contrast to population-wide data collection processes, which would identify Indigenous/non-Indigenous, geographical, and income-related gaps, Indigenous-focussed research may be appropriate to better understand how specific Indigenous communities, or Indigenous households within broader communities, interact with and purchase or forgo telecommunications services. The results of this research could be used to design specific interventions to overcome any remaining barriers after the implementation of the two GNWT proposals to improve equity and affordability. Such

⁹ Statistics Canada, 2022 (<https://www150.statcan.gc.ca/n1/daily-quotidien/220518/dq220518g-eng.htm>).

interventions should be designed in consultation with Indigenous governments, organizations, and communities to ensure effectiveness and buy-in. The GNWT considers that this research should also be undertaken considering ethical and respectful data collection, and adhere to the principles and protocols that specific Indigenous communities and organizations may have in place.

48. However, the CRTC should not assume that every Indigenous government, community, or person has signed onto any particular guidelines or code of practice. In particular, we understand that Indigenous collectives routinely adopt their own protocols, processes, and data sharing agreements to be respected and used.

Q4 What actions should the CRTC take to ensure that Indigenous rights, treaties, agreements and negotiations in the Far North are appropriately addressed in its evaluation of possible regulatory outcomes in this proceeding?

49. Activity related to Indigenous rights, treaties, agreements, and negotiations in the Far North is significant and ongoing. The CRTC should take care to ensure that these are well-reflected on the record of this proceeding.
50. The NWT has several settled Aboriginal rights agreements as well as ongoing negotiations on future agreements that will need to be taken into account. The parties to these agreements are best placed to speak to how they should be appropriately addressed; thus, the Indigenous governments recognized by these agreements should be engaged.

Q5 What actions should the CRTC take to apply the principles of economic reconciliation to its evaluation of possible regulatory outcomes in this proceeding? For examples of relevant concepts to consider, see 2021 Indigenous Connectivity Summit Policy Recommendations. Provide any other reports that you consider to be relevant.

51. The 2021 Indigenous Connectivity Summit Policy Recommendations address a range of actions. The Commission should consider what role it can play in supporting some of the relevant actions within its purview.
52. On the supply-side, for instance, one set of recommendations relate to Federal grants for basic planning, digital inclusion, and network operation and maintenance that continue to support local capacity-building in Indigenous communities. In this context, the CRTC could consider contexts in which to establish targets for Indigenous training and employment within non-Indigenous network builders and service providers, particularly those operating directly in Indigenous communities. This supply-side perspective could have the dual benefits of increasing and improving the telecommunications infrastructure in Indigenous communities, while raising the incomes of Indigenous peoples involved directly in these activities.
53. On the demand side, as noted in our response to Question 1, the GNWT considers that its two proposals related to equity and affordability will be of significant benefit to

Indigenous households and small businesses. Further, as set out in Question 1, the GNWT would also support CRTC specific Indigenous-focussed interventions, to address any remaining gaps after the implementation of these two proposals. As discussed in response to Question 3, the research and data gathering that may be appropriate to be able to, jointly with Indigenous governments and organizations, design effective interventions that are likely to have community buy-in is also crucial and should be carried out based on the principles listed in our responses.

COVID-19 – Impact on telecom policy issues in the Far North (Q6)

Q6 What actions should the CRTC take to ensure that the impact of the COVID-19 pandemic in the Far North is appropriately addressed in its evaluation of possible regulatory outcomes in the proceeding?

54. The COVID-19 pandemic further highlighted the importance of telecommunications in the Far North. The ability to access services online became more important than ever. Gaps and disruptions in service, long experienced in the Far North at frequencies and to degrees that are not acceptable, became highlighted.
55. The GNWT considers that the goal of telecommunications policy for the Far North must be more than simply to optimize how Northwestel is regulated. If anything, the people of the NWT and our counterparts elsewhere in the Far North are more reliant on remotely-delivered communications services than many Southerners. A Northern telecommunications policy must reflect this in its objects and purposes.
56. The GNWT proposes that the goal of a Northern telecommunications policy must be to deliver affordable, high-quality broadband and mobile services choices to the Far North that are at least equitably priced with, as full-featured, and as respectful of local autonomy, choice, and entrepreneurship, as those in the South. Resilient, high-quality networks, including the establishment of minimum standards and systematized, routinized, and non-exception-based outage and quality monitoring within a competitive market, are fundamental to achieving those policy goals.

Low earth orbit satellites – Impact on telecom policy issues in the Far North (Q7)

Q7 New market entrants that use low earth orbit (LEO) satellite technology to provide retail or wholesale Internet services have indicated their intention to provide services across Canada, including in the Far North, in the relatively near term. Comment on the impact these new developments may have on consumers, communities and the market.

57. Just as existing satellites reach end-of-life, new satellite systems in the Low and Middle Earth Orbits (“LEO”; “MEO”) are coming online, delivering users more capacity, better response times, and improved coverage. These include the imminent entry of direct-to-subscriber Internet, through Starlink, as well as community-antenna-oriented service we hope will drive down the price and increase the quality of services made feasible in Northern communities.

58. Internet prices in the NWT are too high. The GNWT strongly supports any lower pricing, any improved quality, and any broader range of choices that can come of these developments, in the context of the diverse, competitive Northern communications services markets that the GNWT hopes to see continue to emerge. But the ability to compete for Internet subscribers must be accessible to smaller as well as larger domestic participants, including incumbents, homegrown competitors, and Indigenous-owned businesses.
59. Northwestel is among these key participants. It is a major supplier and investor in our region. It has a large Northern workforce and contributes to the NWT's economy. As a regulated Canadian entity, it is today the primary means via which CRTC acts to realize the policy goals of the Telecommunications Act. The trust that the CRTC has placed in Northwestel as a Broadband Fund grantee throughout the Northwest Territories confirms and renews that relationship and, on Northwestel's part, that set of commitments.
60. As such, the task before the Commission is challenging but clear. Northern telecommunications policy demands an ecosystem in which large, well-funded, and well-subsidised new foreign entrants and Northwestel, as the incumbent, can coexist in ways that do not crowd out local innovation, including the ability for the best-performing local entrepreneurs and entrants to grow and scale up. The goal is to ensure LEOs help develop a market that meets the needs of Northerners on both the supply and demand sides. Competition, on one hand, and resilience standards and monitoring, on the other, are complements, not substitutes.

Affordability of retail telecommunications services in the Far North (Q8-Q15)

Q8 *Please comment on the following perspective: a good or service is affordable when a consumer is able to purchase it without suffering undue hardship.*

a) *Do you agree with this view? Why or why not?*

61. The perspective that the Commission has proposed focuses on “undue hardship”. Within the range of theoretical and practical perspectives on affordability, both “hardship” and “burden” arise repeatedly as reference points: hence, for instance, affordability as representing a price that “does not impose, in the eyes of a third party (usually government), an unreasonable burden on household incomes.”¹⁰
62. To the extent that a hardship rather than a burden reference point establishes a higher price threshold for affordability, such a view ought to be carefully considered in terms of whether it is overly restrictive. Households and small businesses in the NWT face complex affordability challenges.

¹⁰ Please see note 11 below.

63. The GNWT considers that both hardship and burden reference points should be included, particularly as the Commission's considered perspective on affordability is sought to be operationalized and real methodological challenges arise, including those particular to the Far North, including its much higher cost of living, as set out in response to Q9.
64. The GNWT notes, in this regard, a rich scholarly literature on affordability measurement generally.¹¹ The Commission has now embarked on the very important step of adopting and applying affordability standards. It should take steps to ensure that it has the benefit of this social science research as it does so.

b) If not, explain how you would describe what makes a service affordable or not.

65. The affordability challenge in the NWT can be thought of as two-fold. First, key services, particularly the fixed Internet services accessed by residential and small business customers, are priced much higher in the NWT than in Southern Canada. These higher prices constitute a hardship for most low-income households in ways they are not likely to for high-income households. A restrictive, hardship-only conception of affordability could highlight for redress the affordability challenges of low-income households. But it would, second, likely leave unaddressed the much higher prices faced in the NWT by the majority of households and all small businesses, an outcome contrary to the Northern telecommunications policy principles that GNWT has laid out.
66. A more inclusive conception of affordability that would better cover the challenges faced in the NWT would include both elements. The Commission has already recognized the particular positions of both residential and small business¹² subscribers. For these households and small businesses, affordability would be approached by assessing the equivalence between the telecommunications economic burdens they face in the Far North relative to Southern Canada. This could be considered a "relative" burden perspective which places greater weight on geographic

¹¹ Duncan MacLennan and Ruth Williams, *Affordable housing in Britain and America* (York, UK: Joseph Rowntree Foundation). See also Karen E. Hancock, "'Can pay? Won't pay?' or economic principles of 'affordability,'" *Urban Studies* 30(1): February 1993, 127-145 (preferring the impoverishment method looking at post-payment residual resources to ratio-based approaches); LM Niëns, E. Van de Poel, A. Cameron, M. Ewen, R. Laing, and WBF Brouwer, "Practical measurement of affordability: an application to medicines", *Bulletin of the World Health Organization*, 27 January 2012 (reviewing the application of aggregate data to operationalize the catastrophic, *i.e.* ratio-based, and impoverishment, *i.e.* residual resources, methods); Peter Heindl and Rudoilf Schuessler, "Dynamic properties of energy affordability measures", *SOEP papers on Multidisciplinary Panel Data Research* No. 746 (2013) (suggesting that catastrophic, or ratio-based, measures fare better as a means of linking affordability and poverty measurement methods).

¹² We note that the Commission has, in the past, accepted the Commission for Telecom/television Services' definition of "small business" as, generally, a business with monthly telecommunications service charges not exceeding \$2,500. See, *e.g.*, *Review of the Commissioner for Complaints for Telecommunications Services*, Telecom Regulatory Policy CRTC 2011-46, 26 January 2011, paragraph 21.

equity in the Far North relative to the South. We further develop this in our response to Question 9.

67. The other element would focus on the affordability faced by low-income households, which it may indeed be appropriate to discuss in terms of hardship. For many such households the choice to purchase any good or service, including telecommunications services, is severely constrained. Faced with such choices an unacceptably large number of such households go without Internet access at home, as our response to Q9 demonstrates.

Q9 Do you think the CRTC should establish an “affordability standard” or guidance on what constitutes an affordable retail telecommunication service in the Far North?

a) Why or why not?

b) If yes, what factors do you think are relevant to consider when assessing the affordability of a plan or service to an individual, household or small business?

68. The GNWT agrees that the CRTC should establish an affordability “standard” or “guidance” on what constitutes an affordable retail telecommunication service in the Far North.
69. Such guidance would serve to promote two objectives. The first would be to improve the depth, breadth, and frequency of collection and publication of timely, nationally-comparable telecommunications-specific data for the Far North, pinpointing when, where, and to whom services are affordable in the Far North. The second would apply such timely, nationally-comparable, telecommunications-specific data to this standard in designing, assessing, and monitoring programmes that address affordability concerns in the Far North.¹³
70. Affordability is multi-dimensional. A CRTC-endorsed affordability standard or other guidance would certainly reflect multiple indicators, or factors. In its response to this question, GNWT discusses and presents data for five such factors: prices, expenditures, cost of living, economic burden, and access.
71. In this regard, this section serves two purposes. The first is to provide input into the kinds of factors that could be included in a CRTC-developed “standard” or “guidance”. The second is to enter into the record of the proceeding nationally comparable data that the GNWT believes present a compelling case that there are both general affordability, and specific geographic and low-income affordability challenges in the NWT that merit CRTC intervention.

¹³ The GNWT notes that other utility regulatory agencies have developed affordability frameworks for telecommunications services, including the California Public Utilities Commission. See <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability>

72. In summary, the “**Access**” section shows that Internet take-up in the NWT is lower than in the South, including by geography, income group, and Indigenous identity. Higher Internet “**Prices**” and “**Expenditures**” are important drivers of lower access for lower-income and Indigenous households, which combined with a higher “**Cost of Living**” also results in an inequitable higher “**Economic Burden**” for all NWT households.

[A9] Factor #1: Prices

73. Internet prices are higher in the NWT than in the South. Prices are a key affordability factor and therefore should be taken into account in any affordability standard. However, nationally-comparable telecommunications price comparison data for the Far North or the NWT are lacking. The telecommunications price report comparing Canadian and foreign jurisdictions commissioned annually by Innovation, Science and Economic Development Canada (“**ISED**”) since 2007 (each an “**ISED Price Comparison Report**”) is, for instance, based on a well-established methodology that allocates service offerings to reasonably comparable, “like for like” service baskets. But it is based only on Southern urban data (Vancouver, Regina, Winnipeg, Toronto, Montreal, and Halifax).
74. Table 1 displays one-time, NWT-specific data that GNWT staff compiled in November 2021, in line with 2020 ISED Price Comparison Report methodology. It includes data for Yellowknife and for six “Other NWT” communities: Hay River, Inuvik, Norman Wells, Fort Simpson, Whati, and Colville Lake. Residential prices are, on average, 37 percent higher in Yellowknife than the Canada average. The Other NWT communities, which are perhaps less comparable than Yellowknife is with the Canada urban average, are even higher, at 48 percent above the Canada average.
75. The differences for small business prices, which GNWT staff compiled for NWT and Canada, are even more stark. Yellowknife prices are 130 percent higher. The Other NWT communities’ are 158 percent higher.

Basket	Download Speed (Mbps)	Monthly Cap (GB)	Residential					Small Business ¹				
			Canada ²	Yellowknife ³	%Diff	Other NWT ⁴	%Diff	Canada	Yellowknife	%Diff	Other NWT	%Diff
Level 1	3 to 9	10	\$47.60	\$48.48	2%	\$60.15	26%	\$52.95	N/A		\$159.32	201%
Level 2	10 to 15	50	\$51.54	\$62.95	22%	\$77.96	51%	\$92.72	\$79.95	-14%	\$172.98	87%
Level 3	16 to 40	100	\$66.31	\$79.95	21%	\$80.46	21%	\$113.11	\$169.95	50%	\$209.49	85%
Level 4	41 to 100	150	\$77.98	\$110.95	42%	\$103.21	32%	\$120.84	\$309.95	157%	\$314.49	160%
Level 5	101 to 250	500	\$95.00	\$189.25	99%	\$196.44	107%	\$145.64	\$449.95	209%	\$389.32	167%
Level 6	251 to 500	> 500	\$98.08	N/A		N/A		\$143.37	\$499.95	249%	\$499.95	249%
Level 7	>500	> 500	\$108.71	N/A		N/A		\$197.43	N/A		N/A	
Averages⁵					37%		48%			130%		158%

Notes:

- ¹. Compiled in November, 2021 by GNWT using the same methodology as 2020 ISED Price Comparison Report, applied to businesses “no term” packages. Less expensive (=30%) 3-year term packages are generally available for the six Southern Cities included in “Canada.”
- ². For residential and small business, an average of the available packages Halifax, Montreal, Toronto, Winnipeg, Regina and Vancouver. Residential data from the 2021 ISED Price Comparison Report.
- ³. For residential and small business, this is an average of the available packages from Northwestel and SSI Networks.
- ⁴. For residential and small business, this is an average of available packages in Hay River, Inuvik, Norman Wells, Fort Simpson, Whati and Colville Lake.
- ⁵. These are unweighted averages.

76. This analysis is a one-time GNWT initiative for this Notice, but the GNWT’s submits that it could and should be undertaken on an ongoing basis in future ISED Price Comparison

Reports. The Commission should recommend that ISED extend its Price Comparison Reports' geographic coverage to include

- the three territorial capitals: Yellowknife, Whitehorse and Iqaluit, in addition to Vancouver, Regina, Winnipeg, Toronto, Montreal, and Halifax; and
- given the findings set out in Table 1 with respect to small business prices, small business Internet.¹⁴

[A9] Factor #2: Expenditures

77. Household expenditures on Internet services are much higher in the NWT than the South, and account for much more of current consumption expenditures¹⁵. Expenditures reflect a combination of factors, all of which should be taken into account in any CRTC-specified affordability “standard” or “guidance”: price, selection of packages, and overage charges.
78. Comparing total current consumption and Internet expenditures for Yellowknife and Canada, for the average household and by household income group, is instructive in this regard, if partial,¹⁶ and reflects the importance of taking household income into account. What may be affordable for a high-income or median-income household may not be affordable for a low-income household.

Table 2: 2019 Average Household Expenditures by All & Income Groups							
		All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Canada ²	Current Consumption ¹	\$68,980	\$35,512	\$47,960	\$63,713	\$81,731	\$115,757
	Internet Access	\$728	\$509	\$669	\$748	\$808	\$906
	Internet / CurrentCons		1.43%	1.39%	1.17%	0.99%	0.78%
	Internet / CurrentCons ⁴	1.06%	1.42%		1.18%		0.87%
		All	1st Tertile	2nd Tertile	3rd Tertile		
Yellowknife ³	Current Consumption	\$98,614	\$70,820	\$88,592		\$134,200	
	Internet Access	\$1,426	\$1,128	\$1,634		\$1,511	
	Internet / CurrentCons	1.45%	1.59%	1.84%		1.13%	
% Diff	Current Consumption	43%					
	Internet Access	96%					
	Internet / CurrentCons	0.39%	0.17%		0.66%		0.26%
Notes:		¹ . Total current consumption refers to the sum of the expenditures for food, shelter, household operations, household furnishings, clothing, transportation, health care, personal care, recreation, education, etc., and miscellaneous expenditures. See: https://www150.statcan.gc.ca/n1/daily-quotidien/210122/dq210122b-eng.htm ² . From Statistics Canada. Table 11-10-0223-01 Household spending by household income quintile, Canada, regions and provinces: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110022301 ³ . Custom Tabulation from Statistics Canada. Table 11-10-0233-01 Household spending, three territorial capitals: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110023301 ⁴ . Estimated based on weighted average of Canada quintiles transposed into tertiles. E.g., Canada first tertile = (20.0% first Quintile + 13.3% 2nd Quintile)/33.3%					

¹⁴ With respect to defining small business for telecom purposes, please see footnote 12 above.

¹⁵ See Table 2 for definition of household total current consumption expenditures.

¹⁶ The data is from Statistics Canada’s Survey of Household Expenditures (“SHS”), which includes urban and rural areas in Southern Canada, but only includes territorial capitals in the Far North. This means that there is no nationally-comparable data for household spending, including for communications services, for half the population in the NWT that resides outside Yellowknife.

79. Table 2 allows overall household expenditures to be compared to those on Internet services. Total household current consumption expenditures in Yellowknife were 43 percent higher than in Southern Canada in 2019, reflecting, among other factors, a relatively higher “cost of living” in Yellowknife, including shelter, transportation and other elements.¹⁷ For Internet services, however, households in Yellowknife spend 96 percent more than their southern counterparts, significantly higher than the 43 percent for household current expenditures overall. *The proportion of NWT households’ current consumption expenditures that go to Internet services (1.45%) is more than a third above their Southern counterparts’ (1.06%).*
80. Clearly, one factor driving these greater expenditures is higher prices, as discussed in the section above. The two other factors appear to be household selection of available packages and overage charges. The GNWT does not have comprehensive data on either of the two latter factors, but partial survey data suggests both are material enough to bear CRTC consideration as distinct factors:
- With respect to available plans, recently-released survey data by Digital NWT show that among NWT fixed-Internet-subscribing households in the 29 smaller communities, a majority selected the fastest and most expensive package available to them.¹⁸ Anecdotally, this “upscaling” may well be repeated across the rest of the NWT, suggesting that if given the opportunity, many median and higher-income households in NWT may select higher-tier Internet packages than their southern counterparts. This is consistent with the high importance Northerners place on telecommunications as a means of being connected to each other and the rest of the world.
 - Likewise, as emphasized in Paragraph 58 of the Notice,¹⁹ survey data from Digital NWT, from the CRTC-commissioned Environics report,²⁰ support the view that overage charges are an important driver of higher household Internet connectivity expenditures.
81. Table 2 also presents household expenditure by income group: the Canada data is publicly-available in quintiles; the Yellowknife data, based on a GNWT custom request to Statistics Canada, is in tertiles.²¹ To facilitate comparability, Table 2 further includes tertile estimates for Canada, calculated by GNWT staff. Total current expenditures

¹⁷ This cost-of-living factor is discussed in more detail in the following section.

¹⁸ “Northwest Territories - Report on Household Internet Affordability in Rural/Remote Communities”, at <https://www.digitalnwt.ca/research>

¹⁹ “excessive data overage charges and lack of affordable unlimited data packages were stated as some of the biggest challenges faced by consumers in the Far North in terms of affordability. Most plans are limited use, and many consumers considered that the usage included is too low to meet their needs and far lower than would be acceptable in the south.”

²⁰ “Research on Telecommunications Services in Northern Canada”

²¹ The original request was for quintiles, but Statistics Canada was only able to provide a lower level of disaggregation (tertiles) because of the relatively small sample size in the underlying SHS survey for Yellowknife.

increase from lower-income to higher income groups, with Yellowknife household expenditures always higher than those for Canada as a whole.

82. As expected, absolute spending for Internet services tends to increase from lower to higher income groups.²² However, absolute Internet spending and that relative to total current consumption differs in Yellowknife from Southern Canada. The lowest income tertile in Yellowknife spends 1.59 percent relative to its consumption expenditure, compared to about 1.42 percent in Canada. That 0.17-point gap, which is even higher for the second and third tertiles, represents a 0.12 percent difference.
83. Average and lower-income households in Yellowknife have much higher Internet expenditures than their Southern counterparts: the data presented in this section bear this out. Even relative to current consumption expenditures that take into account the higher cost of living, spending on Internet connectivity is much higher in Yellowknife.²³

[A9] Factor #3: Cost of Living

84. The cost of living is much higher in the NWT than the South. The general cost of living is an important factor to be reflected in any CRTC-endorsed affordability standard or guidance on telecommunications service affordability, which should not be considered in isolation. There is no one single cost-of-living measure appropriate for comparing households within NWT and between NWT and Southern Canada. However, approaches based on similarly-situated households' actual expenditures and on representative baskets, respectively, are possible approaches.
85. In comparing the actual expenditures of "similarly-situated" households, one metric could be in relation to the income distribution. Focussing on the middle of the income distribution, for example, a comparison could be made of an average or median-income household in Yellowknife compared to an average or median-income household in Southern Canada. This is similar to comparing as a proxy for the median, in Table 2, the second household-expenditure tertile for Yellowknife (\$88,592) with the third quintile for Southern Canada (\$63,713), showing a 39 percent higher "cost of living" in Yellowknife—close to the 43 percent difference for the average household in Table 2. Focussing on the lower end of the income distribution, one could similarly compare the households in the first quintile or tertile income groups.

²² This phenomenon likely reflects two elements: 1) lower income groups have lower access (so total expenditure from those that do have access – the numerator – is divided by all households (those that do and do not have access)); 2) the size of households tend to increase from lower to higher-income groups.

²³ Although illuminating, this analysis is necessary partial because the SHS does not include Far North coverage outside the three territorial capitals. The GNWT strongly encourages the Commission to work with Statistics Canada, building on their already-existing collaboration, to extend SHS geographic coverage outside territorial capitals in the Far North, in the same manner that it includes rural areas in the South.

86. In the basket approach, exemplified by ISED Price Comparison Reports, basket contents usually vary significantly across income distribution—not a new challenge, nor one associated uniquely with telecommunications. Statistics Canada addressed the issue by creating the Market Based Measure (“**MBM**”) basket with five components (shelter, food, clothing, transportation and “other”) that reflects a “modest, basic standard of living”²⁴ priced for different regions, adjustable to reflect family sizes. and recently extended to preliminary estimates for the Yukon and NWT (the “**MBM-N**”).²⁵
87. Since the 2019 *Poverty Reduction Act*, the MBM is Canada’s official poverty line. A family is in poverty if its MBM-defined disposable income²⁶ is less than the MBM basket threshold amount for its family size and region. Table 3, comparing the MBM-N for NWT to the MBM for Southern Canada, confirms that the cost of maintaining a “modest, basic standard of living” in NWT is significantly higher than Southern Canada:
- For the five NWT regions outside Yellowknife, the MBM-N is from 43 to 76 percent higher than rural areas in Canada. These higher costs are driven by all five major components, but especially shelter and food costs.
 - For the Yellowknife region the MBM-N is 33 percent higher relative to the urban South, with shelter costs being 64 percent higher than the South.

Table 3: 2019 MBM(-N) Thresholds and Poverty Rates

	Total	Components			Total: diff% rel. to Rural/City Canada ⁶	Poverty Rate ¹
MBM averages for Canada ²		Shelter	Food	Others ³		
Rural Areas in each Province ⁴	\$41,949	\$11,007	\$12,244	\$18,699		10.8%
Largest city in each Province ⁵	\$46,002	\$15,664	\$12,146	\$18,193		
MBM-N for NWT⁷						
Beaufort Delta	\$72,902	\$21,556	\$20,709	\$30,637	74%	15.0%
Sahtu	\$73,848	\$19,163	\$22,682	\$32,004	76%	
Tłı̨chǫ	\$60,021	\$17,340	\$16,716	\$25,965	43%	
Dehcho	\$63,406	\$18,338	\$17,558	\$27,511	51%	
South Slave	\$60,059	\$18,360	\$16,144	\$25,554	43%	
Yellowknife	\$60,971	\$25,728	\$12,755	\$22,488	33%	

Notes: ¹ Calculated based on average of 2018 and 2019 (most recently available for NWT), 11.2% and 10.3% for Canada (Canada's Official Poverty Dashboard of Indicators: <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2022011-eng.htm>) and 17.5 and 12.5% for NWT (See note 7).
² Statistics Canada. Table 11-10-0066-01 Market Basket Measure (MBM) thresholds for the reference family by Market Basket Measure region, component and base year. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110006601>
³ The "Others" is the sum of the Clothing, Transportation and other components of the MBM and MBM-N.
⁴ Calculated as the unweighted average of the "Rural Areas" items in each of the 10 Provinces.
⁵ Calculated as the unweighted average of the Largest City (by population) in each of the 10 Provinces.
⁶ Yellowknife is compared to the Largest City; other areas in NWT are compared Rural Areas in each Province.
⁷ Statistics Canada, "Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories", Income Research Paper Series, November 12, 2021.

²⁴ Statistics Canada, see <https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2020002-eng.htm>. The MBM is available for 1976 through 2020.

²⁵ See Statistics Canada, “Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories” at <https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2021007-eng.htm>, available for 2018 and 2019.

²⁶ In the MBM methodology, disposable income is defined as total income (including government transfers) after deducting not only income tax, but also several non-discretionary expenses including CPP and QPP contributions, union dues, public health insurance premiums, etc. See Statistics Canada (<https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2019014-eng.htm>).

88. These higher thresholds are a factor in the NWT's higher poverty rate of 15.0 percent, compared to 10.8 percent in the South. That is a 4.2 percentage-point difference—or a 39 percent higher poverty rate in NWT.
89. This section has demonstrated that the cost of living is much higher in the NWT than in the South and when measured at “modest, basic” level results in higher poverty rates in the NWT than in Southern Canada. As such, this should be an important factor to be reflected in any CRTC-endorsed affordability standard or guidance.

[A9] Factor #4: Economic Burden

90. Table 2 presented one approach to view equitable telecommunications prices in the NWT: relative to total household current expenditures. This represents an expenditure-based burden approach, to which an equity perspective would move towards equalizing. Another equity approach, more complex because it would take into account household income *and* cost of living, would attempt to measure the economic burden as a percentage of a defined household disposable income.
91. Because of the above-noted dearth of information, the GNWT is not in a position to propose a specific formulation for this economic burden metric. However, for indicative purposes, the GNWT presents in Table 4 the types of elements and preliminary approach that illustrate a potential path forward, by:
 - calculating a median-income “household disposable income”, by subtracting a modified, MBM-based median-income cost of living estimate²⁷ from household after-tax median income; and then
 - expressing Internet expenditures (from Table 2) and the Level 3 Internet basket, at 16-40 Mbps downstream (from Table 1), as a percentage of that disposable income.
92. For example, for Internet connectivity, average expenditures make up 1.54 percent of median disposable income in Yellowknife compared to 1.22 percent in Southern Canada: the 0.32-percentage-point difference represents a burden that is fully one quarter higher for median-income households. For the indicative Level 3 Internet basket for regions outside of Yellowknife, where expenditure data is not available, that price would be between 1.31 and 3.22 percent of disposable income. At an average of 2.65 percent, that is *double the 1.33 percent of median disposable income in Southern Canada*.

²⁷ The MBM and MBM-N are a significant statistical achievement for calculating and regularly updating the nationally comparable cost of a modest, basic standard of living, including Yukon and NWT. As but one of many potential baskets constructed for a specific purpose, it is likely less representative of the goods and services purchased by median or high-income households. In this instance, as explained in the notes to Table 4, GNWT staff used an upscaling factor to the Statistics Canada-estimate MBM, which is designed for a basic, modest low-income-oriented standard of living, to estimate a “median-income MBM”

	Median Income ¹	MBM-based cost of living ²	Disposable Income ³	Internet Expenditures ⁴	Level 3 Internet Basket ⁵	Internet% Disposable Income	% DIFF ⁶
Canada	\$117,000	\$57,168	\$59,832	\$728	\$796	1.22% / 1.33%	
NWT							
Beaufort Delta	\$116,000	\$94,773	\$21,227		\$966	4.55%	3.22%
Sahtu	\$129,000	\$96,002	\$32,998		\$966	2.93%	1.60%
Tłı̨chǫ	\$123,000	\$78,027	\$44,973		\$966	2.15%	0.82%
Dehcho	\$124,000	\$82,428	\$41,572		\$966	2.32%	0.99%
South Slave	\$152,000	\$78,077	\$73,923		\$966	1.31%	-0.02%
Yellowknife	\$172,000	\$79,262	\$92,738	\$1,426		1.54%	0.32%

Notes: ¹. Statistics Canada. 2020 after-tax income of 4-person household, based on 201 Census: Household income statistics by household type: Canada, provinces and territories, census divisions and census subdivisions (<https://www12.statcan.gc.ca/census-recensement/2021/ref/symb-ab-acr-eng.cfm>).
². There is no published estimate of median income-based cost of living. Household average current consumption is on average 60% higher than respective MBM for Canada and Yellowknife. As a conservative proxy, this Table estimates an MBM-based cost-of-living for median household as 30% higher than
³. Define Disposable Income as Median Income - MBM-based cost of living.
⁴. See Table 2 for sources.
⁵. See Table 1 for Level 3 Internet Basket definition and sources.
⁶. The % point difference for Yellowknife is with respect to Expenditures; for the other Regions it is relative to Level 3 Basket.

[Q9] Factor #5: Access

93. Access to telecommunications services, especially Internet, is much lower in the NWT than the South. The actual observed level of access is an important factor to take into account in any affordability standard that the CRTC develops. If affordability is an intermediate objective, affordable access to Internet services by all those that wish to subscribe is the ultimate objective.
94. Internet access at home in the NWT, at 84 percent, is a full 10 percentage points lower than Southern Canada (94%). That is a significant gap that further suggests lower affordability in NWT than the South. Table 5 further disaggregates, including by geographic designation (Census Metropolitan Areas and Census Agglomerations (“CMA/CA”) and outside those areas) and Indigenous identity. In NWT, the only CMA/CA is Yellowknife, which has an Internet access rate somewhat lower (3 percentage points) than Southern CMA/CAs. However, outside the CMA/CAs the gap grows to a very significant 12 percentage points, indicating that affordability is a comparatively larger issue in those areas. Table 5 evidences as much as a 31 percent-point access gap between non-Indigenous (94 percent) and Indigenous (63 percent) households. The CIUS does not provide this particular disaggregation, so it is not possible to compare this gap with the equivalent difference in Southern Canada.

	Total	Geography: CMA/CA ¹		Indigenous Identity ⁴	
		Yes	No	No	Yes
Canada ²	94%	95%	88%	N/A	N/A
NWT ³	84%	93%	76%	94%	63%
Difference (%)	-10%	-3%	-12%		

Notes: ¹. Census Metropolitan Areas and Census Agglomerations. For NWT, the only CMA/CA is Yellowknife.
². Statistics Canada. Table 22-10-0134-01 Household Internet access by geography, based on CIUS. (<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2210013401>). Data for 2020.
³. Statistics Canada, custom tabulation, Northern Canada Internet Use Survey, 2021 (<https://www150.statcan.gc.ca/n1/daily-quotidien/220518/dq220518g-eng.htm>). Data for 2021.
⁴. The NCIUS tabulation provided an Indigenous/non-Indigenous disaggregation, but this was not available for Canada from reference in Note 2 above.

95. This general conclusion, based on Table 5, that NWT has lower overall Internet access than Southern Canada is borne out by Table 6,²⁸ which shows that these differences are primarily driven by differences at the lower end of the income distribution. *The difference for the first income quintile in NWT and Southern Canada is fully 16 percentage points.*
96. The second set of estimates in Table 6²⁹ likewise show that fixed-only access and both technologies-access both decrease from higher to lower income groups, dropping as low as 39 percent for the first income quintile. For mobile data access only, the reverse is true, with an increasing access from higher to lower income groups. This behaviour is consistent with income-constrained “either/or” choices with, for instance, a greater proportion of first income quintile households in NWT choosing mobile data only (26 percent) than in the fifth income quintile (3 percent).
97. Table 6 further shows how these data differ among Yellowknife, three regional centres (Inuvik, Hay River & Fort Smith), and 29 smaller NWT communities. We again note an increase in fixed-only or both-technology access from smaller to larger community and a corresponding decrease in mobile-data-only Internet access.

	All	By Income Group					By Geography		
		1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	Yellowknife	3 Regionals ¹	Rest NWT ²
2017 Canada (All Tech.) ³	89%	69%	85%	94%	98%	99%			
2019 NWT (All Tech.) ⁴	84%	53%	81%	90%	95%	98%	93%	87%	62%
Fixed only or both Tech ⁵	76%	39%	70%	83%	92%	94%	89%	79%	47%
Mobile Data Only ⁶	8%	14%	11%	7%	3%	3%	4%	8%	15%
% Diff (All Tech)	-5%	-16%	-4%	-4%	-3%	-1%			

Notes: ¹. Includes Inuvik, Hay River & Fort Smith.
². Includes the remaining 29 communities in NWT, other than Yellowknife, Inuvik, Hay River & Fort Smith.
³. From the CRTC Communications Monitoring Report 2019, data for 2017. Includes Internet access at home using all technologies, including fixed and mobile data.
⁴. From the 2019 NWT Community Survey of 2019. Custom tabulation by the NWT Statistics Bureau. Includes Internet access at home using all technologies, including fixed and mobile data.
⁵. 2019 NWT Community Survey: Internet access at home using All technologies - using mobile data only.
⁶. 2019 NWT Community Survey: Internet access at home using mobile data only.

98. The recently-issued Digital NWT study on a sample of the 29 smaller communities provides insight on related Internet access gaps. Of the households that did not have fixed Internet,
- an average of 53 percent answered that the reason was “price”, while

²⁸ Because the CIUS does not provide income-based disaggregation, Table 6 is based on estimates for Canada based on the 2017 SHS, as published in the CRTC’s 2018 Communications Monitoring Report—this includes households using both fixed and mobile Internet at home; and for NWT based on a custom NWT Statistics Bureau tabulation of the 2019 Community Survey. The default presentation for both these surveys is Internet at home from all technologies, including homes that access it only via mobile data. The N/CIUS do not include such access, so without further customization, these surveys are not strictly comparable.

²⁹ These data are based on a custom tabulation by the NWT Statistics Bureau. This tabulation disaggregates Internet at home that is based on mobile data plans only, from Internet access at home that is based on any technology, including fixed-line home Internet as well as mobile data plans used at home.

- 17 percent said it was because they “use mobile” data to access the Internet, and
- only a small minority responded “no interest”.

The main reason for lower Internet access in the 29 smaller communities is, as this evidence demonstrates, affordability, rather than lack of interest or availability of service.

[A9] Summary

99. This section has presented a number of factors that the CRTC could consider in developing an affordability standard or related guidance, reviewing available data but underlining where gaps require further work with the CRTC’s ISED and Statistics Canada counterparts. Further, this section has provided a comprehensive case that there are both general affordability, and specific geographic and low-income affordability challenges in the NWT that merit CRTC intervention. As noted, affordability is fundamentally multi-dimensional: multiple indicators, rather than a single metric, are likely needed to reflect the complex nature of affordability challenges in the NWT.

Q10 During Phase I, parties submitted that despite the range of plans available, customers in the Far North generally pay more for less in comparison to customers in the south and that this impacts all retail customers in the Far North, including low-income households.

100. Before addressing which actions ought to be taken by the CRTC, if any, a threshold question exists as to whether CRTC action is appropriate generally in respect of affordability. In particular, some submissions in the first phase of the Commission’s current exercise indicated that, even if Internet access rates are not affordable, government assistance in respect of affordability is either better addressed as a matter for general public subsidy, if at all, insofar as higher pricing is a broader Northern phenomenon or points to broader structural issues associated with poverty and affordability in the North, rather than a sectoral issue in the telecommunications industry.
101. The *Telecommunications Act* requires the Commission to exercise its powers and perform its duties with a view to rendering affordable telecommunications services of high quality accessible to Canadians.³⁰ The Governor-in-Council has required the Commission to “consider” “the extent to which” its decisions “foster affordability and lower prices” and “ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas.” The Commission has repeatedly and consistently addressed affordability throughout its rate-making, tariffing, contribution, subsidy, and investigative activities.

³⁰ Telecommunications Act, paragraphs 47(a) and paragraph 7(b).

102. When the CRTC marked a new phase in its responsibilities towards affordability as a result of the shift from voice to broadband services,³¹ its recognition that “[a] comprehensive solution to affordability issues will require a multi-faceted approach, including the participation of other stakeholders”³² did not, in the GNWT’s view, suggest any passing of the mantle from the regulatory arena to those other stakeholders. The Commission has continued to address its obligations in respect of affordability and accessibility throughout its activities. For instance:

- In Telecom Regulatory CRTC 2020-40, the Commission acknowledged that “given the unique circumstances of the North, including limited competitive choices and general concerns about the affordability of services, it would not be appropriate for the Commission to broadly impose rate increases on consumers.”³³
- In Telecom Order CRTC 2020-370 the Commission reaffirmed its commitment to “the ability of Canadians in the North – particularly those in small and remote communities in Northwestel’s operating territory – to access online services and participate in the digital economy at a level that is much closer to that of Canadians in the South.”³⁴

103. The current proceeding is convened in part to address these very affordability issues and, in GNWT’s respectful submission, to ensure that the renovation of Northern telecommunications policy does not abandon them.

a) What actions should the CRTC take to address the affordability of retail telecommunications services in the Far North as it impacts all customers, regardless of income? Explain how these actions would improve the affordability of telecommunications services to customers in the Far North.

104. The GNWT’s responses to the questions posed by the CRTC present detailed measures to be considered, including the following three: (i) an affordability standard; (ii) a portable operating subsidy program for the broadband era to make available Universal Service Objective (“USO”)-speeds and better whose relative price/expenditure requirements are in line, subject to already-existing subsidies, with those that prevail elsewhere, notwithstanding the high cost of serving the Far North; and (iii) wholesale High Speed Access (“HSA”) for the Far North, the only portion of Canada—remote regions included—where the competitive dynamics and local entrepreneurship and capacity-building that HSA helps unlock remain missing in action.

³¹ Cited in paragraph 12 of the Notice.

³² Modern telecommunications services – The path forward for Canada’s digital economy, Telecom Regulatory Policy CRTC 2016-496, 21 December 2016, paragraph 203.

³³ Review of the price cap and local forbearance regimes, Telecom Regulatory Policy CRTC 2020-40, 4 February 2020, paragraph 139.

³⁴ Northwestel Inc. – General Tariff – Amendment to terrestrial Internet services, Telecom Order CRTC 2020-370, 9 November 2020, paragraph 33,

105. The competitively-neutral portable operating subsidy program referred to in (ii) is further developed in response to Question 19.
106. All three items are challenging ones that will require the CRTC to continue to consult with stakeholders on complex implementation questions and make clear decisions. If implemented, however, they will identify equitable pricing that addresses affordability in a structured manner and will put into place programs that ensure both affordable pricing and competitive choice into the future.

b) What actions should the CRTC take to address the affordability of retail telecommunications services in the Far North as it impacts low-income households? Explain how these actions would improve the affordability of telecommunications services to customers in the Far North.

107. The GNWT's responses to the questions posed by the CRTC further present, in addition to the affordability standard noted above, detailed measures in support of (iv) a targetted program geared to mimic Connecting Families which, like wholesale HSA, is available throughout Canada save the Far North. Like the other measures reviewed, such a low-income affordability program would ensure that, whether or not telcos step forward to provide the same salutary social supports that they have been willing to provide elsewhere in Canada, Northerners are no longer left behind. In this manner, eligible households in the Far North will have available to them broadband packages at USO-level speeds and at the same lower-than-market prices as Southerners.
108. The targetted affordability subsidy program referred to in (iv) is further developed in response to Question 19.

Q11 Do you think the CRTC should end Northwestel's practice of charging \$20 per month to customers of its stand-alone residential DSL Internet service in certain high-cost serving areas, unless they also purchase home phone service? Why or why not?

109. Broadband Internet access is no longer a discretionary service. It is rather, as the CRTC has underlined, essential for access to communications services of all kinds. Including an additional charge for stand-alone DSL in certain high-cost serving areas increases the effective pricing gap faced by those living in those areas.
110. However, if the Commission decides to eliminate this monthly surcharge, it should ensure that it is done in a manner that is sustainable vis-à-vis Northwestel and takes into account Northwestel's plans for maintenance or removal of its copper network. Northwestel has received significant subsidies to build out its next-generation broadband infrastructure. Should Northwestel wish to retain this surcharge, it likely falls to Northwestel to demonstrate any material financial impact involved in removing it. This is particularly in view of the planned replacement of DSL infrastructure. In the event of such material financial impact, the CRTC will then have to decide whether this impact ought to be borne by Northern subscribers.

Q12 Do you think the CRTC should take action to address the amount that consumers may pay in overage fees for their Internet services in the Far North?

a) Why or why not?

111. Paragraph 58 of the Notice states that

[e]xcessive data overage charges and lack of affordable unlimited data packages were stated as some of the biggest challenges faced by consumers in the Far North in terms of affordability. Most plans are limited use, and many consumers considered that the usage included is too low to meet their needs and far lower than would be acceptable in the south. This issue is further exacerbated by the unique circumstances of living in the Far North, such as larger households, the need to access essential services online, isolation, and the ongoing impacts of the COVID-19 pandemic.

112. In the South, unlimited services are a key feature that allows for a form of uninhibited usage that may be qualitatively different from metered usage. Where feasible, uncapped plans should be considered a central form of access, with capped plans available as a value option for occasional users.

113. At the same time, the GNWT has consistently underlined the importance of improved pricing and quality. Further, the GNWT recognizes that extensions to user management tools in the nature of enhanced bill shock protection, building on those already mandated by the Internet Code and requiring them of a broader range of providers, can help remediate the key inhibitors that hamper Internet usage on capped plans, which include “three uncertainties regarding their bandwidth usage: *invisible balances*, *mysterious processes*, and *multiple users*.”³⁵

b) If so, what action(s) do think the CRTC should take?

114. The GNWT has called for equitable pricing in the Far North as regards the South, both in respect of price and quality. In respect of bandwidth cap pricing, this suggests that the CRTC should determine whether the level and structure of overage fees in the Far North is significantly higher than in the South.

115. Where the differences are significant and unlikely to be reduced as an already-planned result of upcoming Broadband Fund implementations, the Commission should:

- take these differences into account in the design of the portable operating subsidy addressed by this submission; and
- at the same time, consider revisions to the Internet Code that would directly address the three uncertainties referred to above.

³⁵ Marshini Chetty, Richard Banks, A.J. Bernheim Brush, Jonathan Donner, and Rebecca E. Grinter, “You’re capped! Understanding the effects of bandwidth caps on broadband use in the home,” in *Proceedings of CHI 2012* (New York: ACM Press, 2013).

116. In particular, and given the Commission’s already-articulated “expectation” that service providers other than those to which the Internet Code applies directly behave, nonetheless, in a manner consistent with the Code,³⁶ the Commission should ensure certain safeguards to the extent that overage fees continue to be a factor that is significant in the Far North in ways different than in the South.

117. These safeguards should include measures that go beyond what is strictly required to comply with the Internet Code and address the “invisible balance”, “mysterious processes”, and “multiple users” challenges referred to above. The GNWT considers that all ISPs serving the Far North that exceed a threshold number of residential and small business subscribers, not just Northwestel, should be expected to implement these measures.

Q13 Do you think the CRTC should change any aspect of Northwestel’s retail tariffed services (i.e. home phone or terrestrial Internet) to improve the affordability, reliability or quality of these services?

a) Why or why not?

118. Yes. More affordable pricing and improved quality including, notably, increased reliability, are needed in the Far North in order to meet the Northern telecommunications policy objectives described by the GNWT. Northwestel is currently the dominant provider of these services.

b) If so, what action(s) do you think the CRTC should take? For example, changes to rules that address installation fees, maintenance fees, suspension and disconnection of service, security deposits, refunds for outages, etc.

119. In respect of affordability, the GNWT has proposed that a range of measures should be considered, as set out in response to Questions 9, 10 and 19.

120. In respect of reliability and other forms of quality, the GNWT has submitted that clear standards, including but not limited to those mandated through the Broadband Fund, should be brought together to develop clear reliability and quality requirements for broadband and mobile providers. These requirements should be well-specified, and enforced both through decentralized recourse to the CCTS when individual consumers and small businesses find that they are not met; and through centralized retail quality of service (“QoS”) mechanisms whose performance standards are enforced through:

- refunds of portable operating subsidies in line with the degree to which the retail QoS indicators were not met in a given period; and
- potential direct obligations on service providers that reach a certain number or proportion of potential subscribers in a community.

³⁶ Large facilities-based Internet service providers – Application to review and vary Telecom Regulatory Policy 2019-269 regarding the application of the Internet Code, Telecom Decision CRTC 2021-125, 8 April 2021.

121. It is important that reliability and quality obligations resemble those already put in place by the Commission to the greatest degree possible, and that they be achievable. To that end, parties' submissions as to the adequacy of existing infrastructure in the Far North, including the availability and pricing of Wholesale Connect services, will be an important element in considering whether and how to implement reliability and quality obligations.
122. In this regard, the GNWT strongly supports ongoing efforts to develop a Great Slave Lake fibre redundancy project that makes wholesale elements available at competitive and, where appropriate and consistent with the Commission's findings on this proceeding, subsidized rates that will fuel improved reliability and competition. Noting that the Broadband Fund's guiding principles include focusing on underserved areas and aligning with the broader ecosystem of future investments, the GNWT respectfully submits that it ought to consider this project for funding.
123. Finally, with reference to capped usage in particular, the responses set out above in respect of appropriate bill-shock management tools in the Internet Code are directly relevant.

Q14 Do you think the CRTC should impose any new conditions of service on satellite Internet providers in the Far North in order to improve the affordability, reliability or quality of these services?

a) Why or why not?

124. The GNWT has advocated for clear affordability standards consistent with the important role of post-PSTN communications services, particularly in the Far North. That a community is only served by satellites does not diminish the importance of those standards: on the contrary, it underlines their importance.
125. This may translate into higher subsidy requirements, in the event satellite service is more expensive. It may, similarly, translate into different requirements, where insurmountable technical challenges prevent achieving, using satellites, the goals met elsewhere through terrestrial technology.
126. The GNWT is optimistic that, in view of continuing innovation in satellite technology, it will be possible to deliver affordable, reliable services to all of the Far North. In so doing, the goal of ensuring broadband services are affordable and meet quality standards must remain top of mind. Those living in Canada's satellite-served regions deserve the ability to continue to live and work in communities in which they may be deeply rooted, while maintaining the ability to participate in broader society with the assistance of communications technologies.

b) If so, what new regulatory requirements do you think are required?

127. Capital subsidies through the Broadband Fund; portable operating subsidies; enhancements to existing bill shock management tools, and their extension to more

service providers; and the incorporation of reliability and other quality measures outlined in this submission, should all play a role in constituting the regulatory framework for service providers that serve the Far North via satellite.

Q15 Do you think the CRTC should take any other action to improve the affordability of telecommunication services in the Far North?

a) Why or why not?

b) If so, describe the actions the CRTC should take. Alternatively, describe the outcomes you think the CRTC should aim to achieve.

128. The GNWT has submitted that a range of measures should be considered to improve affordability, as set out in response to Questions 9, 10 and 19.

Subsidy of retail home phone and Internet access services in the Far North (Q16-Q19)

Q16 Do you think the CRTC should take action to address the affordability of local (home phone) service rates in some areas or all of the Far North?

a) Why or why not?

129. Yes, the CRTC should take action to address local home phone affordability. There are both general and low-income affordability issues in the Far North. The local service subsidy regime assisted with general affordability concerns.

b) If so, address what actions you think the CRTC should take.

130. As outlined below, the CRTC should consider retaining a form of local service subsidy.

Q17 Do you think the CRTC should re-introduce a local service subsidy to address the price of home phone service in some or all high-cost serving areas in the Far North?

131. The CRTC should consider retaining a form of local service subsidy. Unlike services like broadband and mobile, it is not clear that PSTN-interconnected, separately-powered home phone services will ever become a competitive market in the Far North. While alternative solutions are under development, they do not yet provide the convenient, resilient, readily-usable services that telephony represents. As such, it may be appropriate to include a local service subsidy that takes into account local conditions, affordability measures, the availability of practical alternatives, and Broadband Fund funding.

a) Discuss the potential impacts to residents of the Far North if rates for home phone service were to increase.

132. A material increase in home phone prices would be inappropriate at this time. Residents of the Far North continue to make pervasive use of telephones, particularly where challenged by the affordability of broadband and wireless services; and further,

they make use of telephones as the most reliable means for contacting 9-1-1 emergency services.

b) What considerations do you think the CRTC should take into account when assessing whether or not to re-introduce the local service subsidy?

133. Should broadband and wireless services achieve affordability to the degree that reliance on telephony becomes unnecessary—or is replaced by high-quality mobile services, or convenient Internet-connected appliances, as a means for simply and cheaply reaching out to someone—then a local service subsidy may no longer be necessary. The Commission should monitor, including through its annual monitoring exercise, the degree to which the path to this goal has progressed.

Q18 In the event that the end of the local service subsidy in the Far North results in a material shortfall for Northwestel, the CRTC may need to consider additional factors that may have an impact on any potential shortfall, such as Northwestel's investments and network improvements. What considerations, if any, should the CRTC take into account with respect to Northwestel's capital investment plan and the growth technology for the provision of telecommunications services in Northwestel's operating territory?

134. The local service subsidy is designed to ensure that continuing to operate telephony in the Far North is sustainable and its costs recoverable without unduly raising rates. For the reasons set out in response to Q17, a form of local service subsidy should continue forward at least until telephony's convenience and reliability, and the improved NG9-1-1 functionalities letting other devices be used for straightforward location-based emergency services, is made widely available in Northwestel's serving territory, including NWT.

Q19 Do you think the CRTC should introduce a new subsidy to reduce the rates charged for retail Internet access services in some or all communities in the Far North?

a) Why or why not?

135. The data reviewed in GNWT's response to Q9 identified two key affordability gaps in how Internet access is priced in the Northwest Territories.
136. One is a general affordability challenge. Northern households and small businesses face much higher prices than those in the South, and therefore households direct a materially higher proportion of their expenditures or disposable income, after taking into account the higher cost of living in the Far North, towards Internet access than do Southerners.
137. The other is a particular low-income affordability challenge. The NWT's lowest-income and least-resourced households direct an even higher proportion of household expenditures towards being connected than their Southern counterparts. The NWT has

a high proportion of persons who would like to subscribe to home Internet but, for economic reasons, do not do so.

138. Gaps not dissimilar to these are why the CRTC, for many years, provided an operating subsidy for local phone service that helped close general equity gaps in the Far North, and why some Canadian telcos stepped forward to create a Connecting Families programs to address specific gaps affecting low-income households in the South. Historically, the Commission ensured that local telephone services were kept affordable through tariffs holding service rates below costs, and non-portable local service subsidies for the tariffed carrier to recover these costs. Initially, the local service subsidy making these below-cost rates sustainable was drawn from long distance services drawn broadly from all local telephone service subscribers,³⁷ and later from a fund based on all-services revenue to keep rates in high-cost serving bands similar to those in non-high-cost areas.³⁸
139. It is now time to close these gaps in respect of retail Internet access in the Far North. Retail telecommunications services like broadband and mobile are no longer optional luxuries that households can easily do without. Increasingly, access to them is required in order to participate meaningfully in society. All Northerners should have access to these essential services by ensuring that they are priced equitably, competitive, and affordably, regardless of community or the infrastructure by which it is served.
140. For these reasons, where operating costs would otherwise make affordable pricing unfeasible as a market outcome, a portable and competitively-neutral operating subsidy that does not stifle innovation is likely required, as set out in more detail below. An approach is required to ensure the financial basis for making Internet access prices in the Far North equitable.
141. The population of the Far North is relatively small and remote. Broadband service matters here at least as much as anywhere else in Canada. The Commission has the responsibility, ability, and tools not only to establish guidelines for equitable rates on par with those of the South, as submitted above, but also the tools to enable equitable pricing, as could be provided for by ongoing operating subsidies where warranted.

b) If you think a new Internet subsidy should be explored in order to improve the affordability of this service in the Far North:

i. How do you think the CRTC should measure whether the subsidy is successful in improving affordability of Internet services in the Far North?

³⁷ Competition in the provision of public long distance voice telephone services and related resale and sharing issues, Telecom Decision CRTC 92-12, 12 June 1992.

³⁸ Changes to the contribution regime, Decision CRTC 2000-745, 30 November 2000.

142. The GNWT has identified, in its response to Q9, key elements of an approach whereby the CRTC would establish an affordability standard for retail Internet service. This affordability standard can be used to identify pricing goals.
143. The Commission has identified and, we assume, will from time to time review target speeds in respect of its Universal Service Objective (“USO”). These target speeds can be used to identify the minimum retail Internet service speeds to be made available at the target prices.
144. Putting together these approaches to target pricing and to target speeds, the GNWT suggests the Commission explore two separate subsidies.
145. A portable operating subsidy would offset the high cost of serving the Far North, addressing the general affordability gap. This subsidy would provide to the incumbent, and to other providers serving a threshold proportion of the market or opting in to participate voluntarily, a fixed-dollar subsidy for every subscriber. The fixed-dollar subsidy would be calculated based on the efficient cost of serving a community. In return, participating providers would be required to offer the USO-target package at a rate determined by the affordability standard. The same participating providers would be expected to offer any higher-tier packages—attracting the same fixed-dollar subsidy, irrespective of speed above the USO target—at proportionate rates.
146. A regulated Northern version of the Connecting Families program, to be implemented to the extent the Far North continues to remain without Connecting Families coverage, would similarly draw on both the affordability standard and the USO target. The affordability standard would direct a price that is affordable to eligible lower-income households in the Far North. For practical purposes, that price is likely to be the same as or similar to the \$20 price for Connecting Families 2.0 in the South. The related package would be a USO-target-or-better one.
147. Participating service providers would receive per-subscriber subsidies from the National Contribution Fund. This low-income-related subsidy could be stacked atop the portable broadband operating subsidy, making service providers whole.

ii. Should the subsidy be available to some or all:

- ***96 communities in the Far North? Should the CRTC distinguish between high-cost and low-cost serving areas?***
- ***Households in the Far North? Should households be required to meet specific characteristics (e.g. low income) in order to be eligible to receive a subsidized service?***
- ***Service plans in the Far North? Should the CRTC limit the subsidy to plans with specific characteristics? Should small businesses be eligible to receive a subsidized service?***
- ***Retail contracts for Internet service regardless of underlying technology (e.g. terrestrial, satellite, fixed wireless)?***

- *Service providers?*

148. The GNWT has suggested that the Commission review forms of subsidy in order to address both the general and low-income-specific affordability challenges demonstrated above. In this section we provide further detail, including in table format, about the two separate subsidy programs to address the general and low-income-specific challenges.

[Q19.1] Portable subsidy to address higher prices in the Far North

149. The competitively-neutral, portable operating subsidy would have to take into account a number of considerations. On rate-setting for example, incumbent retail Internet pricing in the Far North is tariffed for the residential and business segments, while projects funded by the Broadband Fund—as they are throughout the NWT—come with their own pricing obligations. A number of interveners addressed the role of continued tariffing, accompanied by a general approach to price caps, in translating the Commission’s responsibility to ensure just and reasonable rates for both sectors.³⁹ However, marrying this approach with a competitive environment will require an approach to combining equitable rates with reasonable pricing. Table A19.1 summarizes some of the elements discussed above and presents further detail on some of the other elements to be considered in the design of this new portable subsidy.

Element	Potential approach	Notes
Duration	Ongoing	The new subsidy would be in place until corresponding affordability metrics, including access, suggest that equity for the Far North no longer requires the new subsidy.
Type of subsidy	Operational	Would cover the differences between the CRTC-regulated reduced price of the eligible service and the CRTC-determined proxy costs of its provision
Geographic coverage	Far North	
Eligible Service Providers	Service providers that supply Internet to more than a threshold proportion of residents and small businesses in a community would be required to participate, and to meet specific quality of service criteria in order to receive the full per-subscriber subsidy. Other service providers that met eligibility criteria could also do so.	With the objective of a competitively-neutral program, the CRTC would establish minimum quality criteria for participating service providers. To ensure availability, systemically important service providers would be designated to provide the eligible service, whether by administrative means (using one or several criteria) or via a competitive process.
Financing of Programme	National Contribution Fund	While other financing mechanisms are possible, the National Contribution Fund would be the default financing approach.

³⁹ Government of the Yukon intervention, paragraphs 36 to 38.

Table A19.1: Potential portable subsidy to address high operating costs in the Far North		
Element	Potential approach	Notes
Beneficiary eligibility	All households and small businesses.	This service would be universally available to all households and small businesses automatically, as its purpose is to redress general affordability requirements.
Is it portable?	Yes	Any eligible service provider may provide the eligible service and receive the corresponding portable subsidy—a fixed-dollar amount, subject to community factors, for delivering the USO-level package.
Eligible Service(s)	Residential and small-business Internet	Participating providers would have to make available the “base” package defined by the universal service objective (“USO”) level. Participating providers would also receive the same per-subscriber subsidy for higher-speed packages, which the CRTC would expect them to offer at prices reasonably proportionate to the USO-level package.
Price / Subsidy of Eligible Service(s)	Price to be determined based on affordability metrics. Subsidy to be calculated by the CRTC.	A uniform-dollar subsidy could be calculated as the difference between the calculated costs of providing the USO-level service and the threshold affordable price determined by one or more equity-based average or median-income affordability metrics to be applied by the CRTC. That uniform portable subsidy amount could be applied to the USO-level package or for higher-quality packages. Recognizing that the underlying costs of providing the USO-level service could vary by geographic location, it could be necessary to calculate different dollar amounts by “subsidy band” based on geographic and other factors.

[Q19.2] Portable subsidy to address low-income affordability in the Far North

150. The data presented in response to Question 9 bore out a particular affordability challenge faced by low-income households in the NWT. Canadian communications companies have taken the lead in spearheading, and ISED has played an important role in helping coordinate and extend, the Connecting Families programme. Connecting Families now offers eligible low-income households home Internet service packages, including 50/10 Mbps speeds and 200 GB of usage, for \$20 per month.⁴⁰ Eligibility rests on household receipt of the maximum available Canada Child Benefit or, for seniors, maximum Guaranteed Income Supplement, as determined by Employment and Social Development Canada.

⁴⁰ <https://www.ic.gc.ca/eic/site/111.nsf/eng/home>

151. The Connecting Families program, which is coordinated through a third-party administrator,⁴¹ is voluntary. To date, neither Northwestel nor any other service provider has volunteered to bring the program to the Far North, with the result that low-income residents in the NWT are left behind.
152. Absent a voluntary commitment that puts the Far North in the same position as the rest of the country, the GNWT suggests the CRTC consider a regulated Connecting Families-like program for the Far North, to be funded through the National Contribution Fund. Such a program, which we refer to as “Connecting Northern Families” for shorthand, would be in line with programs to enable access to basic services by the most economically disadvantaged households, including those funded by universal service payments raised industry-wide, which are today commonplace. For instance:
- The Ontario Electricity Support Program (“OESP”) began providing electricity subsidies to low-income households in January 2016. In 2019-20, the OESP supported an average of 256,189 households with on-bill credits of over \$180 million over the year.⁴²
 - The U.S. Federal Communications Commission (FCC)’s Lifeline program compensates designated telecommunications carriers for discounting the minimum-standard-or-better⁴³ landline, mobile, or home Internet service selected by eligible low-income beneficiaries. Federal Lifeline supported 8.2 million households at the end of 2020;⁴⁴ states may supplement the service, as 17 did at the end of 2018.⁴⁵
153. Table A19.2 compares programme elements relevant to such a new program, which take the Far North context into account, with existing Connecting Families 2.0 elements:

	Connecting Families 2.0	New “Connecting Northern Families”	Notes
Programme duration	5 years	Ongoing	The original Connecting Families (1.0) programme and Connecting Families 2.0, were each designed with a defined duration of five years, currently running to 2026. The proposed program to redress this program’s absence from

⁴¹ <https://cfsc-opec.org/en/>

⁴² <https://www.oeb.ca/sites/default/files/OEB-Annual-Report-2019-2020-English.pdf>

⁴³ <https://www.lifelinesupport.org/lifeline-rules-rights/>

⁴⁴ <https://www.usac.org/wp-content/uploads/about/documents/fcc-filings/2021/second-quarter/low-income/LI08-Lifeline-Subscribers-by-State-Jurisdiction-Jan-2020-through-Dec-2020.xlsx>

⁴⁵ NRRI 19-02 State Universal Service Funds 2018: Updating the Numbers, <https://pubs.naruc.org/pub/3EA33142-00AE-EBB0-0F97-C5B0A24F755A>

Table A19.2: Potential regulated Northern low-income affordability portable subsidy			
	Connecting Families 2.0	New “Connecting Northern Families”	Notes
			the Far North would be ongoing, subject to periodic CRTC review.
Type of subsidy	Internal to service provider	Operational (fixed-fee)	
Geographic coverage	Canada, subject to operator participation	Far North	
Operator participation to provide Eligible Service	Voluntary	Mandatory for designated service providers; voluntary for others	Service providers serving above a threshold number of households in a community would be required to participate in the program. Others could elect to participate.
Financing of Programme	Subsidized internally by participating service provider	National Contribution Fund	
Beneficiary eligibility	Receipt of maximum CCB or GIS	Receipt of maximum CCB or GIS	Generally, to mirror the Connecting Families approach.
Ex ante limit on number of eligible households	Yes	No	In part because the program is internally funded, Connecting Family operator participants establish a numerical ceiling, lower than the universe of eligible households, to be enrolled in the programme. The Connecting Northern Families program would not set such a cap: the limit would be the number of eligible households.
Eligibility verification	Third-party administrator	Third-party administrator	A third-party administrator would coordinate the program, whether the existing service provider (“Computers for Success”, a not-for-profit) or a Northern equivalent. Would ensure eligibility validation.
Is it portable?	Yes	Yes	The eligible household can apply the portable subsidy to any eligible service package provided by any eligible service provider.
Eligible services	One package: Residential Internet at 50/10 with 200GB	One package: Residential Internet at USO-level characteristics.	There are a number of approaches as to the number and type of eligible Internet packages that could be included in the new program. We suggest an approach similar to the South, in which a designated package is presented based on the USO objective.
Price / subsidy of eligible services	Price = \$20/month	Price ≈ \$20/month, subject to affordability metrics. CRTC to determine single dollar amount subsidy across Service Providers.	There are number of approaches to establishing the portable subsidy. One practical approach would be to establish a dollar amount calculated as the difference between the calculated costs of providing a benchmark eligible Internet package (for example, the USO-level package) and the threshold affordable price determined by the low-income affordability metrics. For practical purposes, that price is likely to be the same as or similar to the \$20 price for Connecting Families 2.0 in the South.

c) What conditions of service do you think should be imposed in order for a service provider to be eligible to receive the subsidy? For example, would a service provider only be eligible to receive the subsidy if it met certain quality of service criteria, or other criteria, such as owning or operating telecommunications facilities?

154. Generally, we have distinguished between the incumbent service provider, whose pricing is already subject to tariffs, price caps, and Broadband Fund pricing obligations; systemically important service providers that serve more than a threshold proportion of households within a community; and other service providers.
155. In the same regard, we have noted conditions of service that could be imposed in conjunction with both general and low-income subsidy approaches:
- With respect to price, USO-level packages would be offered at a rate determined through the affordability standard to be developed in conjunction with this proceeding. Higher-speed packages would, in respect of the portable subsidy, be expected to be offered at reasonably proportionate rates.
 - With respect to quality of service, subsidies would be decreased in proportion with the failure to achieve retail quality of service metrics, including uptime requirements, to be established for the related services.
156. Finally, regarding facilities-based and service-based service providers, an efficient approach may be to provide the relevant subsidy to the wholesaler, which would offer the high-speed access service at a rate discounted accordingly. Under this approach, the service-based provider benefitting from this lower wholesale rate would be required to meet the related retail price requirement.

d) Which service providers should be required to contribute to the subsidy fund?.

157. The subsidies would be raised through the existing National Contribution Fund mechanism.

Quality and reliability of retail telecommunications services (Q20-Q23)

Q20 Do you think the CRTC should take action to improve the quality of Northwestel's Internet network? For example, should the CRTC take action to improve the speed of Internet service?

a) Why or why not?

b) If so, explain what actions the CRTC should take.

158. With respect to improving the quality of Northwestel's Internet network, in *Broadband Fund – Project funding approval for Northwestel Inc.'s Northwest Territories fibre*

project, Telecom Decision CRTC 2020-258, 12 August 2020 the Commission accepted and set in motion a network quality improvement program with planned outcomes for virtually every community in the Northwest Territories.

159. With respect to improving, in this context, the speed of Internet service, we note that the commitment made in relation to the latter projects is to packages at speeds ranging from 10/2 to 50/10. Insofar as ordinary Internet usage profiles and, accordingly, the speeds required to fully participate in society using the Internet continue to evolve, it may become inappropriate for the CRTC to rely on a static 50/10 target; for subsidized broadband networks to limit commitments to the same target; or for the Broadband Fund not to attend more closely to projects that will upgrade reliability and resiliency, such as the Great Slave Lake fibre redundancy project.
160. In *Modern telecommunications services – The path forward for Canada’s digital economy*, Telecom Regulatory Policy CRTC 2016-496, 21 December 2016, the Commission adopted the delivery of speeds of at least 50 Mbps download and 10 Mbps upload as a criterion to assess whether the broadband portion of the universal service objective is achieved. The GNWT therefore expects that the Commission will wish to revisit the 50/10 target and related static approach that it adopted nearly six years ago. The potential of proposed broadband technologies to be upgraded was a criterion for reviewing the technical merit of Broadband Fund proposals. How they will keep pace with updates to target speeds over time, and as feasible, should be clarified by the CRTC.

Q21 *Do you think the CRTC should take action to improve the reliability of Northwestel’s Internet network? For example, should the CRTC take action to reduce the duration and frequency of network outages (sometimes, this is referred to as bringing redundancy to a network or making a network more resilient)?*

161. Particularly in view of the Internet’s increasingly central role in all sectors of personal, social and economic life, its network reliability in the Far North is mission-critical.

a) *Why or why not?*

162. The *Telecommunications Act* requires that the CRTC take action to realize the objective of rendering “reliable ... telecommunications services of high quality accessible to Canadians ... in all regions of Canada”.
163. This objective has not yet been met in the Far North. The Environics research commissioned by the CRTC bears this out, with 47 percent of those in the NWT reporting that network outages have a major or moderate impact, not just on their consumption of telecommunications services, but on their “personal, social and economic well-being”. Outages lasting up to two weeks “were a severe inconvenience because it debilitated the community; during the outages participants noted that they were unable to access basic necessities such as prescriptions, groceries or gas as the point-of-sale machines relied on Internet to work.”

b) If so, explain what actions the CRTC should take.

164. The GNWT respectfully submits that the Commission should ensure a comprehensive regulatory approach to network outage detection, response, and remediation is in place.
165. With respect to network outage detection, the Commission should require service providers that serve a material threshold of a Territory's or of a community's population to ensure stakeholders have the means to know when service is down and to manage expectations as to when it may be restored. This could, for instance, be implemented in the form of requirements that service providers (a) instrument their networks so as to be able to know and report when a service outage occurs, and (b) notify to the Commission and Territorial and Indigenous government clearing-houses or their designates, by using a lightweight batch protocol to be determined and using a templated approach in the nature of Appendix A to ISED's *Telecommunications Incident Notifications Guidelines*, when outages occurred.
166. With respect to response and remediation, the Commission should require such service providers to report on steps taken to restore services; and to identify and remediate root causes; and consider companion obligations on such systematically-important service providers to take such steps within a reasonable period. Consumers and small businesses, the GNWT has suggested, should have the ability to pursue a complaint before the CCTS for particular failures to meet these obligations that particularly affect them. Service providers seeking a portable operating subsidy should, at the same time, be prepared refund subsidies received, in whole or part, to the extent that they have failed to meet the retail quality of service targets that the Commission adopts as a result of decisions made on this proceeding or a follow-up to it.
167. Finally, the GNWT again notes its strong support for ongoing efforts to develop a Great Slave Lake fibre redundancy project that makes wholesale elements available at competitive and, where appropriate and consistent with the Commission's findings on this proceeding, subsidized rates that will fuel improved reliability and competition. In particular, we ask the Commission to ensure that the Broadband Fund is able to accommodate support for projects of this type.

Q22 Do you think the CRTC should require Northwestel to develop a network improvement plan?

168. The Notice explains that, by "network improvement", it means "initiatives to improve the reliability of networks to reduce the frequency of outages", in relation to which the Notice refers to the discussion, in TNC 2020-367, of the Northwestel modernization plan solicited in TRP 2011-771 and approved, with revisions, in TRP 2013-711.
169. More broadly, the GNWT understands such plans to be a variety of Service Improvement Plan ("SIP") in which an incumbent local carriers files a plan for capital expenditures to implement network improvements needed to achieve a basic service target.

170. SIPs are generally designed in ways that incorporate least-cost technology, target larger communities or areas first, serve unserved areas prior to providing upgrades, and serve permanent dwellings before seasonal ones. They set out specific proposals to fund such improvements. In so doing, they propose a reasonable balance between the speed and cost of implementation and need to maintain affordable rates.⁴⁶ Once accepted, the capital improvement plan is accepted as part of the incumbent's fixed costs and to be recovered through tariffs, through embedding into costing exercises; through the industry-wide contribution fund; or through a combination of these.
171. Extrapolating from the above, a Network Improvement Plan would provide for the most least-cost, efficient means by which to improve Northwestel's network so that it be able to provide services that achieve reliability targets to be specified, and whose capital costs would be recovered in ways to be determined.
- a) Why or why not?*
- b) If so, describe the network improvement plan and benefits. For instance, network improvements may include upgrades to transport facilities, network redundancy, upgrade and/or expansion of Internet services across Northwestel's operating territory, improvement of broadband Internet services in satellite-dependent communities, etc..*
172. Three factors complicate the possibility of the Commission's requiring Northwestel to propose a Network Improvement Plan, as described above, for review.
173. First, Northwestel is already presumably bound to certain network improvement requirements pursuant to the terms of its Broadband Fund agreements, the details of which are, in distinction to SIPs, not well-known to interveners—but likely include specific provisions as to reliability:

"6.2.1(a) Assessment criteria – Technical merit (2-P1)

This criterion will be used to determine whether a project is efficient and sustainable and therefore more likely to continue meeting the broadband service requirements of underserved eligible geographic areas over the long term. The technical merit of proposed projects will be assessed based on the following: (...)

Resiliency: The proposed network's ability to continue to provide and maintain an acceptable level of service during network failures in the course of normal operations and unforeseen circumstances. These circumstances may include physical network failures, such as fibre cuts or equipment malfunctions, and natural disasters. The CRTC will also evaluate the inherent resiliency of the

⁴⁶ Telephone service to high-cost serving areas, Telecom Decision CRTC 99-16, 19 October 1999, paragraphs 40-43.

proposed project, or how the project would improve the resiliency of existing infrastructure.”⁴⁷

174. The GNWT encourages the Commission to consider to what extent these commitments ought to be clarified on this proceeding.
175. Second, and nonetheless, it appears clear in view of past network outages, and dissatisfaction levels relating to network outages, that a range of improvements that assist in delivering better reliability and resiliency to services delivered over the Northwestel’s network are required. However, just what standards are to be met has yet to be determined.
176. Relatedly, it is expected that Northwestel’s operating will increasingly be subject to competition. Global LEO and MEO constellations are entering the market. New infrastructure projects are delivered as joint ventures, or pursuant to Build-Transfer-Operate models that sees ownership pass to Indigenous governments or corporations. Particularly in such an environment, a focus on outcomes to be achieved is critical.
177. In that context, GNWT respectfully proposes that, rather than begin with the end-goal of a Northwestel SIP over and above already-existing but unspecified Broadband Fund commitments, the Commission ought to make use of this first portion of the current proceeding to state clear criteria for what gaps exist to be filled. A commitment to network redundancy that minimizes single points of failure, with which important projects like the Great Slave Lake fibre redundancy project would likely assist, is an example of how the Commission might proceed with such an approach.
178. Having established network improvement criteria to be met, and then solicited Northwestel’s and other parties’ views on projects and initiatives required to fulfil them, like the Great Slave Lake project, the Commission could then proceed to ownership and competitive bidding elements. In a multi-provider environment, including HSA-based providers, which provides for competitive choices, overall network improvements should be delivered equitably in line with availability and pricing principles that ensure non-discriminatory, efficient access.

Q23 In Canada, consumers who wish to file a complaint about their telecommunications services can do so with the Commission for Complaints for Telecom-Television Services (CCTS). However, the CCTS’s mandate is limited to services that are forborne from rate-regulation, such as Northwestel’s satellite Internet services. This means that complaints about Northwestel’s terrestrial Internet services, which are rate-regulated, must be submitted to the CRTC directly. Do you think the CRTC should take action to improve the complaint resolution process for telecommunications services in the Far North??

⁴⁷ Application Guide for the 3 June 2019 Call for Applications for the Broadband Fund, Appendix to Telecom Notice of Consultation CRTC 2019-191, 3 June 2019.

a) Why or why not?

179. Yes, the CRTC should take action to improve the complaint resolution process for consumers and small businesses.
180. The current split between the Commission, for rate-regulated services, and the CCTS, for other services, is confusing and unhelpful, as exemplified by the well-structured but inevitably complex guide to who consumers should contact to escalate complaints which, published by Northwestel, consists of nine columns (City, Province, Cable Internet, Terrestrial DSL, Satellite DSL, Cable TV, Cable Home Phone, Home Phone, and Long Distance) and 105 rows—along with the appropriate instructions “[r]efer to the table below to understand whom to contact.”⁴⁸

b) If so, explain what actions you think the CRTC should take..

181. The CCTS continues to evolve in its maturity as a complaints resolution body tailored to consumers and small businesses. There is increasing familiarity with the CCTS’s role as a consumer and small business complaints handler.
182. The GNWT respectfully submits that there may be merit in seeing the CCTS act as a single-window dispute resolver, provided it takes care to publish regular summaries of typical or interesting complaints and their resolution, an essential form of guidance; and, more broadly, to continue to define specific evidentiary elements or templated approaches that streamline consumers’ ability to present their case efficiently and equitably.
183. This would not remove the CRTC from the equation. We understand that the CRTC also acts as a form of *de novo* rehearing body for CCTS complaints, which role may continue to be refined. However, the CRTC also has a key role to play in conducting its own, self-standing analysis of the CCTS’s detailed open data sets of complaints; and working with the CCTS on wedge issues that generate significant numbers of complaints, in order to continue to address systemic issues through regulatory frameworks.

Telecommunications service provider engagement with local communities, including Indigenous communities, in the Far North (Q24-Q25)

Q24 Do you think the CRTC should take action to improve how telecommunication services are offered or provided to better meet the needs of Indigenous individuals, local communities or small business customers in the Far North? For example, customer service in Indigenous languages, culturally-sensitive payment plans, business plans that support Indigenous businesses, etc.

a) Why or why not?

⁴⁸ Online: <<https://www.nwtel.ca/complaint-process>>

b) If so, explain what actions you think the CRTC should take.

184. The GNWT agrees with and endorses each of the three examples provided in Q24, which are basic to respecting the rights of Indigenous peoples. The GNWT supports these approaches and urges the Commission to work with their proponents and potential users in developing guidelines that ensure Indigenous languages, cultures, resources, and needs are meaningfully and respectfully sought out.
185. The Commission has, for some time now, maintained consumer bills of rights and codes that set out what consumers may expect in respect of different services. Some of these relate to different subscriber needs, including the needs of accessibility-seeking subscribers and of Official Language Minority Communities (“OLMCs”).

Q25 Should the CRTC impose any requirements or expectations on service providers relating to meaningful engagement with Indigenous communities when providing (or planning to provide) telecommunications services to Indigenous communities in the Far North?

a) Why or why not?

b) If so, explain what actions you think the CRTC should take.

186. Yes. It is particularly appropriate that service providers building facilities into, or making substantial repairs or changes to them in, a community, engage with that community respectfully. Reporting requirements that included the views of those consulted, or that established a protocol for connecting with local governance authorities to do so, would be helpful in this regard.

c) What are the elements of these requirements or expectations, including what would constitute meaningful engagement?

i. Which service provider(s) should be subject to these requirements or expectations?

187. The approach adopted by the Commission should be competitively neutral, without stifling or interfering unduly with entrepreneurship and innovation. As such, threshold targets relating to provider size, systemic or community importance, procedural milestones, and cooperation with local authorities should be identified.

ii. What are the instances or circumstances under which meaningful engagement would be expected or required? For instance, some parties suggested that the CRTC should require additional and specific Indigenous involvement in planning and designing service improvement projects to adequately address the connectivity needs of Indigenous communities on an ongoing basis, help improve service standards, encourage client services that are culturally sensitive, and help support the availability of services.

188. The GNWT agrees that work to engage Indigenous involvement in planning and designing what telecom services are necessary in their communities, and how cost trade-offs with respect to connectivity, service standards, client services, and availability needs are best met in those contexts, is fundamental to Northern telecommunications policy.

iii. How would one measure the effectiveness or success of meaningful engagement with the local communities in the Far North?

189. The GNWT looks forward to reviewing the submissions of local community authorities, governments, band councils, and other organizations in identifying how they would prefer that the effectiveness of engagement with them be measured.

iv. Should the CRTC impose reporting requirements to monitor engagement with the communities, including what information these reports should include, the filing frequency, and whether a feedback mechanism attached to these reports would be appropriate so that the communities could react and comment on them?

v. Are there any other mechanisms or tools that could be used to adequately measure the engagement from service provider(s)?

190. The GNWT has suggested establishment of engagement protocols focused on procedural steps and engagement with local authorities, rather than focusing only on written reports. Compliance with these protocols would be a key step in measuring respectful engagement.

Competition (Q26-Q27)

Q26 How might consumers benefit from this kind of competition, even if it did not mean lower prices overall, or improvements with respect to Internet service reliability and quality?

191. The preamble to this question suggests that service-based competition would result in offerings that are “very similar to Northwestel’s services in terms of price, reliability, and quality”; and moves on to ask what other benefits service-based competition could, therefore, bring to the market.

192. It is not clear that improvements in price, reliability, or quality accompanying service-based competition should be ruled out.

- With respect to price, the Competition Bureau’s broadband market study found that wholesale-based competitors offered services at discounts ranging from 15 to 35

percent under incumbents.⁴⁹ This injects price competition vigour into the market and undermines the conditions for unconscious parallelism between incumbents.

- With respect to reliability and quality, service-based competitors share the last mile of the network with their wholesale HSA suppliers, but interconnect these services with self-supplied facilities at the earliest feasible point in the network. For instance, service-based competitors provision their own Internet connectivity, often helping stimulate the build-out of local Internet exchange points and creating richer interconnection meshes within the corresponding communities. Likewise, service-based competitors have the ability to tune the services they provide to different usage profiles than those chosen by their facilities-based competitors.

193. Beyond price, reliability, and quality improvements, however, service-based competition also provides opportunities for different and competing approaches to customer service, privacy and transparency, cultural tailoring of service delivery, as a starting point. Particularly as telecommunications functionalities are delivered increasingly through software, service-based competitors have growing scope to deliver increased innovation, responsiveness, choice, and attention to local needs.

Q27 According to the Competition Bureau, competition in a given market generally benefits consumers through lower prices, greater choice and increased levels of quality and innovation.

a) Which of these benefits are most important to consumers with respect to their Internet services and why?

b) How would you rank them in order of priority?

194. The GNWT notes that the Competition Bureau information sheet referenced in this question does not present lower prices, greater choices, and increased quality and innovation as mutually exclusive or separately-attained goals but, rather, as the mutually-reinforcing results of a competitive market:

Competition in the marketplace is good for Canadians. Competition benefits Canadians by keeping prices low and keeping the quality and choice of products and services high.

With fair and vigorous competition, businesses must produce and sell the products consumers want, and offer them at prices they are willing to pay. This means that in a competitive market, the consumer holds the power....

[W]hen businesses operate in a healthy competitive market, consumers get to choose the best option available to meet their needs and price point. Fair competition means that businesses must make a strong case to each consumer, and convince them that their products or services are the superior

⁴⁹ Competition Bureau, *Delivering Choice; A Study of Competition in Canada's Broadband Industry* (Ottawa: Competition Bureau, 2019), page 17.

choice. This translates to more and better products and services that meet the diverse range of consumer tastes. In short, more variety, more features, higher quality and more value for consumers.

As consumer preferences invariably shift, a competitive market will reflect these changes in the products and services it delivers. This will push businesses that excelled at meeting yesterday's needs to either adapt or fall behind because of pressures from existing competitors or new entrants in the marketplace.

195. A competitive market in which a range of competing providers seek to differentiate their services based both on price and quality, including reliability, should achieve a range of competitive outcomes. Selecting some ingredients to the exclusion of others or ranking their importance would, in the GNWT's submission, result in a recipe whose results were not as intended.
196. Fostering competitive vigour in a high-cost environment remains a key challenge for Northern telecommunications policy. The approaches canvassed in the GNWT's submission to meet this challenge include updating the Commission's long-standing approach to High Cost Serving Areas for broadband; extending to the Far North certain regulatory instruments that are in place everywhere else in Canada, including the Connecting Families program and service-based competition framework; and addressing consumer rights and CRTC procedural frameworks that impose on competitive markets the requirement to respect and seek reconciliation with Indigenous peoples as a baseline.

Wholesale high-speed access service (Q28-Q38)

Q28 How can the CRTC's Wholesale Analysis be responsive to the particular circumstances of the Far North?

a) Comment on the CRTC's preliminary view that the Essentiality Test should apply to wholesale services in the Far North.

197. The Essentiality Test was devised in 2008, and refined in 2015, to address circumstances in which the Commission must mandate the provision of a wholesale service if there is to be retail competition in a downstream market. The Essentiality Test is designed, in this sense, to address high barriers to entry in respect of a retail service, not just the nature of existing retail competition in respect of that service.
198. In the Far North, entry barriers are sufficiently high that many facilities, including fibre broadband networks, have required subsidy to be brought to market in the first place. For the same reason, the incumbent provider remains tariffed.
199. In the past, some parties have presented wholesale HSA as an expensive frill that is perhaps justified in high-density areas amenable to competition, but unnecessary and

even counter-productive in remote contexts in which bringing even one service provider to market is challenging.

200. In the event providing wholesale HSA, including in the relatively aggregated format likely best-suited to the Far North, would substantially raise overall service costs then, of course, it is important that evidence to this effect be filed on this proceeding in order to assess what subsidy would be required to offset these costs, and whether it is cost-beneficial.
201. But absent such evidence—and noting that aggregated HSA has generally been available throughout HSA providers’ footprints, bringing competitive choice to remote regions throughout Canada with the notable exception of the Far North—the GNWT does not share the view that the case for wholesale HSA diminishes as regions become more expensive to serve.
202. On the contrary: the GNWT submits that the more difficult the case for facilities-based entry, by constructing parallel access networks, the greater the need to look to the unbundling of elements that pass the Essentiality Test in order to create an enabling environment for competition.
203. As such, the circumstances in which the Essentiality Test has been applied in the South similarly apply in the Far North.

b) Should the existing policy considerations (public good, interconnection, innovation and investment) apply to wholesale services in the Far North? Why or why not? Should they be modified or qualified in some way?

c) What further policy considerations may be appropriate to examine given the particular circumstances of the Far North? How should these be applied to inform the Wholesale Analysis?

204. The Commission’s Essentiality Test framework treats the policy considerations noted in the Commission’s question as ones that are “unrelated” to the Essentiality Test. They operate, instead, as self-standing bases on which to mandate provision of a wholesale service.
205. A “public good” policy basis for mandating wholesale supply is one in which, even where the incumbent does not exercise market power in the upstream wholesale service, there is a need to mandate the service for reasons of social or consumer welfare, public safety, or public convenience.
206. The Far North is characterized by remote communities that rely on telecommunications services for public safety and, increasingly, for essential activities including education, health care, and government and financial services. Insofar as a broader range of providers assembling a more diverse range of connectivity options is required in order to improve access to public safety and essential online services, the

“public good” basis for mandating wholesale supply in respect of broadband-related facilities regardless of the Essentiality Test could apply in the Far North.

207. An “innovation and investment” policy basis for mandating wholesale supply is one in which, even where the incumbent does not exercise market power in the upstream wholesale service, there is a need to mandate the service in order to enhance the level of innovation or investment in advanced and emerging networks and services, or to impact the associated level of advanced- or emerging-services adoption.
208. Investment in advanced and emerging networks and services in the Far North are the results either of commitments locked in by means of public subsidy (Northwestel), or of very-large-scale business plans that require global operations and significant government investment (Starlink). At the same time, the Far North is characterized by a strong focus on local entrepreneurship and capacity-building that is especially important in view of the need to ensure Indigenous peoples and communities have the same economic opportunities, and the same access to culturally-appropriate services and employment, as their non-Indigenous counterparts. Insofar as the level of investment is at limited risk because it is locked in, while the potential is higher to impact adoption by Indigenous persons when local communities play a greater role in service delivery, the “innovation and investment” basis for mandating wholesale supply in respect of broadband-related facilities regardless of the Essentiality Test could apply in the Far North.
209. The “particular circumstances of the Far North” are ones that could make wholesale more, not less, important, as set out above. Facilities build-out in the Far North has been based on subsidy and deployment obligations, not facilities competition, illustrating the degree to which the prospect for entry through parallel access networks is weaker in the Far North. The need to rely on unbundling essential facilities to create an enabling environment for competition is, correspondingly, more acute, and should be applied to evidence as to the cost and ideal architecture of HSA roll-out for the Far North which, the GNWT notes, has generally been made available in remote areas in an aggregated format.

Q29 What form should a mandated HSA service take and why? Comment on any factor you consider relevant, including:

a) the kind of infrastructure that the service should provide access to (e.g. transport, access, fibre-to-the-node [FTTN], fibre-to-the-premises [FTTP], coaxial cable, copper loop);

210. With respect to technology choice, mandated HSA should relate to the platforms over which it is expected that the incumbent will serve communities for a reasonable period of time, such that the investment in enabling wholesale HSA could have the greatest returns. In the Northwest Territories, we understand that these will be FTTP and satellite, as other platforms are being phased out in favour of Broadband Fund projects. However, to the extent that communities are expected to remain for at least the

medium-term future on DSL, coaxial cable, or other technologies able to support HSA services, these could also be candidates for mandated HSA.

211. With respect to network segment, mandated wholesale HSA should include the access segment and such transport as is required to backhaul that traffic to the closest feasible point of interconnection.

b) which communities the service should be available in; and

212. If mandated, the wholesale HSA service should be available in all communities. The question should be not where to offer it, but where to place the point of interconnection for accessing it. For instance, for most communities in the Far North, we assume it will be more cost-effective to provide service through the kind of aggregated interconnection model deployed by Bell Canada in the South. Evidence filed on this subject in the current proceeding will be instructive in this regard.

c) whether the service should be the same or different depending on the infrastructure or the community.

213. If mandated, the wholesale HSA service should target approximately the same outcomes in all communities, with the understanding that available speeds, latencies, and price points may vary by technology. In this regard, the Commission's requirements with respect to speed-matching are relevant.⁵⁰

Q30 Given that Wholesale Connect already provides a wholesale service over Northwestel's transport facilities, should the wholesale HSA service complement Wholesale Connect, or should they be provided as independent and potentially overlapping services?

214. The concurrent availability of independent and potentially overlapping services at competitive rates would no doubt provide greater choice to existing and potential competitors. However, the GNWT notes the challenges encountered by the proposed approach to disaggregated wholesale HSA in the South. For this reason, we have assumed that an aggregated HSA service is likely more appropriate to the North, should an HSA service be mandated.
215. More broadly, the GNWT has advocated that, in the transition to a competitive environment, portable operating subsidies be brought in that enable facilities-based providers to offer retail and wholesale services in line with pricing and affordability goals. An additional "retail-minus" check on wholesale component rates, such that the full range of tariffed items required to assemble the relevant elements of a competitive

⁵⁰ Wholesale high-speed access services proceeding, Telecom Regulatory Policy CRTC 2010-632, 30 August 2010; Shaw Cablesystems G.P. – Introduction of Internet 1500 wholesale high-speed access service, Telecom Order CRTC 2022-96, 5 April 2022.

broadband offering are priced at a reasonable margin below their related retail rates, should be considered in order to ensure this goal.

Q31 *How does the Wholesale Analysis described in Review of wholesale wireline services and associated policies, Telecom Regulatory Policy CRTC 2015-326, 22 July 2015, amended by Telecom Regulatory Policy CRTC 2015-326-1, 9 October 2015, apply to the particular form of wholesale HSA solution you propose in response to question 29? That is:*

216. This question demands a level of detail that is beyond the scope of GNWT's ongoing activities, and look forward to reviewing other parties' submissions on these matters.

Q32 *Comment on how the wholesale HSA solution you propose in response to question 29 would promote facilities-based competition, service-based competition, or both. Why should this be the CRTC's desired outcome? How will the solution you propose lead to concrete outcomes that are meaningful to consumers and communities.*

217. If Wholesale HSA is mandated in the Far North, the CRTC's desired outcome should include promoting choice, new entry, and competitive pressure on pricing, quality, and innovation, including the local entrepreneurship and Indigenous-led capacity-building and service design and provision referred to throughout this submission.

218. As between facilities-based and service-based competition, the GNWT is hopeful that increased competition by providers of any type will continue to lower entry barriers and fuel new approaches to local facilities design and innovation among Northern and Indigenous entrepreneurs.

Q33 *The CRTC is committed to engaging with Indigenous Peoples to ensure that their needs are considered in its policy development processes. Comment on how the solution you propose in response to question 29 addresses Indigenous rights and contributes to reconciliation in the Far North. In particular, how could your solution help promote economic development and opportunities in Indigenous communities, including skills training and education, technical and digital literacy, employment, and opportunities for local entrepreneurs? Could it help empower Indigenous communities to own and maintain their own infrastructure, and if so, how?*

219. Making available, through wholesale HSA service, those network elements that cannot be feasibly or economically reproduced could help create the conditions for economic development and opportunities in Indigenous communities. A growing number of HSA-based providers in the South have invested increasingly in their own access networks. Bringing wholesale HSA to the Far North, thereby putting the North on par with the rest of Canada, could enable a similar dynamic to be exercised in the hands of Indigenous and local authorities, which take an active role in community economic development. Doing so is, further, in line with the advice of the Standing Committee on Economic Development and Environment ("SCEDE") of the 19th Legislature of the Northwest Territories, which recommended that "the GNWT ensure all publicly funded

Internet backbone infrastructure in the NWT provide wholesale high-speed Third-Party Internet Access.”

Q34 *Comment on how the solution you propose in response to question 29 could allow for more service providers to operate in the Far North. Consider all kinds of providers, including for-profit and local, not-for-profit providers (such as providers that are owned and operated by communities or municipalities). What benefits could different kinds of service providers, including local not-for-profit service providers, bring to consumers and communities?*

220. Access to reasonably-priced wholesale services like wholesale HSA could help allow more service providers in the Far North. These include both existing and future for-profit providers; providers owned and operated by local communities, municipalities, and Indigenous governments; and combinations of these, including joint ventures and for-profit subsidiaries of public and not-for-profit authorities. However, the GNWT echoes the SCEDE report, cited in the response to Question 33 above, in underlining the importance of reasonable pricing in doing so.

Q35 *Currently, the CRTC sets the rates that Northwestel can charge for its retail terrestrial Internet services according to its price cap regulatory regime. Discuss whether and how the price cap regime would need to be adjusted to realize the benefits of the solution you propose in response to question 29. Is it possible to set retail rates that are more affordable than they are now while also promoting competition, and if so, how?*

221. Yes, the current price cap regime would need to be adjusted to account for the introduction of a wholesale HSA service regime and affordability-related initiatives identified in this submission; and it is, by extension, possible to create the environment for retail rates more affordable than they are now, while also promoting competition. However, this is a complex and inter-related matter.

222. In general terms, the combination of Broadband Fund pricing commitments; mandated wholesale; and operating subsidies linked to an affordability standard, delivered as competitively-neutral portable subsidies, should result both in more affordable retail rates, and more robust competition. This approach would not guarantee lower pricing on the part of parties not subject to price caps. But, by aligning input costs with target retail rates, it would ensure that competitors have the ability and incentive to enter markets and hold one another's feet to the fire without facing insurmountable barriers to do so. From a practical standpoint, this approach has been effective elsewhere in Canada in lowering prices.

Q36 *In 2022-2023, Northwestel's retail terrestrial Internet services may be in direct competition with new market entrants that use LEO satellite technology to provide retail Internet access services. Comment on the impact these new developments may have on the solution you propose in question 29 and how they may affect your solution's impact on consumers, communities and the market..*

223. We do not anticipate any significant impact from satellite technology developments on the wholesale HSA service, should such a service be mandated in the Far North. New LEO developments may result in consumers seeing increased choices at competitive rates, such that communities will be served by one or more of Northwestel's Broadband-Fund-contracted fibre networks, LEO facilities and, potentially, other facilities-based networks—as well as by service-based competitors.
224. However, it is important to distinguish between the presence of multiple service providers, and high costs of market entry. As noted elsewhere in this submission, the purpose of wholesale HSA service would be to mitigate the latter, not merely to achieve the former. To the extent LEOs enter the market without using HSA, either because they do not require a made-in-Canada subsidy or have received subsidies or other incentives outside of Canada, they will compete on price.

Q37 In Review of the competitor quality of service regime, Telecom Regulatory Policy CRTC 2018-123, 13 April 2018, the CRTC set out separate competitor quality of service regimes for Wholesale Connect, and for wholesale HSA services provided by incumbents in the south. Discuss what quality of service regime is appropriate for the solution you propose in question 29, including what service indicators and standards will meet the needs of competitors and consumers. How should the particular circumstances of the Far North be factored into its competitor quality of service regime?

225. Distinct competitor quality of service regimes should apply to distinct wholesale components, such that each wholesale service provided is accompanied by some quality-of-service monitoring. In this regard, there should be no tension between Wholesale Connect and wholesale HSA quality of service regimes. The retail quality measurement regime proposed in A29 would, similarly, co-exist with these.

Q38 Justify why, with regard to all of the factors above and any other factor you consider relevant, Northwestel should or should not be required to provide a wholesale HSA service in the form that you have proposed.

226. The GNWT has, in its submissions on this proceeding, addressed ways in which the Commission's Essentiality Test, public good policy, and innovation and entrepreneurship policy, each suggest a wholesale HSA service could potentially:
- lower high barriers to Northern entry, which have already required ongoing tariffing and long-standing subsidy throughout the Northwest Territories and other portions of Northwestel's serving area;
 - enable service delivery by Indigenous and local initiatives in ways that respond to the unique needs of the Far North; and
 - meet, in addition to the policy tests referred to above, the Northern telecom policy objectives set out in this submission, including meaningful choice in service providers.

Wholesale Connect (Q39)

Q39 Comment on what changes to Wholesale Connect could help promote competition in the Far North. As a starting point, Iristel Inc. and the Public Interest Advocacy Centre made several suggestions on which the CRTC seeks comments, including:

a) With regard to technical changes:

i. Should the maximum transmission unit be increased from 1,500 bytes to at least 9,000 bytes?

227. In procuring services for its own use, the GNWT recently sought a minimum transmission unit of 1,600 bytes in order to support the architecture and technology to be deployed. As such, a maximum transmission unit is not, from the standpoint of at least one large user of telecommunications services, adequate.

ii. Should more than one point of presence per community per wholesale customer be available?

228. The GNWT anticipates that up to one point of presence per community per wholesale customer should be sufficient in most cases, and that in many cases a point of interconnection that is at a more centralized location may be more efficient. However, we look forward to reviewing submissions by existing and prospective wholesale customers in this regard.

iii. Should 10 Gigabits per second Ethernet ports be available in network breakout point communities?

229. Yes, 10 Gigabits per second Ethernet ports should be available in network breakout point communities. As a purchaser of telecommunications services, it is the GNWT's experience that most routing equipment comes with 10G interfaces by default, which is becoming the standard connect speed.

230. At the same time, it will be important that wholesale services be configured so that users are not compelled or required, from a practical pricing standpoint, to purchase in far greater quantities than required. Similarly, whether users have the practical ability to pool purchases is relevant in this regard.

iv. Should more than one network breakout point on a redundant path be provided? Does the additional network breakout point proposed by Northwestel in Tariff Notice 1126 and approved in Northwestel Inc. – Wholesale Connect Service – Addition of a new network breakout point in Fort St. John, British Columbia, Telecom Order CRTC 2021-414, 15 December 2021, satisfy this need?

231. The GNWT agrees that, in many contexts, it is essential that more than one network breakout point on a redundant path be available in order to promote resiliency, but that the trade-off between redundancy and cost is context-driven. Broadly, however,

the GNWT again notes its strong support for ongoing efforts to develop a Great Slave Lake fibre redundancy project that makes wholesale elements available at competitive and, where appropriate and consistent with the Commission's findings on this proceeding, subsidized rates that will fuel improved reliability and competition.

v. *Should Ethernet and wavelength-based transport services be provided?*

232. Ethernet-, wavelength-, and Dense Wave Division Multiplexing (DWDM)-based transport services are standard throughout the South. Business context and, in particular, pricing are essential factors in evaluating the importance of these in particular settings. Generally, however, availability of these modes of transport delivery are important elements in the ability of larger businesses and competitive telecom service providers to assemble a transparent network infrastructure. In particular, they can help reduce infrastructure deployment costs by creating practical alternatives to laying dedicated fibre.

vi. *Should Wholesale Connect be offered as a Layer 2 network solution, instead of as a Layer 3 solution?*

233. As a large telecommunications user, the GNWT is of the view that the ability to access layer 2 network solutions is important for similar considerations as those referred to in the preceding response, especially where the MTU is greater than 1500 bytes. Some users of wholesale connect may have technical reasons to prefer a L2 connection over L3 based on their architecture or technology being deployed. As with the other Wholesale Connect items canvassed by the Commission on this proceeding, however, the availability of pricing that is accessible and competitive with alternatives would likely be a key determinant.

b) *With regard to quality of service:*

i. *Should the Class of Service and Service Level Agreement provisions in the Wholesale Connect tariff be changed? If so, how?*

ii. *Should the competitor quality of service regime applicable to Wholesale Connect, as set out in Review of the competitor quality of service regime, Telecom Regulatory Policy CRTC 2018-123, 13 April 2018, be changed? If so, how?*

234. The GNWT does not have sufficient experience to respond to this question, but looks forward to reviewing submissions by existing and prospective wholesale customers in this regard.

iii. *Should the option to purchase dedicated bandwidth be part of the Wholesale Connect service?*

235. The GNWT is of the general view that, subject to pricing, the option to purchase dedicated bandwidth, which is a functionality relevant to certain enterprise use cases, should be part of the Wholesale Connect service. However, we look forward to

reviewing submissions by existing and prospective wholesale customers in this regard.

c) Given the changes to Wholesale Connect that you proposed, comment on whether and how the particular wholesale HSA service that you described in response to question 29 will provide additional benefits in the Far North. Should the wholesale HSA service you proposed still be introduced, even if Wholesale Connect is improved in the manner you proposed? Why?

236. The GNWT's submissions on Wholesale Connect have not sought means by which the service would be updated to respond fully to the use case addressed by wholesale HSA. However, should such proposals be devised, the GNWT looks forward to reviewing them.

4. Conclusion

237. The Government of the Northwest Territories appreciates the opportunity to participate in this important proceeding. It carries forward the work undertaken in recent years by so many Northern stakeholders to participate in the Commission's proceedings and develop a fuller record relating to modernizing and reforming Northern telecommunications policy in ways that create tangible improvements for those who live, work, and do business here, including in how we serve and relate to those who have done so since time immemorial.

*** End of Document ***



Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

**Call for comments –
Telecommunications in the Far North, Phase II,
Telecom Notice of Consultation CRTC 2022-147,
8 June 2022**

**Further comments of the
Government of the Northwest Territories**

10 February 2023

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1 Executive Summary

1. The Government of the Northwest Territories (“GNWT”) is pleased to participate in *Telecommunications in the Far North, Phase II*, Telecom Notice of Consultation CRTC 2022-147 (the “Notice”).
2. GNWT is a long-time participant in proceedings before the Canadian Radio-television and Telecommunications Commission (the “CRTC” or the “Commission”). GNWT has consistently made submissions in support of services for the Northwest Territories (“NWT”) that compare favourably to those available to Southern Canada in respect of affordability, quality, and reliability, including redundancy; and that provide for genuine choice of service providers and promote local and Indigenous entrepreneurship, including the innovation and competitive discipline that contestable markets impose.
3. The Notice provided 39 questions ordered into ten topics. GNWT answered most of the 39 questions in its comments. Many other parties took a different approach, for example commenting by topic. To respond to this variety of approaches GNWT has prepared these further comments by theme, as set out below (with correspondence to the 39 questions):
 - Indigenous reconciliation and engagement matters (Q1-Q5 and Q24-Q25)
 - Potential disruptions to Northern telecommunications (Q6-Q7)
 - Affordability and Subsidies (Q8-Q15 and Q16-Q19)
 - Quality and Reliability (Q20-Q23)
 - Competition and Wholesale Access (Q26-Q27, Q28-Q38 and Q39)
4. The remainder of this executive summary provides an overview of GNWT’s further comments, which address the issues that GNWT considers to be of primary importance to the residents of the NWT. These key issues are ones in which GNWT considers it made a contribution in its comments and on which there were substantive submissions from other parties. On the other issues not specifically addressed below, and after having considered other comments, GNWT maintains its position as set out in its comments and reserves the right to comment on these and other issues as the record develops through this proceeding. Failure to respond to any specific proposal or comment does not imply GNWT’s agreement in any such case.

1.1 Indigenous reconciliation and engagement

5. One of the matters GNWT highlighted in its comments was that higher Internet pricing in the Far North affects Indigenous households disproportionately. GNWT’s two subsidy proposals, therefore, would improve affordability for Indigenous households.

6. GNWT focusses on two key issues: the CRTC's role in reconciliation, including the initiation of a separate CRTC proceeding, and the establishment of a new Indigenous and Northern affairs unit/office at the CRTC (Q2), and the CRTC's role in service provider engagement with Indigenous communities (Q25).

1.1.1 Reconciliation and the CRTC (Q2)

7. There was general support for CRTC action to apply the United Nations Declaration on the Rights of Indigenous Peoples ("UNDRIP" or "Declaration"). Many First Nations and Indigenous organizations, however, went further, suggesting that the CRTC should incorporate the Declaration principles more firmly in its general approach.
8. GNWT encouraged the CRTC to convene a separate process on the CRTC's role in implementing the Declaration. Such a proceeding could consider a number of important proposals put forward by GNWT and other parties.
9. One such proposal for which there appeared to be growing support among many parties was for the CRTC to establish an internal unit/office to liaise and consult on Indigenous and Northern matters. Such a unit could also help ensure appropriate staffing to attend to other matters that parties, including GNWT, highlighted, including improved and more frequent data gathering.

1.1.2 Service provider engagement with communities (Q25)

10. GNWT agreed that the CRTC should impose requirements on service providers relating to meaningful engagement with Indigenous communities when providing, or planning to provide, services to Indigenous communities. In its Intervention, GNWT noted that reporting requirements should also be required.
11. All parties that commented on the matter agreed that service provider engagement with Indigenous communities should be done meaningfully and with respect. However, there was some disagreement as to whether the current approach should be continued, in which no CRTC-specific requirements have been set out beyond those attached to funding, or whether a more rules-based perspective should be adopted by the CRTC.
12. GNWT underlines the emphasis placed by other interveners on evaluating real progress according to the extent and results of the CRTC's and service providers' engagement efforts. Clarifying, as a first step, the CRTC's plans and expectations in this regard will have a positive effect regardless of more directive requirements, particularly in the event such plans and expectations are not met in the future.

1.2 Potential disruptions to Northern telecommunications policy

13. GNWT focusses on the two issues included under this topic, lessons from the COVID-19 pandemic (Q6) and the policy effect that Low and Medium Earth Orbit ("LEO"; "MEO") satellite systems may have in the Far North (Q7).

1.2.1 Learning from COVID-19 (Q6)

14. The COVID-19 pandemic showed that the people of the Far North are more reliant on remotely-delivered communications services than many Southerners. Northern telecommunications policy must deliver affordable, high-quality broadband and mobile services choices to the Far North that are at least equitably priced with, and as full-featured as, those in the South.
15. GNWT was pleased to note some degree of consensus around these positions. COVID-19 served to emphasize the importance of telecommunications generally, and of access to the Internet specifically, in the Far North. It provided an impetus to ensure that Internet is accessible, robust, affordable, and available through meaningfully different choices for all Northern residents.

1.2.2 Integrating new forms of satellite systems (Q7)

16. LEO and MEO satellite systems coming online just as existing satellites reach end-of-life will help increase consumer choice in the Far North. They will add to a Far North competitive ecosystem already served by the incumbent, Northwestel, as well as by smaller domestic participants, including local and Indigenous-owned businesses.
17. A broad range of Interventions from different interveners complement and underscore GNWT's position in respect of the role played by satellite entrants. More ways to deliver broadband and mobile, including new backhaul options and new direct-to-home options, will help broaden and deepen the Northern markets for these services. Although new LEO and MEO entrants add competition to the marketplace, they do not put the issue of competition in the Far North to rest.

1.3 Affordability and Subsidies

18. GNWT suggested that the CRTC adopt an affordability standard to assess and monitor affordability challenges. Based on such metrics, the CRTC could undertake regulatory action in the form of two, separate portable subsidies, each to address a specific affordability challenge.
19. GNWT focusses on these two key issues: a CRTC affordability standard to guide regulatory action (Q9), and whether and how to implement Internet subsidies in the Far North (Q19).

1.3.1 An affordability standard to guide regulatory action (Q9)

20. Broadband prices are much higher in the NWT than in the South, resulting in economic hardship and lower take-up rates. GNWT therefore welcomes the possibility of the CRTC developing an affordability standard to improve the depth, breadth, and frequency of collection and publication of timely, nationally comparable data for the Far North, and allow the CRTC to apply such data to assess, monitor, and design programmes to address affordability concerns.

1.3.2 Internet subsidies for the Far North (Q19)

21. There was an overwhelming response during Phase I that Internet rates in the Far North are not affordable. This assessment was echoed by many interveners in this Phase II. GNWT provided a comprehensive evidence that there are both general affordability, and specific geographic and low-income affordability challenges in the NWT that merit CRTC intervention. In light of this evidence, GNWT developed two separate equity- and affordability-related subsidy proposals for the Far North.

1.4 Quality and reliability

22. GNWT asked that the CRTC establish a comprehensive approach to network outage detection, response, and remediation. A multi-player environment requires an output-based focus on identifying and resolving system single points of failure rather than on mandating a Northwestel network improvement plan (“NIP”).
23. In these further comments GNWT focusses on reliability, especially outages (Q21), and whether the CRTC should require Northwestel to develop a NIP (Q22).

1.4.1 Improved reliability to reduce outages (Q21)

24. Many NWT residents and businesses expressed frustration with reliability levels and with the frequency and duration of outages. These frustrations were echoed by many in the Far North, including First Nations and other Indigenous organizations.
25. Numerous interventions called for the CRTC to take a more forceful approach, including concrete regulatory action, to improve this situation. A regulatory framework that includes transparency measures would improve stakeholders’ expectations and understanding of infrastructure gaps. Such regulatory action must seek to identify material single points of failure and mitigate them through resiliency-oriented network redundancies.

1.4.2 Network improvement plan for Northwestel (Q22)

26. GNWT considers that in a multi-player environment, a focus on specific outcomes to be achieved (reduced number/length of outages), rather than on who would achieve them, as the question’s focus on requiring a Northwestel NIP may have implied, would be more appropriate. Northwestel’s approach in first focusing on specific areas of reliability concern is, in GNWT’s submission, consistent with this view.

1.5 Competition and Wholesale Access

27. Comparatively high costs of serving communities in the Far North mean that broader competitive choice, including broader local entry, will not result from unregulated markets alone. GNWT has therefore indicated support for mandated wholesale High Speed Access (“HSA”).

28. GNWT focusses on the preference for and benefits from further competitive choice (Q27); how to apply the essentiality test in the Far North (Q28); and whether wholesale HSA should be mandated in the Far North (Q29).

1.5.1 Preference for and benefits of competition (Q27)

29. GNWT has underlined the importance of a Northern telecommunications policy reset that shifts focus to equitably-priced services at quality levels, and with features comparable, to those delivered in the South. Like in the South, these services should be available to end-users through a choice of providers, including foreign LEO/MEO entrants, incumbents, other competitors and local entrepreneurs. Choice in providers, GNWT stressed, is not a secondary consideration to the objectives of equitable price and quality.

1.5.2 Application of Essentiality Test to the Far North (Q28)

30. GNWT agrees that the CRTC's review of wholesale HSA in the Far North should apply the Essentiality Test. Notwithstanding the Far North's geography, weather, population and relatively higher attendant costs for terrestrial service, GNWT considers that its application should lead to mandating wholesale HSA. GNWT does not share the view that the case for wholesale HSA diminishes as regions become more expensive to serve.

1.5.3 Wholesale High Speed Access in the Far North (Q29)

31. The comparatively high costs of serving communities in the Far North mean that a combination of competitive choices, including local entry, and improved price and quality will not result from unregulated markets alone. GNWT indicated support for a reasonable form of mandated wholesale HSA, which it expects would reduce entry barriers, promote more competition and help reduce prices.
32. Wholesale HSA can allow competitive service providers to provide meaningful competition by paying a fair rate for the "last-mile" access portion of existing networks, rather than building new ones. GNWT is also interested in mandated wholesale HSA's potential to help spur the development of more local and Indigenous-owned service providers in the Far North, in line with the related goal of economic reconciliation highlighted in the Notice's Q5.

2 Introduction

33. The Government of the Northwest Territories ("GNWT") is pleased to participate in *Telecommunications in the Far North, Phase II*, Telecom Notice of Consultation CRTC 2022-147 ("Notice").

34. GNWT is a long-time participant in proceedings before the Canadian Radio-television and Telecommunications Commission (the “CRTC” or the “Commission”). GNWT has consistently made submissions in support of services for the Northwest Territories (“NWT”) that compare favourably to those available to Southern Canada in respect of affordability, quality, and reliability, including redundancy; and that provide for genuine choice of service providers and promote local and Indigenous entrepreneurship, including the innovation and competitive discipline that contestable markets impose.
35. The Notice provided 39 questions ordered into ten topics. GNWT answered most of the 39 questions in its comments. Many other interveners took a different approach, for example commenting by topic. To respond to this variety of approaches GNWT has prepared these further comments by theme, as set out below (with correspondence to the 39 questions):
- **Indigenous reconciliation and engagement matters** (Topic: Reconciliation with Indigenous Peoples in the Far North (Q1-Q5); Topic: Telecommunications service provider engagement with local communities, including Indigenous communities, in the Far North (Q24-Q25)).
 - **Potential disruptions to Northern telecommunications** (Topic: COVID-19 - Impact on telecom policy issues in the Far North (Q6); Topic: Low earth orbit satellites - Impact on telecom policy issues in the Far North (Q7)).
 - **Affordability and Subsidies** (Topic: Affordability of retail telecommunications services in the Far North (Q8-Q15); Topic: Subsidy of retail home phone and Internet access services in the Far North (Q16-Q19)).
 - **Quality and Reliability** (Topic: Quality and reliability of retail telecommunications services (Q20-Q23)).
 - **Competition and Wholesale Access** (Topic: Competition (Q26-Q27); Topic: Wholesale high-speed access service (Q28-Q38); Topic: Wholesale Connect (Q39)).
36. In the following sections GNWT addresses the issues that GNWT considers to be of primary importance to the residents of the NWT. These key issues are ones in which GNWT considers it made a contribution in its comments and on which there were substantive submissions from other interveners. On the other issues not specifically addressed below, and after having considered other comments, GNWT maintains its position as set out in its comments and reserves the right to comment on these and other issues as the record develops through this proceeding. Failure to respond to any specific proposal or comment does not imply GNWT’s agreement in any such case.

3 Indigenous reconciliation and engagement matters

37. In this section GNWT develops and responds to submissions on what GNWT considers are key issues for NWT residents in the context of the following Notice topics: reconciliation with Indigenous Peoples (Q1-Q5), and telecommunications

service provider engagement with local communities, including Indigenous communities (Q24-Q25).

38. In particular, GNWT addresses the key issues related to reconciliation and a separate CRTC proceeding, and the related matter of a new Indigenous and Northern affairs unit/office at the Commission (Q2), and the CRTC's role in service provider engagement with Indigenous communities (Q25).

3.1 Reconciliation and the CRTC (Q2)

39. In its comments GNWT argued that the CRTC should formalize its regulatory framework in relation to seeking out of Indigenous Peoples' ongoing involvement and lead role in guiding the improvement of telecommunications services to address the needs of their communities. It is fundamental that mutual respect and trust become the basis for productive and effective relationships between Indigenous Peoples, through their governments, and federal, provincial, and territorial governments, including the CRTC.
40. The broad and deep efforts required for the CRTC to implement the principles reflected in the United Nations Declaration on the Rights of Indigenous Peoples ("Declaration" or "UNDRIP") likely go beyond, GNWT submitted, what can be accomplished as a sub-component to the current Far North-focussed proceeding. It deserves its own proceeding. Its scope extends beyond Northwestel's service area. GNWT therefore encouraged the CRTC to convene a self-standing process on its role in implementing the Declaration's principles, that would unfold in parallel or as a follow-up to the current proceeding.
41. Other submissions on Q2 including those both of First Nations and other Indigenous organizations, and of service providers and their associations (e.g. Northwestel¹, TELUS², Iristel³, SSi Canada⁴, and the Competitive Network Operators of Canada ("CNO")⁵) generally supported CRTC action to apply the Declaration's principles to the possible regulatory outcomes of the proceeding. Many First Nations and Indigenous organizations, however, went further than general expressions of support, addressing whether the CRTC should, and whether it has a self-standing obligation to, incorporate the Declaration principles more firmly in its general approach. These proposals were likewise at a level that would imply a separate and parallel proceeding. For example, the Kluane First Nation ("KFN") noted that:

[t]he CRTC, and the companies it regulates, must abide by ... specifically the principles of United Nations Declaration of the

¹ Northwestel Intervention, paragraphs 57-60.

² TELUS Intervention, paragraphs 38-39.

³ Iristel Intervention, paragraphs 57-59

⁴ SSi Canada Intervention, paragraph 23.

⁵ CNO Intervention, paragraph 20.

Rights of Indigenous Peoples ... in all of their dealings with KFN and other First Nations.⁶

42. The Taku River Tlingit First Nation (“TRTFN”) echoed this proposal for the CRTC to take a more comprehensive approach to reconciliation and the application of the Declaration:

TRTFN recommends that the CRTC implement a more comprehensive and informed approach to consultation and other aspects of reconciliation with First Nations and Indigenous Peoples. These might include establishing an internal process for outreach and engagement, and perhaps a separate public proceeding for First nations and indigenous groups to work with the Commission to define a methodology and a culture to reflect a true appreciation of the needs and requirements of reconciliation.⁷

43. Such a proceeding could consider a number of important proposals put forward by GNWT and other parties. These can be categorized into organizational and administrative proposals, and proposals related to reconciliation and Indigenous policy development. These could work well in a complementary manner, if adopted, but could each be beneficial on a stand-alone basis.
44. On organizational and administrative proposals there appeared to be considerable support among many parties, including First Nations and Indigenous organizations, for the First Mile Connectivity Consortium (“FMCC”)’s proposal that the CRTC establish an internal office to liaise and consult on Indigenous and Northern matters.⁸
45. In support of this proposal to create such a unit within the CRTC, the Eeyou Communications Network & James Bay Cree Communications Society (“ECN”) stated that:

[w]e support FMCC’s proposal that the CRTC should establish an Office within the Commission with expertise on Indigenous and Northern issues with the proviso that this office should address issues, not by large regions or province, but with respect for regional governance and by language of the community; this office would advise the Commission on Indigenous and Northern issues, conduct outreach to specific Indigenous organizations, and propose a coordinating mechanism for federal Indigenous in telecommunications programs and policies.⁹

The Champagne and Aishihik First Nations (“CAFN”) added that:

⁶ KFN Intervention, paragraph 10.

⁷ TRTFN Intervention, paragraph 38.

⁸ FMCC Intervention, paragraphs 58-63.

⁹ ECN Intervention, paragraph 36.

the CRTC should establish a structure within the CRTC (i.e., the Northern First Nations Advisory Board) to set reasonable, actionable, and attainable actions and interventions to overcome systemic discrimination and policy and regulatory roadblocks that are preventing digital equity from becoming a reality and to measure outcomes;¹⁰

Similarly, the First Nation of Na-Cho Nyäk Dun (“FNNND”) proposed that:

One of the actions which CRTC might consider is to create a dedicated function within the Commission to engage with First Nations and Indigenous people, similar to what has been established by the Federal Communications Commission Office of Native Affairs and Policy (ONAP).¹¹

46. There are of course many instances where entities have established and reformed dedicated organizational functions to promote greater attention to Indigenous Peoples. In 2017, the federal Department of Indigenous and Northern Affairs Canada¹² was dissolved and replaced by two new departments, Crown-Indigenous Relations and Northern Affairs Canada¹³ and Indigenous Services Canada¹⁴.
47. Within GNWT, the Department of Executive and Indigenous Affairs provides overall management and direction to GNWT’s Executive Branch, but also has as its mandate to “[e]nsure mutually respectful intergovernmental relations between the territorial government and Aboriginal, provincial, territorial, national and international governments” based on the principles that:

Aboriginal people of the Northwest Territories have rights, which should be defined, recognized and protected in a variety of forums.

The interests of the residents of the Northwest Territories should be best served by a negotiated resolution of Aboriginal rights, including land, resource and self-government agreements, and the political and constitutional development of the Northwest Territories.¹⁵
48. In addition to work on reconciliation matters and implementation of Declaration principles, the new proposed unit within the CRTC (which for reference purposes GNWT refers to as the “Indigenous and Northern Unit”) could help ensure appropriate staffing to attend to other matters GNWT highlighted in its initial comments. These include improving the quality of the data by which

¹⁰ CAFN Intervention, paragraph 14(ii).

¹¹ FNNND Intervention, paragraph 117.

¹² <https://www.canada.ca/en/indigenous-northern-affairs.html>

¹³ <https://www.canada.ca/en/crown-indigenous-relations-northern-affairs.html>

¹⁴ <https://www.canada.ca/en/indigenous-services-canada.html>

¹⁵ <https://www.eia.gov.nt.ca/en/mandate>

telecommunications access in the Far North is compared with its Southern counterparts, ensuring that it is comparable across Canadian geographies and specific to the telecommunications sector.¹⁶ Such work could likewise include complementary approaches for redressing equality and equity gaps specific to Indigenous Peoples' and communities' access to telecommunications services, disentangling these from broader regional disparities in equity and affordability, as GNWT proposed.¹⁷

3.2 Service provider engagement with communities (Q25)

49. On service provider engagement with Indigenous communities, there was far less agreement, either in support of the objectives or as to specific approaches.
50. In response to Q25, GNWT agreed that the CRTC should impose requirements or expectations on service providers relating to meaningful engagement with Indigenous communities when providing, or planning to provide, services to Indigenous communities. GNWT noted that it was particularly appropriate that service providers building facilities into, or making substantial repairs or changes to them in, a community, engage with that community respectfully and meaningfully. Reporting requirements that included the views of those consulted, or that established a protocol for connecting with local governance authorities to do so, should also be required.
51. All parties that commented on the matter agreed that service provider engagement with Indigenous communities when providing, or planning to provide, services to Indigenous communities should be done meaningfully and with respect.
52. Certain service providers went further and highlighted the specific initiatives already underway at their companies. Northwestel noted that in September 2022 it published its reconciliation plan, "The Path Forward":

This detailed plan lays out our reconciliation vision, formal governance over the plan, and a series of commitments and specific actions that we are committing to over the coming years. We have published our plan publicly to be accountable to the communities we serve and as a first step to further consultations with Indigenous governments and communities on how to make it better.¹⁸

53. Northwestel noted that this reconciliation plan was developed under the guidance and direction of its Community Advisory Board, which was established in 2020 to

¹⁶ GNWT Intervention, paragraphs 43-48.

¹⁷ GNWT Intervention, paragraph 37.

¹⁸ Northwestel Intervention, paragraph 64.

advise Northwestel “on community opportunities and issues and to provide guidance on public relations, Indigenous reconciliation, and community investment.”¹⁹

54. Similarly, TELUS noted that in September 2021, it formalized its commitment to progressing the path of reconciliation through its Indigenous Reconciliation Action Plan (“IRAP”), which establishes goals and targets to guide Reconciliation activities from 2022 to 2026.²⁰ TELUS noted that its IRAP was guided by Indigenous voices and frameworks of Reconciliation, and that in particular:

TELUS enlisted the services of its Indigenous Advisory Council, which is comprised of experts in their field with lived experience. The advisors contribute strategic guidance on IRAP initiatives, advise TELUS in ongoing relationship development with Indigenous peoples and share Indigenous values and teachings as respected voices of their communities.²¹

55. However, there was some disagreement amongst interveners as to whether the current approach should be continued, in which no CRTC-specific requirement exists to undertake initiatives like Northwestel’s or TELUS’s beyond, for instance, funding-tied models—or whether a more rules-based perspective tied specifically to telecommunications regulation should be adopted by the CRTC.
56. In its comments GNWT argued the CRTC should indeed impose sector-specific requirements on service providers. Given the diversity of such possible engagements, however, GNWT advocated a relatively “light-handed” approach. This could include engagement reporting requirements on service providers that set out the results of the engagement, including the engagement methodology applied and the views of those consulted, among other matters.
57. FMCC argued that the CRTC should establish more stringent and uniform engagement requirements. It noted that while both Northwestel and TELUS have issued reconciliation plans, as discussed above, many important aspects remain to be specified. For instance:

To date we are not aware of any specific definition of ‘duty to consult’ or ‘free, prior and informed consent’ in the context of telecommunications or connectivity policy.²²

58. FMCC argued that CRTC requirements for meaningful consultation need to be made explicit and made the following two recommendations:

The Commission should require commercial service providers to publicly post details on the scope of work, roles and

¹⁹ Northwestel Intervention, paragraph 63.

²⁰ TELUS Intervention, paragraph 40.

²¹ TELUS Intervention, paragraph 41.

²² FMCC Intervention, paragraph 310.

responsibilities of staff members working on Indigenous consultation and engagement.²³

A specific definition of “Duty to consult” and associated performance indicators based on community desires and needs, clear project timelines, and mutually understood goals and definitions could be developed.²⁴

59. A similar view was expressed by Public Interest Advocacy Center (“PIAC”) that argued that “the Commission should impose requirements, not just expectations on service providers.”²⁵ With respect to what would constitute meaningful engagement, PIAC suggested that:

such engagement efforts should meet the expectations of different Indigenous communities to be heard and be able to share their specific needs and concerns on a timely basis and in an open and constructive environment.²⁶

60. This focus on Indigenous expectations was also supported by SSi Canada, itself a service provider, in stating its “belie[f] that Indigenous communities should be empowered to define, and to require, meaningful engagement from their own perspective.”²⁷

61. Along these lines, the Council of Yukon First Nations (“CYFN”) indicated that:

[t]he measure of success for CRTC relations with Indigenous groups is whether there has been engagement and consultation that those groups feel has met the obligations of Canada. This will require CRTC outreach to the communities.²⁸

62. This suggestion from CYFN as to how to measure the success of the CRTC’s efforts was echoed by PIAC. They submitted that the:

success of such engagement efforts could be measured by requiring the specific service providers to provide detailed account and/or report of their consultation efforts, objectives and outcomes to the Commission, the details of which can be reviewed or audited by the Commission. The Commission may also want to engage with the specific local communities to hear their feedback.²⁹

²³ FMCC Intervention, paragraph 315.

²⁴ FMCC Intervention, paragraph 317.

²⁵ PIAC Intervention, paragraph 165.

²⁶ PIAC Intervention, paragraph 166.

²⁷ SSi Intervention, paragraph 60.

²⁸ CYFN Intervention, response to Question 25(c)iii (no paragraph numbering).

²⁹ PIAC Intervention, paragraph 167.

63. GNWT agrees with the emphasis placed by other parties on evaluating real progress by the extent and results of the CRTC's engagement efforts and by service providers' continued efforts. GNWT considers that, as a first step, clarifying the CRTC's plans and expectations in this regard will have a positive effect regardless of more directive requirements, particularly in the event such plans are not met in the future.

3.3 Conclusion

64. GNWT appreciates the opportunity to review and comment on the submissions of other parties regarding Indigenous reconciliation and engagement matters. GNWT notes, in particular, the broad range of support for continued regulatory activity around formalizing the Commission's approach to reconciliation in the Far North and throughout Canada, as may be approached through a separate proceeding, and as would benefit from a new proposed Indigenous and Northern Unit at the CRTC.

4 Potential disruptions to Northern telecoms policy

65. In this section GNWT develops and responds to other comments on the two issues included under the following Notice topics: COVID-19's (Q6) and on new satellite systems in the Low and Medium Earth Orbits ("LEO"; "MEO"), (Q7) impact on telecommunications policy in the Far North.

4.1 Learning from COVID-19 (Q6)

66. The ability in the Far North to access services online became more important than ever during the COVID-19 pandemic. Gaps and disruptions in service, long experienced in the Far North at frequencies and to degrees that the Commission would not accept in Southern political and media capitals, became highlighted.
67. GNWT submitted that Northern telecommunications policy must be about more than simply to optimize how Northwestel is regulated. Its objects and purposes must reflect the greater reliance of the people of the Far North on remotely-delivered telecommunications services. Its goal must be to deliver affordable, high-quality broadband and mobile services at least equitably priced with, as full-featured as, and as respectful of local autonomy, choice, and entrepreneurship as those in the South. Resilient, high-quality networks are fundamental to achieving those policy goals.
68. GNWT was pleased to note some degree of consensus around these positions. COVID-19 served to emphasize the importance of telecommunications generally, and access to the Internet specifically, in the Far North. It provided an impetus to ensure that Internet is accessible, robust and affordable to all Northern residents.
69. FNNND, for instance, noted that non-pharmaceutical interventions of the Yukon Government and First Nations to limit the spread of COVID-19, including limiting

travel and closing schools, and “increased the importance of access to telecommunications,”³⁰ such that:

...issues related to network reliability and available bandwidth for Internet connection became more acute, with user needs for access to remote schooling, the ability to work from home, or obtain medical advice and information about the pandemic taking on vastly more significance.³¹

70. The critical role that telecommunications played during this time was likewise highlighted by CFNY:

The COVID-19 pandemic revealed clearly that access to affordable and unlimited Internet is not a “nice-to-have” luxury, like cable television, but rather a basic utility, like electricity, without which a modern household is unable to properly function.

During the pandemic, distance learning and remote working household usage quickly revealed that Internet access in the north is currently not an affordable option, with households seeing Internet access bills, including overage fees, often in excess of \$500 per month. Northwestel acknowledged this fact themselves when, on April 30, 2020, they announced an “Internet usage relief plan” providing users with an extra 100GB per month of usage for terrestrial DSL Internet customers.

CYFN submits that these outcomes of the pandemic served to shine a bright light on the importance of ensuring that Northern people, and especially First Nations people have affordable access to consistent quality, reliable and fast Internet service.³²

71. It was not just First Nations and other Indigenous organizations that shared this view. Northwestel³³ and CNOC³⁴ also highlighted the importance of telecommunications during the COVID-19 pandemic.
72. Both FMCC and PIAC stressed that this time of increased reliance on telecommunications shone a light on unequal access in the Far North. Based on responses to a DigitalNWT household survey in rural/remote NWT communities, for example, FMCC noted that a majority of households reported using the Internet more.³⁵ And PIAC highlighted that the pandemic shone a light on the “digital divide

³⁰ FNND Intervention, paragraph 46.

³¹ FNND Intervention, paragraph 47.

³² CFNY Intervention, response to Question 6 (no paragraph numbering).

³³ Northwestel Intervention, paragraphs 92-93.

³⁴ CNOC Intervention, paragraph 24.

³⁵ FMCC Intervention, paragraph 102.

faced by many residents residing in the rural and remote regions of Canada, including those in the Far North³⁶, suggesting that in response, the CRTC develop:

...a better understanding of the role smaller communities, municipalities, non-profits, some Indigenous groups and other similar organizations can play in bridging this digital divide.³⁷

73. The impact of COVID-19 on Northern telecommunications policy will be determined by the CRTC as a result of this proceeding. It should be informed by the gaps that the pandemic highlighted in Northerners' already-heightened communications needs. It should address the need for more affordable and equitably-priced Internet service, improved reliability and increased competitive choice.

4.2 Integrating new forms of satellite system (Q7)

74. Internet prices in the NWT are higher than in the South.³⁸ Any lower pricing, any improved quality, and any broader range of choices are welcome in the Far North. New LEO and MEO satellite systems coming online just as existing geo-stationary satellites reach end-of-life, have an important part in these processes. Depending on their architecture, they deliver either directly or indirectly to retail users more capacity, better response times, and improved coverage.
75. A Northern telecommunications policy demands an ecosystem in which large, well-funded, and well-subsidised new foreign LEO and MEO entrants can co-exist with the incumbent, Northwestel, operating in markets also permeable to smaller and larger domestic participants—including homegrown competitors and Indigenous-owned businesses. In that context, the Commission has a role in ensuring that new LEO and MEO systems can be part of a market environment that meets the needs of Northerners on both the supply and demand sides.
76. Some Parties considered that the ability of direct-to-retail satellite systems to contribute towards these goals were limited to high-income or high-usage households outside the major towns in the Far North, including those in Satellite Dependent Communities. For example, SSi Canada argued that:

LEO entrants that provide only retail internet services may be attractive to certain end-user customers, but we anticipate that their appeal will be limited to a fairly small number of well-off consumers and business customers in outlying areas who have no access to fibre backbone connectivity.³⁹

³⁶ PIAC Intervention, paragraph 44.

³⁷ PIAC Intervention, paragraph 45.

³⁸ GNWT Intervention, paragraph 75.

³⁹ SSi Intervention, paragraph 28.

77. PIAC was likewise of the view that Starlink’s entry “does not address the affordability issues per se”⁴⁰ and that, on the contrary, that it:

could likely increase the digital gap between the higher-income and lower-income consumers with the low-income households unlikely to be able to afford Starlink and benefit from its potentially higher speed Internet and data offerings.⁴¹

78. CYFN, for its part, underlined that direct-to-retail LEO satellite competition does not lessen the imperative to increase terrestrial competition, including via wholesale high-speed access (“HSA”):

CYFN believes that LEO satellite technology will be a useful alternative for some people, but a competing ISP presence, with access to wholesale pricing, and dedicated bandwidth and/or fibre access is also necessary to bring the benefits of competition to our market.⁴²

79. This theme that the entry of Starlink or other LEO satellite systems are not likely to be a substitute for terrestrial-based wholesale-based competition was also highlighted by a number of parties, including TELUS⁴³, an HSA provider; CNOC, representing a preponderance of HSA customers; and PIAC.⁴⁴ For instance, CNOC argued that:

the Commission must not rely upon LEO satellite network technology as a magic bullet for solving the problems with the provision of telecommunication services in the Far North, including the extreme lack of competition. Where Northwestel has wireline facilities, the Commission should instead rely upon the tried and tested model of wholesale HSA competition.⁴⁵

80. The comments of this broad range of parties complement and underscore GNWT’s position in respect of the role played by new satellite entrants. While LEO and MEO entrants represent additional competition, GNWT considers that a greater number of terrestrial fixed and wireless alternatives are necessary to broaden and deepen markets for broadband services in the Far North.

4.3 Conclusion

81. The Commission’s goals for Northern telecommunications should include markets that are open to new entry and, therefore, better able to respond to consumer needs, including unique local and Indigenous needs. The COVID-19 pandemic highlighted

⁴⁰ PIAC Intervention, paragraph 53.

⁴¹ PIAC Intervention, paragraph 53.

⁴² CYFN Intervention, response to Question 7 (no paragraph numbering).

⁴³ TELUS Intervention, paragraph 36.

⁴⁴ PIAC Intervention, paragraphs 54 and 57.

⁴⁵ CNOC Intervention, paragraph 31.

these needs. The presence of new satellite entrants, while an increase in competition, has not eliminated the need for further regulatory measures to promote greater competitive choice in the Far North.

5 Affordability and Subsidies

82. In this section GNWT develops and responds to other comments on what GNWT considers are key issues for NWT residents in the context of the following Notice topics: Affordability of retail telecoms services in the Far North (Q8-Q15); Subsidy of retail home phone and Internet services in the Far North (Q16-Q19).
83. In particular, GNWT addresses the key issues related to the desirability of an affordability “standard” or “guidance” (Q9); and whether the CRTC should introduce a subsidy to reduce retail Internet access service prices (Q19).

5.1 An affordability standard to guide regulatory action (Q9)

84. Broadband prices are much higher in the NWT than in the South, resulting in economic hardship and lower take-up rates. GNWT therefore welcomes the possibility of the CRTC developing an affordability “standard” or “guidance” to improve the depth, breadth, and frequency of collection and publication of timely, nationally comparable data for the Far North, and allow the CRTC to apply such data to assess, monitor, and design programmes to address affordability concerns.
85. To assist the CRTC in this process, GNWT’s initial intervention compiled, analysed and presented, in response to Question 9, data on take-up rates by geography, income group and Indigenous identity; a comparison of Internet prices and household expenditures across households, highlighting lower-income and Indigenous households; and differences in cost of living and, taking into account incomes, the correspondingly higher economic burden faced by NWT households.
86. A number of consumer groups and Indigenous organization were in favour of establishing an affordability standard. For example, PIAC proposed that the CRTC adopt an affordability standard⁴⁶ and put forward a number of factors that such a standard could incorporate,⁴⁷ many of which are similar to GNWT’s proposals.
87. In its comments FMCC also advocated for the CRTC to establish an affordability standard.⁴⁸ FMCC listed the following factors that such a standard could include:
 - geography (North/South; North-North; within Communities);

⁴⁶ PIAC Intervention, paragraph 69.

⁴⁷ PIAC Intervention, paragraphs 72-81.

⁴⁸ FMCC Intervention, paragraph 153.

- household income, and percentage of low-income households;
- household size;
- bandwidth and data usage requirements for essential public services and economic activities accessed online; and
- additional costs paid by consumers in some communities, such as data overage and/or telephone service for DSL Internet service.⁴⁹

88. CYFN came out strongly in favour of an affordability metric:

Yes, the CRTC should establish an “affordability standard” or guidance on what constitutes an affordable retail telecommunication service in the Far North. Other circumpolar nations set as an objective to have all of their citizens, regardless of where they live in the country, enjoy the same standards and costs of basic services. Canada should aspire to this goal. In the case of affordable Internet, this will promote better levels of education and drive economic growth, benefitting the entire nation.⁵⁰

89. TELUS, CNOG and Northwestel advocated for different approaches. TELUS did not appear to argue directly against the adoption of an affordability standard, but instead argued that “the affordability of telecommunications services cannot be solely based on comparisons to prices available in the south”⁵¹ and therefore other factors, including higher average individual or household income⁵² or higher cost of other goods and services in the Far North⁵³ should also be considered. TELUS did not appear to conclude whether the statistics it presented showed an affordability issue, highlighting instead the complexity of the exercise.

90. GNWT agrees with TELUS that a number of factors should be considered in determining affordability. In its intervention GNWT presented possible factors to be considered by the CRTC for this reason. Those factors included those underlined by TELUS, such as household income and higher general prices in the Far North. They also included further nationally comparable data⁵⁴ that “GNWT believes present a compelling case that there are both general affordability, and specific geographic and low-income affordability challenges in the NWT that merit CRTC intervention.”⁵⁵

⁴⁹ FMCC Intervention, paragraph 156.

⁵⁰ CYFN Intervention, response to Question 9 (no paragraph numbering).

⁵¹ TELUS Intervention, paragraph 4.

⁵² TELUS Intervention, paragraph 5.

⁵³ TELUS Intervention, paragraph 7.

⁵⁴ GNWT Intervention, paragraph 72.

⁵⁵ GNWT Intervention, paragraph 71.

91. Northwestel and CNOc both made a related but similar argument: that because developing an affordability standard is relatively complex, the CRTC should not use that mechanism as a tool for deciding on a subsidy but, instead, rely on already-existing analytic tools. CNOc suggested, in this regard, that:

...instead of spending an undue amount of time assessing how to measure the affordability of retail telecommunications services in the Far North, CNOc urges the Commission to heed the clearly and forcefully expressed opinion of Northern Canadians: telecommunications services in the Far North are not affordable and regulatory action is required to address the situation.⁵⁶

92. Similarly, based on its review of three affordability measures included in the 2018 Wall Report examining Affordability in the Canadian Mobile Wireless and Fixed Broadband Markets, Northwestel concludes that:

Rather than focusing on the establishment of an overarching affordability standard, which will necessarily be subjective, complex, and changeable, the Commission should make a practical factual determination about whether a subsidy is needed, and, if so, whether the subsidy should be given to specific groups or to all residents of the Far North. Such a practical approach would be simpler, faster, less administratively burdensome, and more flexible and responsive to the current reality for residents.⁵⁷

93. An affordability standard's purpose is to provide a transparent quantitative mechanism to help guide the achievement of affordability as a distinct policy objective. In this manner, it is similar to the CRTC's universal service objective by which "Canadians, in urban areas as well as in rural and remote areas, have access to voice services and broadband Internet access services, on both fixed and mobile wireless networks", including the 50/10 criterion⁵⁸ to measure the successful achievement of that objective.

94. Having recourse to the CRTC's universal service objective criteria has evidenced a number of advantages over the years. It has provided both the CRTC and stakeholders a transparent quantitative target. Progress has been measured against that target nationally. Geographic areas or populations where progress is slow or absent have been identified with greater facility. Here, likewise, GNWT views an affordability standard in a similar manner. It would provide the CRTC and stakeholders a transparent, objective, and measurable quantitative target against which to gauge affordability in the Far North and identify geographic areas or populations where progress is insufficient.

⁵⁶ CNOc Intervention, paragraph 38.

⁵⁷ Northwestel Intervention, paragraph 175.

⁵⁸ Telecom Regulatory Policy CRTC 2016-496, paragraph 37.

95. Neither CNOC nor Northwestel argue, in this setting, against the principle of a subsidy *per se*. But they do propose that this can be decided without a CRTC-endorsed affordability standard. While GNWT agrees that this is feasible, it submits that an affordability standard is desirable.
96. Just as for many other complex regulatory matters, there are no data or analytical short cuts to the matter affordability. The breadth and depth of data and analysis required for the CRTC to “make a practical factual determination”⁵⁹ on a subsidy’s desirability, size, and availability “to specific groups or to all residents”⁶⁰ would be comparable to that required to constructing an affordability standard.
97. In both cases the CRTC would be required to look at a combination of take-up, income, pricing, expenditure, cost of living and poverty and other aspects to determine the desirability of a subsidy, the size of the subsidy and whether it should be provided specific groups or to all residents.
98. But beyond the short-term calculus of any incremental work is the longer-term advantage of policy credibility and transparency that an established affordability standard lends the process. This credibility is important because, if it is to allocate scarce resources, the Commission must be able to demonstrate the basis on which it has made such decisions and track resulting progress in meeting objectives against a standard. Transparency is equally critical, so that stakeholders can hold the CRTC and funded parties to account in the process.

5.2 Internet subsidies for the Far North (Q19)

99. There was an overwhelming response during Phase I that Internet rates in the Far North are not affordable. This assessment was echoed by many Parties in response to specific questions in the Notice. GNWT provided a comprehensive case that there are both general affordability, and specific geographic and low-income affordability challenges in the NWT that merit CRTC intervention. Specifically, GNWT developed two separate equity- and affordability-related subsidy proposals for the Far North.
100. The interventions of two NWT residents summarized well the dissatisfaction that many of those in the NWT expressed regarding higher Internet service prices, and the need for the CRTC to correct what is a market failure when held up against policy objectives, including those canvassed in this proceeding:

The highest internet package in southern Canada is \$170 a month. In Yellowknife, for unlimited data (because we have two kids at home) our service cost \$252 a month. ... Based on these

⁵⁹ Northwestel Intervention, paragraph 175.

⁶⁰ Ibid.

numbers we are paying nearly \$1000 more a year to access internet to conduct business with our southern neighbours.⁶¹

Make internet affordable by either putting a cap on rates or giving households rebates quarterly during the year.⁶²

101. Consumer organizations, First Nations and Indigenous organizations called for CRTC intervention to make Internet more affordable in the Far North. For example, PIAC proposed that the CRTC establish two separate subsidies to address affordability in the Far North. The first is a “low-income affordability subsidy” to:

reduce the financial burden on these low-income households and vulnerable consumers, while also enable them to fully participate and better avail the benefits offered by online connectivity. Otherwise, many of them might not be able to do so because they cannot afford to get an Internet service or a high-speed Internet service and/or at best may have to settle for low-quality options with limited data plans.⁶³

102. The second subsidy is a portable operating subsidy “to be made available to all ISPs with customers, in order to subsidize service delivery and bring down prices to all customers in the Far North, for Internet service.”⁶⁴ PIAC argues that both subsidies should be financed from the National Contribution Fund (“NCF”). This proposal for the CRTC to implement two separate subsidies, each to deal with distinct affordability matters, is closely aligned to GNWT’s subsidy proposals.

103. As noted above, FMCC presented an extensive affordability-related analysis in its comments, based on which it argued that the “Commission should design and provide affordability subsidies for low-income households in the Far North.”⁶⁵ In contrast to the voluntary Connected Families program which is time-limited, in which Northwestel does not participate and which is therefore uniquely unavailable in the Far North, the FMCC argued that the “CRTC should make any subsidy program permanent”.⁶⁶ FMCC considers that its proposed low-income affordability subsidy should be portable, to “allow consumer choice and stimulate competition”.⁶⁷

104. The Northern Rockies Regional Municipality (“NRRM”) noted that the current affordability situation “imposes a financial burden on individuals, families and businesses across the Northern Rockies and has a negative effect on economic

⁶¹ Intervention of Sarah Woodman of Yellowknife, NT.

⁶² Intervention of Kristen Weingartner of Hay River, NT.

⁶³ PIAC Intervention, paragraph 84.

⁶⁴ PIAC Intervention, paragraph 129.

⁶⁵ FMCC Intervention, paragraph 166.

⁶⁶ FMCC Intervention, paragraph 168.

⁶⁷ FMCC Intervention, paragraph 227.

development and quality of life”.⁶⁸ With respect to existing voluntary affordability support for low-income households, NRRM noted and recommended the following:

While the Connecting Families initiative facilitated by the Federal government affords the provision of low-cost basic service to qualifying families, the program relies on the voluntary participation of ISPs. Although the majority of significant service providers (including Northwestel’s parent, Bell) support the project, Northwestel does not, and in conversation has indicated that participation is not under consideration. **It is recommended that the CRTC** encourage/incent the company to become part of the program or to provide a similar opportunity, in the interest of equity.⁶⁹ (emphasis in original)

105. NRRM noted that subsidies have been “applied to enable the delivery of a range of “essential services” where the costs of operation are not able to be met while preserving affordability” and given the feedback NRRM had received in in the development of its Regional Connectivity Strategy, it concluded that:

It is recommended that the CRTC consider the use of a subsidy to be made available to Northwestel or others, subject to suitable performance conditions, and under an affordable pricing regime for both residential and business users.⁷⁰ (emphasis in original)

106. CYFN argued that an Internet-related subsidy should be introduced “if this is what is required to bring Internet service prices in line with Southern Canada”.⁷¹ Similarly, FNNND argued that the CRTC should require Northwestel to implement Internet “pricing plans which parallel what is available in Southern Canada”.⁷² This would be implemented via an Internet subsidy in communities in the Far North where prices are higher than in the South, and the subsidy would be portable “to allow customers to choose their supplier.”⁷³ FNNND also recommends that the CRTC consider a separate means-driven subsidy program, to be “designed in consultation with Indigenous people”.⁷⁴

107. On the matter of subsidies the Champagne and Aishihik First Nations (“CAFN”) argued that:

the CRTC should make retail internet subsidies available in all communities where the comparable rates in southern

⁶⁸ NRRM Intervention, paragraph 7.

⁶⁹ NRRM Intervention, paragraph 10.

⁷⁰ NRRM Intervention, paragraph 15.

⁷¹ CYFN Intervention, response to Question 19 (no paragraph numbering).

⁷² FNNND Intervention, paragraph 68.

⁷³ FNNND Intervention, paragraph 92.

⁷⁴ FNNND Intervention, paragraph 93.

communities are lower, which subsidy should be applied regardless of the type of technology, and which should be portable, to allow customers to choose their supplier to prevent the subsidy from becoming a barrier to competition⁷⁵

108. ECN proposed that two separate subsidies be established. The first subsidy would be provided to operators providing the defined basic Internet level (50/10) "at a CRTC defined affordable level"⁷⁶ and the second one should be a separate low-income affordability program:

We advocate for a program for making Internet services affordable for low-income households, whether through the CRTC or ISED, that is in the same vein as the "Connecting Families" initiative, but mandated for ALL service providers. Low-income households should have just as much right to determine who is their ISP as higher-income households. The right to choose a service provider shouldn't be based on your income bracket.⁷⁷

109. In contrast to this forceful advocacy for a combination of one or two separate subsidies to address affordability concerns, CNOC, Northwestel and TELUS took different approaches.

110. CNOC noted that it "is generally opposed to reliance upon subsidies and retail rate regulation as a means of addressing affordability issues and instead supports the development of effective and sustainable competition as a means of addressing concerns with affordability."⁷⁸ Having noted its preference for competitive solutions, CNOC concedes that there may be some acute affordability problems that competition will not solve in a reasonable period. Under this scenario, CNOC would not be opposed to the CRTC establishing a portable and time-limited subsidy:

Nonetheless, CNOC acknowledges that certain communities in the Far North may face acute affordability issues, particularly in satellite-dependent communities, and that effective and sustainable competition will take time to develop. Therefore, to the extent that the Commission decides that some form of subsidy or ongoing rate regulation mechanism is required, CNOC believes that it should be available to all service providers and that it should not be viewed as a substitute for the development of competition, but instead as a time-limited measure to be phased-out once it is determined that the community in question is sufficiently competitive to protect the interests of end-users.⁷⁹

⁷⁵ CAFN Intervention, paragraph 14(xii).

⁷⁶ ECN Intervention, paragraph 57.

⁷⁷ ECN Intervention, paragraph 58.

⁷⁸ CNOC Intervention, paragraph 86.

⁷⁹ CNOC Intervention, paragraph 88.

111. GNWT underlines CNOC’s acknowledgement that telecommunications services in the Far North are not affordable and that regulatory action is required. GNWT is likewise of the view that increased competitive choice can offer many benefits, including a greater variety of service offerings that could provide end-users with a better fit to their usage patterns and result in effective price reductions. But GNWT is also very cognizant of the geographic, population density and other drivers of terrestrial telecommunications costs in the NWT. It is not that high prices in the NWT are mostly or uniquely a result of lack of sufficient effective competitors.
112. In this context, therefore, GNWT disagrees with CNOC’s proposed “sufficiently competitive” threshold for time-limiting the affordability subsidy. As argued above, given the structure of terrestrial telecommunications costs in the NWT, GNWT considers that effective competitive choice does not necessarily result in prices that are affordable.
113. Northwestel has a comparable position, arguing that the CRTC could take regulatory action in the form of a subsidy to address any affordability challenges identified by the CRTC:

If the Commission determines that it needs to take action to address the affordability of Internet services in the Far North, it could do so by way of a subsidy. Such an approach would be consistent with the Commission's actions in the past when it has determined that rates are just and reasonable but that action was still needed to address affordability, such as with the local service subsidy regime for voice in HCSAs.⁸⁰

114. Northwestel further specifies that “it is for the Commission to decide the appropriate scope of such a subsidy, including whether it will apply only to low-income households, residents of certain communities, Indigenous residents, all residents of the Far North, or some other criteria.”⁸¹
115. While agreeing that the Commission can take regulatory action, including subsidies, to address affordability challenges, Northwestel distinguishes its own views on whether and how to implement Internet subsidies:

While we do not believe that a rate subsidy for retail Internet services is required, for the reasons described in section 7.4, the Commission may have policy reasons for wanting to provide affordability relief to residents of the Far North. In that case, the Commission should address this systemic social concern with a social assistance program in the form of a subsidy.⁸²

116. GNWT has not taken the position that an Internet subsidy is not required. However, GNWT does agree with Northwestel that it is for the CRTC to determine whether

⁸⁰ Northwestel Intervention, paragraph 149.

⁸¹ Northwestel Intervention, paragraph 156.

⁸² Northwestel Intervention, paragraph 324.

regulatory action is required to address affordability challenges, which could include implementing a subsidy.

117. In discussing some of the administrative aspects of how an Internet subsidy could be implemented, Northwestel suggests that it would be the only TSP eligible to receive such a subsidy:

We note that Northwestel, as the only rate regulated company, and the only company subject to potential mandated rate decreases, would be the only TSP eligible to receive such a subsidy.⁸³

118. In GNWT’s view, a competitively-neutral portable operating subsidy is the better approach. Residents of the NWT and of the Far North have expressed a strong preference for competitive choice. Any CRTC-determined subsidy should be portable, so that all eligible providers can access it. A portable subsidy is clearly the majority view of those that proposed a subsidy, including PIAC,⁸⁴ FMCC,⁸⁵ FNNND,⁸⁶ CAFN,⁸⁷ and CNOC.⁸⁸

119. Finally, GNWT notes what appears to be an evolution in Northwestel’s approach. In the Phase I proceeding, Northwestel asserted that its Internet service was not only “affordable”⁸⁹, but also that these rates are “affordable for low income Canadians”.⁹⁰ In its comments in this proceeding, Northwestel noted that the Commission has found that Northwestel’s terrestrial retail Internet access rates are “just and reasonable” as a result of the CRTC’s approval of those rates.⁹¹ However, Northwestel makes a critical distinction—that such a determination does not imply any conclusion as to affordability:

the question of whether rates are affordable is distinct from the question of whether they are just and reasonable.⁹²

120. A somewhat related line of argument is advanced by TELUS in its intervention. TELUS argues that while the CRTC is charged pursuant to the *Telecommunications Act* (the

⁸³ Northwestel Intervention, paragraph 332.

⁸⁴ PIAC Intervention, paragraph 129.

⁸⁵ FMCC Intervention, paragraph 227.

⁸⁶ FNNND Intervention, paragraph 92.

⁸⁷ CAFN Intervention, paragraph 14(vii).

⁸⁸ CNOC Intervention, paragraph 88.

⁸⁹ TNC 2020-367 Northwestel Intervention, paragraph 211.

⁹⁰ TNC 2020-367 Northwestel Intervention, paragraph 229.

⁹¹ Northwestel Intervention, paragraph 142.

⁹² Northwestel Intervention, paragraph 150.

“Act”) to ensure rates are just and reasonable, it is “not charged with ensuring any specific outcome with regard to affordability in the Far North”.⁹³

121. It is not clear to GNWT why a finding that rates are “just and reasonable” either must, or should, exclude affordability as a criterion for what is just and what is reasonable.
122. First, the Act grants the CRTC broad discretion in this respect, where it states that “in determining whether a rate is just and reasonable, the Commission may adopt any method or technique that it considers appropriate”.⁹⁴ An affordability standard is certainly such a method or technique, or a component of one, that is directly related to the Commission’s obligation to work towards “affordable telecommunications services ... accessible to Canadians ... in all regions of Canada.”⁹⁵
123. Second, beyond the Commission’s discretion to take into account the matter of affordability, the Act explicitly requires the CRTC to take regulatory action to ensure affordability by setting it out as a Canadian telecommunications policy objective that the Commission shall take into account in any forbearance decisions, and that the Commission shall exercise its powers with a view to implementing.⁹⁶ What is more, the Commission is further required expressly to take affordability into account as the result of subordinated legislation authorized by the Act, as GNWT addressed this specific argument in its comments:

The *Telecommunications Act* requires the Commission to exercise its powers and perform its duties with a view to rendering affordable telecommunications services of high quality accessible to Canadians. The Governor-in-Council has required the Commission to “consider” “the extent to which” its decisions “foster affordability and lower prices” and “ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas.” The Commission has repeatedly and consistently addressed affordability throughout its rate-making, tariffing, contribution, subsidy, and investigative activities.⁹⁷

The Commission’s recognition, to which TELUS points, that “[a] comprehensive solution to affordability issues will require a multi-faceted approach, including the participation of other stakeholders”,⁹⁸ does not suggest that the CRTC should not deal with affordability issues, but rather that the CRTC cannot do it alone.

⁹³ TELUS Intervention, paragraph 9.

⁹⁴ *Telecommunications Act*, ss. 27(5).

⁹⁵ *Telecommunications Act*, ss. 7(b).

⁹⁶ *Telecommunications Act*, ss. 7(b), 34(1), 47(a).

⁹⁷ GNWT Intervention, paragraph 101.

⁹⁸ TELUS Intervention, paragraph 13.

124. More specifically on the practical matters of subsidies, TELUS makes two additional arguments. The first is that governments are best positioned to address affordability challenges. The second is that service providers can provide targeted programs for low-income consumers. Both arguments are in support of TELUS's position that the CRTC should not implement any subsidy financed by the NCF.

125. The first TELUS argument relates to administration and to financing of subsidies. On administration, TELUS argues that:

Only governments have the requisite data to identify the specific communities and households in the Far North that depend on assistance in order to purchase telecommunications services.⁹⁹

TELUS therefore argues that it is governments that should finance any such affordability program.

126. While GNWT agrees with the data requirement point, GNWT disagrees with TELUS's conclusion. The federal, provincial and territorial governments indeed have access to this type of data. But that does not lead to the conclusion that governments should automatically fund telecommunications-related affordability programs. Indeed, as TELUS highlights in its second argument, the Connecting Families is a good example of a public-private partnership whereby service providers, who do not have the means to assess low-income eligibility, partner with the federal government to provide them with access to such eligibility criteria based on federally-administered low-income programs. It is the participating service providers that voluntarily finance the lower-priced Internet offerings under Connecting Families.

127. As to whether financing should be undertaken by governments via general revenues, by the NCF, or voluntarily by service providers via their own participation in Connecting Families and similar opt-in programs, TELUS argues in favour of the first and third options but rejects the second. It says that the telecommunications affordability challenge faced by low-income residents in the Far North is a poverty reduction challenge that goes beyond the scope of sector-specific regulation.¹⁰⁰

128. GNWT notes that the question at hand is not how to "solve" low incomes in the Far North or in Canada generally. It is how to address the negative telecommunications-sector-specific effects that flow from such low incomes. As argued above, the Act empowers a sector-specific regulator, the CRTC, to undertake sector-specific actions in support of its sector-specific goals, including with respect to affordability. The low-income affordability proposals put forward by GNWT are in line with the latter. They are modelled on the very Connecting Families program that TELUS highlights in its comments.

⁹⁹ TELUS Intervention, paragraph 15.

¹⁰⁰ TELUS Intervention, paragraph 12.

129. TELUS is rightly proud to highlight its participation in its own¹⁰¹ and in jointly-targetted low-income programs, including Connecting Families. GNWT notes and welcomes TELUS's call for the Commission to encourage all service providers to participate in this program:

These programs provide solutions to address the affordability of telecommunications services for specific groups of eligible low-income Canadians that otherwise would not be able to obtain such services. The Commission should encourage all service providers to participate in the Connecting Families program and execute their own programs to help close digital divides across Canada.

130. Such an approach is consistent with GNWT's suggestion that Northwestel be invited to follow its Southern counterparts' lead and commit, in this proceeding, to the Connecting Families program. However, should a firm commitment of this type fail to materialize, GNWT has submitted that the CRTC should create and implement a distinct subsidy program for the Far North.

5.3 Conclusion

131. Broadband prices are much higher in the NWT than in the South, resulting in economic hardship and lower take-up rates. GNWT therefore welcomes the possibility of the CRTC developing an affordability standard to improve the depth, breadth, and frequency of collection and publication of timely, nationally comparable data for the Far North, and allow the CRTC to apply such data to assess, monitor, and design programmes to address affordability concerns. There was an overwhelming response during Phase I that Internet rates in the Far North are not affordable. This assessment was echoed by many interveners in response to specific questions in the Notice. GNWT provided a comprehensive case that there are both general affordability, and specific geographic and low-income affordability challenges in the NWT that merit CRTC intervention. Specifically, GNWT developed two separate equity- and affordability-related subsidy proposals for the Far North.

6 Quality and Reliability

132. In this section GNWT develops and responds to comments on what GNWT considers are key issues for NWT residents in the context of the Notice topic: quality and reliability of retail telecommunications services, corresponding to Q20-Q23.
133. In particular, GNWT addresses key issues related to reliability, especially outages (Q21), and whether the CRTC should require Northwestel to develop a network improvement plan ("NIP") (Q22).

¹⁰¹ TELUS Intervention, paragraph 17.

6.1 Improved reliability to reduce outages (Q21)

134. On the question of reliability and outages, GNWT submitted that the CRTC should establish a comprehensive regulatory approach to network outage detection, response, and remediation:
- With respect to detection, GNWT called for the Commission to require service providers to ensure stakeholders have the means to know when service is down and to manage expectations as to when it may be restored.
 - With respect to response and remediation, the CRTC should require service providers to report on steps taken to restore services; to identify and remediate root causes; and consider companion obligations on such systematically-important service providers to take such steps within a reasonable period.
135. During Phase I many NWT residents echoed the Notice¹⁰² in expressing frustration with reliability levels and with the frequency and duration of outages. This focus on reliability was also reflected by NWT residents in this Phase II:

The reliability of the internet service provided by Northwestel - including the reliability of its speed - is really not up to par. No reasons are given as to why. In addition, there is zero help available when the service they provide through their cable system (Pulse) does not extend throughout the house. Instead, we are expected to muddle through what might work with this rarely-used Pulse system. Even their website has zero - ZERO - help.¹⁰³

136. First Nations and other Indigenous organizations likewise noted their frustration both with reliability and outages on the Northwestel network, and with the transparency and handling of those outages. These interveners included the Tr'ondëk Hwëch'in First Nation ("THFN"),¹⁰⁴ KFN,¹⁰⁵ FNNND¹⁰⁶ and CYFN, that noted, given the critical importance of telecommunications services in many First Nations, how destructive and potentially dangerous outages may be:

Despite Northwestel's improvement in reducing the number of outages which the CRTC has noted, YFN people continue to experience service interruptions slowdowns and other service problems. The critical reliance on Internet access in our rural and remote communities requires a higher degree of service quality and reliability. Access to almost everything in our small communities - from banking to highway information to

¹⁰² Notice, preamble to Question 21.

¹⁰³ Intervention of Colin Hillier of Fort Smith, NT.

¹⁰⁴ THFN Intervention, paragraphs 13-16.

¹⁰⁵ KFN Intervention, paragraph 17.

¹⁰⁶ FNNND Intervention, paragraphs 99-100.

emergency services - depends entirely on Internet access, because there no physical alternatives. Network outages mean more than inconvenience, it could mean life or death.¹⁰⁷

137. These concerns were well reflected by PIAC whose comments highlighted the number, duration and geographic impact of outages in 2021, but also the June 2022 outage that impacted communities in the NWT.¹⁰⁸
138. Many of the details regarding a number of previous outages have been submitted only in redacted form by Northwestel, which makes it difficult for stakeholders, including GNWT, to analyse these outages and develop an independent view as to proposed solutions or assess alternatives. However, parties focussed on a number of approaches to reduce the frequency and duration of outages. After acknowledging “some improvement in reliability, particularly from Fort Nelson and the south”¹⁰⁹, NRRM nonetheless noted that:

Service issues to the north of Fort Nelson related to the absence of access to redundant infrastructure in that part of the Regional Municipality is linked to more prolonged service outages. Such loss of connectivity can have serious implications for residents reliant on the service and create significant difficulty for businesses there, particularly when banking and credit card transactions are disrupted. **It is recommended that the CRTC** take steps to see to it that work to establish redundant infrastructure across the NRRM is completed with all haste.¹¹⁰ (emphasis in original)

139. Clearly, redundant facilities anywhere there now exists a single point of failure are of particular importance. This is especially the case if an outage were to affect a relatively large number of communities and people. It is for this reason that GNWT strongly supports the ongoing efforts to develop the Great Slave Lake fibre redundancy project. As noted by Northwestel, both the North and South Slave regions “are particularly vulnerable to network outages and impacts because of a lack of fibre redundancy”.¹¹¹ These “eight communities are home to 71% of the Northwest Territories total population”.¹¹²
140. The Great Slave Lake fibre redundancy project would eliminate this single point of failure that could affect many NWT residents and businesses. Of note is that on this particular project Northwestel has partnered with Det'on Cho Management LP (“Det'on Cho”), the business arm of Yellowknives Dene First Nation. While the terms

¹⁰⁷ CYFN Intervention, response to Question 21 (no paragraph numbering).

¹⁰⁸ PIAC Intervention, paragraph 146.

¹⁰⁹ NRRM Intervention, paragraph 24.

¹¹⁰ NRRM Intervention, paragraph 25.

¹¹¹ Northwestel Intervention, paragraph 396.

¹¹² Northwestel Intervention, paragraph 397.

of the agreement likely bear scrutiny, particularly if price-setting and operational functions are retained by Northwestel, the partnership would increase the asset ownership and beneficial participation by Indigenous businesses. The deal structure would see Det'on Cho construct, finance, and own the underlying fibre asset, with Northwestel being Det'on Cho's customer.¹¹³

141. At the same time, any additional investments in telecommunications and other support¹¹⁴ infrastructure redundancy will take time to implement and, though they would likely further reduce the frequency and duration of outages, they will not eliminate them. TELUS goes so far as to argue that,

[w]hile much can be done to improve the reliability of service in the Far North, the final result will likely never reach levels achieved in the rest of Canada, due to the long travel times required to reach cable breaks or radio towers.... It is therefore unrealistic to expect that Northwestel's service reliability will ever reach exactly the same level as in urban areas in southern Canada.¹¹⁵

142. GNWT trusts that all parties will undertake concerted and creative efforts to achieve the reliability that Northerners deserve. In parallel to any initiatives to improve reliability, however, the CRTC must establish a comprehensive regulatory approach to network outage detection, response, and remediation. This type of approach will reduce some of the frustration and lack of transparency that many residents and Indigenous organizations voiced above.
143. A CRTC regulatory framework that includes a response element focussed on transparency would be able to improve stakeholder understanding of errors, communications gaps, and infrastructural needs - including business opportunities that these infrastructure gaps could represent to local entrepreneurs. At the same time, the CRTC's framework should include not only an improved and more transparent reporting framework, but also better communications from the relevant service provider to the affected populations during an outage, as noted above. For instance, PIAC suggests that "the Commission should mandate specific communications standards regarding these outages"¹¹⁶ and provides a list of helpful suggestions, many based on the Rogers outage in July 2022.
144. GNWT acknowledges that the problem of how the CRTC addresses outages is a Canada-wide matter not confined to the Far North. However, and notwithstanding the roles played by other agencies including ISED, this function is core to the CRTC's mission as a public interest regulator—and grounded explicitly in the Act's reliability

¹¹³ Northwestel Intervention, paragraph 410.

¹¹⁴ See, for example, the description of Northwestel's investment in power supply and redundancy in Northwestel Intervention paragraphs 379-385.

¹¹⁵ TELUS Intervention, paragraph 47.

¹¹⁶ PIAC Intervention, paragraph 149.

objective. As the many submissions on this topic confirm, action from the CRTC is widely expected and viewed as important in the Far North. Such action must seek to identify potentially important single points of failure and, in effect, eliminate them by implementing a reasonable level of redundancy. It must also improve transparency and communications, both in view of the CRTC's important consumer responsibilities, and as important market feedback.

6.2 Network improvement plan for Northwestel (Q22)

145. In view of past network outages, and the dissatisfaction levels they help fuel, it is clear that a range of improvements are needed to improve the reliability and resiliency of services delivered over Northwestel's network. In its comments, however, GNWT argued that in a multi-player environment a focus on specific outcomes to be achieved, rather than on who would achieve them, would be more appropriate.
146. Most parties that commented on the matter agreed that reliability could and should be improved in the Far North and at Northwestel. But there was disagreement as to the most appropriate mechanism for achieving this, including whether the CRTC's apparent focus on Northwestel as the primary vehicle for doing so was appropriate.
147. Interveners appeared to distinguish between the goal to be achieved and whom to subsidize, or further subsidize, to achieve such goals. SSi Canada, for instance, answered that "We take no view on whether the Commission should take action to improve the quality or reliability of the network operated by the dominant incumbent or require Northwestel to develop a network improvement plan", but noted that in the context of a multi-operator environment, that it was concerned by the CRTC's focus on Northwestel at the expense of competitive providers like itself:

The questions imply that the Commission sees its legislative mandate as being to support the efforts of a single ILEC to enhance its internet network, with no consideration given to the impact of such support on competitors to that ILEC.¹¹⁷

148. CNOC underlined that Northwestel has been the beneficiary of "tens of millions of dollars [of the] Commission's Broadband Fund and the federal government's Connect to Innovate Program" and that therefore:

Northwestel should be required to apply to the Broadband Fund and the federal government's various support programs to the extent that it needs additional funding to complete a mandated network improvement plan.¹¹⁸

¹¹⁷ SSi Intervention, paragraph 52.

¹¹⁸ CNOC Intervention, paragraph 93.

149. According to CNOC, while Northwestel should indeed be required to implement a network improvement plan,¹¹⁹ it also suggested, the corresponding funding mechanism would need to be developed.
150. FMCC, meanwhile, identified a NIP as a means for Northwestel to be compelled to be more transparent as to how it manages public funding:

Along with providing details regarding upgrades to transport facilities, network redundancy, and upgrades, expansions and improvements of services, such a plan would assist in improving transparency of how Northwestel is managing the public funding it received to build and operate networks in the Far North.¹²⁰

151. Northwestel took a different approach. It noted that it has made “significant investments in the quality and reliability of our Internet network” and that it has “robust plans for further network improvements over the coming years”:¹²¹

Given our plans to continue investing in network quality and reliability, a Commission-mandated network improvement plan is not needed. However, there are areas in which the Commission could take action to enhance the quality and reliability of our network.¹²²

In particular, Northwestel referenced the Great Slave Lake redundancy project as a specific instance in which the CRTC could assist financially.

152. GNWT supports a Great Slave Lake redundancy project. More generally, Northwestel’s approach in first focusing on specific areas of reliability concern is consistent with GNWT’s view that, in a multi-player environment, a focus first on specific outcomes to be achieved is more appropriate than starting with a specific mechanism such as a Northwestel NIP.
153. It could be the case that, after such an assessment, the CRTC does indeed decide that in the context of a Far North reliability strategy, that one of the actions is to mandate that Northwestel develop a NIP. If so, GNWT would submit that such a plan ought to be developed in view of a competitive environment; taking into account already-funded projects; have the full input of affected parties, including Indigenous communities; and including reporting and related requirements to address current concerns - including those related to broadband and wireless outage reporting.

¹¹⁹ CNOC Intervention, paragraph 92.

¹²⁰ FMCC Intervention, paragraph 273.

¹²¹ Northwestel Intervention, paragraph 353.

¹²² Northwestel Intervention, paragraph 359.

6.3 Conclusion

154. The record of Phase I and this proceeding indicates that outages are a particular issue in the Far North, where they appear to be more frequent and more sustained than in the South, even as the Far North's reliance on access to modern telecommunications is more acute. The CRTC has already taken steps in this direction, including quality requirements embedded in its Broadband Fund subsidies to Northwestel, and its greater attention to outage reporting during the past year. However, a number of steps remain to be taken by the Commission in addressing this situation. These further steps must include network improvements that reduce single points of failure. They must also achieve better outage handling that bridges communications gaps, better manages expectations, and fulfils the CRTC's consumer protection and market regulatory responsibilities.

7 Competition and Wholesale Access

155. In this section GNWT develops and responds to other comments on what GNWT considers are key issues for NWT residents in the context of the following Notice topics: competition (Q26-27), the question of whether wholesale High-Speed Access ("HSA") should be mandated in the Far North (Q28-Q38), and whether Wholesale Connect should be revised (Q39).
156. In particular, GNWT addresses key issues related to the preference for and benefits of competition (Q27), the application of the essentiality test to the Far North (Q28), and whether wholesale HSA should be mandated in the Far North (29).

7.1 Preference for and benefits of competition (Q27)

157. GNWT's comments underlined the importance of a Northern telecommunications policy reset that shifts focus to equitably-priced services at quality levels, and with features comparable, to those delivered in the South. Like in the South, these services should be delivered by a range of providers, including foreign LEO/MEO entrants, incumbents, competitors and local entrepreneurs.
158. Competitive choice, GNWT stressed, is not a junior partner to the objectives of equitable price and quality. Rather, competition and choice help ensure improved pricing and quality and sparks innovation by holding existing players' feet to the fire. They allow subscribers to avoid the frustration of being locked in.
159. There was a demonstrated preference for increased competition across First Nations and other Indigenous organizations, consumer groups, and most competitive service providers. KFN underlined that they valued competitive choice, the lack of which they considered unequal treatment compared to the South:

Kluane First Nation, and other Yukon First Nations, must have access to competitive choices of telecommunications service

providers, to ensure comparable treatment with the rest of Canada.¹²³

160. Similarly, in reviewing the input received during Phase I of the proceeding, TRTFN:

note[d] the overwhelming support from interveners and individuals for competitive choice, and specifically for adoption of wholesale access rules in Northwestel's territory. We support the principle of choice as an important means of protecting customer interests.¹²⁴

161. NRRM likewise made submissions in favour of more competitive options, both because of the potential for these to provide enhanced customer service but also because of the intrinsic value of greater consumer choice:

The NRRM is on record as seeking competitive terrestrial providers which we hope would provide consumer choice in service options and pricing. Competition would also be expected to benefit consumers by incenting the incumbent and any newcomer(s) to offer enhanced customer service and benefits in pursuit of market share.¹²⁵

162. FMCC's analysis of Phase I individual submissions suggested that many viewed the current lack of competitive choice as a challenge.¹²⁶ ECN objected to the implied incompatibility of improved price, choice, and quality altogether:

We reject the premise of this question. Consumers in the South do not have to choose between lower prices, greater choice and increased levels of quality and innovation. Nor should the residents of the North.¹²⁷

163. GNWT shares this view. As it noted in its comments, the Competition Bureau information sheet referenced by the CRTC "does not present lower prices, greater choices, and increased quality and innovation as mutually exclusive or separately-attained goals but, rather, as the mutually-reinforcing results of a competitive market".¹²⁸

164. Northwestel suggested that certain policy objectives taken for granted in the South may be "either/or" alternatives that cannot be reconciled in view of the high cost of serving the Far North. For example, in the survey conducted by Nanos submitted by Northwestel as Appendix 2 of their submission a key question presented an either/or

¹²³ KFN Intervention, paragraph 22.

¹²⁴ TRTFN Intervention, paragraph 62.

¹²⁵ NRRM Intervention, paragraph 19.

¹²⁶ FMCC Intervention, paragraph 334.

¹²⁷ ECN Intervention, paragraph 77.

¹²⁸ GNWT Intervention, paragraph 194.

proposition asking respondents to choose between *immediately* providing better and faster Internet service or *immediately* introducing more competition:

Thinking of possible telecommunications policy priorities for the Government of Canada, if you had to choose one immediate priority for the North would it be: [ROTATE] immediately providing better and faster Internet service to the North OR immediately introducing more competition for Internet services to the North?¹²⁹

165. The premise that either of these goals could be reached immediately is unlikely. It raises the question of whether the results would have been different had the respondents been proposed reasonable timelines, or no timeline, rather than an unlikely “immediate” one. More importantly, the survey question’s design requiring that respondents choose between two laudable objectives that, GNWT has submitted, are mutually reinforcing, limits its usefulness.
166. In any case, the results for that survey question are not conclusive even in the presence of these limitations. About 41% of respondents preferred greater competition, compared to the 51% preferring the “better and faster” Internet option. That is not an overwhelming result either way—suggesting that NWT residents would indeed prefer both, alongside greater reliability and affordability.

7.2 Application of Essentiality Test to the Far North (Q28)

167. Alongside the above-noted preference for increased competition among First Nations, Indigenous organizations, consumer groups and most service providers, most of these parties likewise deemed it “reasonable”, as the CYFN put it, “to apply the Essentiality Test to providing wholesale services to competitors in the Far North.”¹³⁰
168. This view that, in CAFN’s words, “CRTC should apply their Essentiality Test to wholesale services in the Far North”,¹³¹ was likewise generally supported by consumer groups, including PIAC¹³², and by most service providers, including SSi Canada¹³³ and CNOC.¹³⁴
169. TELUS stated this position succinctly, arguing that the current regulatory framework for wholesale services “should apply to Northwestel without exception”:

Specifically, the Essentiality Test should be applied to Northwestel in a manner consistent with its application in the

¹²⁹ Northwestel Intervention, Appendix 2 page 7 (no paragraph numbering).

¹³⁰ CYFN Intervention, response to Question 28 (no paragraph numbering).

¹³¹ CAFN Intervention, paragraph 14(xiii).

¹³² PIAC Intervention, paragraph 79.

¹³³ SSi Intervention, paragraph 66.

¹³⁴ CNOC Intervention, paragraphs 58-59.

rest of Canada, and new policy considerations for the Essentiality Test particular to the Far North are neither necessary nor desirable. The Commission is already equipped to accommodate any special circumstances that may distinguish Northwestel.¹³⁵

170. Of particular note is TELUS's submission that "[p]ast regulatory approaches have not achieved the Commission's goals for basic service or met the needs of Canadians in the Far North, and there is no evidence to suggest that a special Far North version of the Wholesale Analysis will yield any better results". In this regard TELUS was aligned with SSi Canada, whose support for mandated wholesale HSA as an outcome of the Essentiality Test was rooted in:

the fact that throughout the Far North, even more so than in the rest of Canada, markets cannot themselves support the build-out of duplicate, fully independently-financed infrastructure such as long-haul fibre and many types of last-mile access infrastructure, especially FTTP Historically, the only way to be first to market with telecommunications infrastructure in the Far North is through significant subsidies or an existing dominant market position.¹³⁶

171. GNWT agrees that the CRTC's review of wholesale HSA in the Far North should apply its established Essentiality Test which, notwithstanding the Far North's geography, weather, population, and relatively higher attendant costs for terrestrial service. GNWT believes that once applied, it would lead to mandating wholesale HAS in the Far North.
172. As already submitted, GNWT does not "share the view that the case for wholesale HSA diminishes as regions become more expensive to serve."¹³⁷ Rather,

the more difficult the case for facilities-based entry, by constructing parallel access networks, the greater the need to look to the unbundling of elements that pass the Essentiality Test in order to create an enabling environment for competition.¹³⁸

173. Rather than dwell on the methodological question as to whether the Essentiality Test framework should be applied to the Far North, Northwestel sought, for its part, to demonstrate that mandated wholesale HSA does not meet the Essentiality Test.¹³⁹ To the contrary, GNWT submits that in view of the Commission's "preliminary view that the Essentiality Test should apply in the Far North",¹⁴⁰ the Essentiality Test run-

¹³⁵ TELUS Intervention, paragraph 20.

¹³⁶ SSi Intervention, paragraph 77.

¹³⁷ GNWT Intervention, paragraph 201.

¹³⁸ GNWT Intervention, paragraph 202.

¹³⁹ Northwestel Intervention, paragraph 430.

¹⁴⁰ Notice, Appendix 1 preamble to Question 28.

throughs submitted by CNOC¹⁴¹ and PIAC¹⁴² are to be preferred. CNOC succinctly concludes that the “wholesale HSA service provided by Northwestel satisfies the Essentiality Test.”¹⁴³

174. Likewise, GNWT concurs with the CNOC conclusion that “[t]here are no reasons related to public good, interconnection, or innovation and investment such that Northwestel should not be mandated to provide wholesale HSA service.”¹⁴⁴

7.3 Wholesale High Speed Access (HSA) in the Far North (Q29)

175. In GNWT’s view, the comparatively high costs of serving communities in the Far North means that the development of a full range of competitive choices, including entrepreneurial local entry and improved price and quality, cannot be achieved without regulatory intervention. For this reason, GNWT indicated support for a reasonable form of mandated wholesale HSA, which, if adopted, GNWT expects would reduce entry barriers, promote greater choice and reduce prices.
176. Wholesale HSA can allow competitive service providers to provide meaningful competition by paying a fair rate for the “last-mile” access portion of existing networks, rather than building new ones. This approach provides for more efficient use of scarce access facilities, particularly in an already-subsidized operating environment, while increasing local entrepreneurship and competitive entry opportunities.
177. This view was echoed by many of the parties commenting on this matter. FNNND noted that “the rules used by CRTC to implement competition in the rest of Canada have yet to be applied to Northwestel, with the result that our people, our businesses, and our organizations do not have choices between suppliers, and that we have more expensive and poorer quality service”.¹⁴⁵ They stated baldly that,
- [i]t is time to fix this situation, and it is up to CRTC to apply rules that will allow us to have the same benefits and uses of telecommunications, including choices, at affordable prices.¹⁴⁶
178. Iristel,¹⁴⁷ FMCC¹⁴⁸ and CNOC were also in favour of the CRTC mandating a Wholesale HSA service in the Far North:

¹⁴¹ CNOC Intervention, paragraphs 62-81.

¹⁴² PIAC Intervention, paragraphs 186-188.

¹⁴³ CNOC Intervention, paragraph 78.

¹⁴⁴ CNOC Intervention, paragraph 79.

¹⁴⁵ FNNND Intervention, paragraph 123.

¹⁴⁶ FNNND Intervention, paragraph 125.

¹⁴⁷ Iristel Intervention, paragraph 21.

¹⁴⁸ FMCC Intervention, paragraph 346.

Northern Canadians are right to be frustrated with the lack of choice of service providers in the Far North and the only realistic way for the Commission to address this frustration is to mandate that Northwestel be required to provide a wholesale HSA service to its competitors. There is no reason that Northern Canadians should not enjoy the same benefits of wholesale-based competition enjoyed by the rest of the country.¹⁴⁹

179. GNWT is also interested in mandated wholesale HSA's potential to help spur the development of more local and Indigenous-owned service providers in the Far North, in line with the related goal of economic reconciliation highlighted in the Notice's Q5. This potential is highlighted by CYFN¹⁵⁰, PIAC¹⁵¹ and FNNND, that argued the CRTC establish reasonable terms for the mandated wholesale HSA service:

to allow these alternative service providers to build a more diverse and robust economy within Yukon, and perhaps more importantly to enable indigenous peoples and communities to create businesses, build capacity and realize economic benefits.¹⁵²

180. At the same time, GNWT is mindful of Northwestel's submissions that the "costs to implement a new wholesale HSA service in the Far North will outweigh any benefits" and "the actual costs of creating a wholesale HSA service are significant, that could require an investment of over [[Filed in confidence with the CRTC]]", such that the benefits "are minimal at best for consumers."¹⁵³ While GNWT, and most other parties, have disagreed with the latter assertion (that the net benefit would be minimal), Northwestel's submission as to costs is of concern, not least insofar as the many parties have been unable to test Northwestel's costing submissions, since they were made in confidence.
181. Implementing wholesale HSA is not costless. However, GNWT notes that, throughout the NWT the terrestrial broadband access network being rolled out is one subsidized by the Broadband Fund. Mandated wholesale HSA in the Far North was sought long before the Commission awarded those subsidies. Parties to this proceeding include some of those best-placed to evaluate the costs claimed and attendant architectures, and to propose lower-cost alternatives and approaches where necessary.
182. While the costs of implementing wholesale HSA are undoubtedly an important consideration, so are the benefits of greater competitive choice. Indeed, Northwestel's survey submissions show that more than 41% of NWT residents prefer more

¹⁴⁹ CNOC Intervention, paragraph 42.

¹⁵⁰ CYFN Intervention, response to Question 33 (no paragraph numbering).

¹⁵¹ PIAC Intervention, paragraph 190.

¹⁵² FNNND Intervention, paragraph 141.

¹⁵³ Northwestel Intervention, paragraph 433.

competition to promises of better service and pricing (recognizing, as discussed above, that this is a false choice).

183. Northwestel also submitted that mandating “a wholesale HSA service would undermine the business case and our ability to invest”, and that its introduction “would reduce capital expenditures by approximately ## per year due to a corresponding drop in revenue, and the impact would be felt most largely on discretionary capital projects”.¹⁵⁴ Whatever the redacted ## value, no measure of the counterweight investments by competitors, as well as the potential benefits of introducing wholesale HSA are taken into account. These latter include greater choice, more vigorous price competition, and the potential for Indigenous-owned firms to play a stronger role in the Northern telecommunications ecosystem.
184. The matter of extending wholesale HSA in the only part of Canada where it is not already present has been before the Commission for many years. GNWT is optimistic that joining other parts of the country by introducing mandated wholesale HSA in the Far North will lead to greater overall investment in the Far North from all service providers, including Northwestel.
185. GNWT notes that it is not advocating that the CRTC decide on this issue solely on the “reduced investment” narrative put forward by Northwestel, or that it even do so after calculating potential increased investment from other parties. But GNWT has suggested ways in which the NCF, and other public subsidy mechanisms, could be involved in wholesale HSA on an equal footing to other forms of operating subsidy that may be needed to ensure equitable pricing in the Far North.

7.4 Conclusion

186. GNWT has underlined the importance of a Northern telecommunications policy reset that shifts focus to equitably-priced services at quality levels, and with features comparable to, those delivered in the South. Like in the South, these services would be delivered by a range of providers, including foreign satellite entrants, incumbents, competitors and local entrepreneurs. Competitive choice, GNWT has stressed, is not a junior partner to the objectives of equitable price and quality. GNWT agrees that the CRTC’s review of wholesale HSA in the Far North should be based on its established Essentiality Test. GNWT considers that its application would lead to mandating of wholesale HSA in the Far North, as it has in the South.

8 Conclusion

187. GNWT appreciates the opportunity to participate in this important proceeding. It carries forward the work undertaken in recent years by so many Northern stakeholders to participate in the Commission’s proceedings and develop a fuller

¹⁵⁴ Northwestel Intervention, paragraph 434.

record relating to modernizing and reforming Northern telecommunications policy in ways that create tangible improvements for those who live, work, and do business here, including in how GNWT serves and relate to those who have done so since time immemorial.

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Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

Telecommunications in the Far North, Phase II, Telecom Notice of Consultation CRTC 2022-147

Opening Statement of the Government of the Northwest Territories

**Delivered by William MacKay
Deputy Minister of Finance,
Secretary of the Financial Management Board
Government of the Northwest Territories**

**Kwanlin Dün Cultural Centre
Whitehorse, Yukon**

17 April 2023

Good morning Madame Chair, Commissioners and CRTC staff. Welcome to what the Commission refers to as the Far North, which we call home.

My name is William MacKay, and I am the Deputy Minister for the Department of Finance of the Government of the Northwest Territories (GNWT). With me today are Dave Heffernan, the Chief Information Officer for the GNWT, and Jason Doiron, Director of Governance, Planning and Security. Joining us remotely is Edgardo Sepulveda, who leads our team of regulatory consultants.

The GNWT is a long-time participant in proceedings before the CRTC. We have consistently made submissions in support of services for residents and businesses of the Northwest Territories that compare favourably to those in the South in terms of affordability, quality, and reliability. Our vision is to have a telecommunications sector in the Far North that provides reliable and affordable broadband services, along with genuine choice of service providers that can promote local and Indigenous entrepreneurship.

Telecommunications services are integral to many Northerners in ways not always appreciated in the South. They shape our ability to communicate with one another, and the world. This is especially the case for our most remote communities, many of which are only accessible by plane and where telecommunications provide the only means of accessing government, healthcare, financial, education and training services. This was underscored by the COVID-19 pandemic.

Accordingly, we understand the critical need for high quality, reliable services. It is for this reason that, during the hearing to review Northwestel's regulatory framework 10 years ago, the GNWT said it was *"looking to build a fibre line through the Mackenzie Valley because the area is inadequately served."* We followed through on that pledge. The GNWT partnered with Leducor and Northwestel to design, finance, build, and operate the Mackenzie Valley Fiber Link— a 1,154-kilometre link from McGill Lake to Inuvik, completed in 2017 at a cost to the GNWT of over \$100 million.

In the rest of our time today, I want to focus on what we consider to be the four key themes in this proceeding: Indigenous Reconciliation; Affordability and Subsidies; Quality and Reliability; and, finally, Competition and Wholesale Access.

Our first theme relates to Indigenous Reconciliation

Half the population of the Northwest Territories is Indigenous. High broadband prices in the Far North exacerbate the considerable affordability challenges faced by Indigenous households. The GNWT's two broadband subsidy proposals, which I will cover in a few minutes, would improve affordability for Northerners in general, but also Indigenous households in particular.

As you are aware, on March 27, the Auditor General of Canada released four performance audit reports. One of these was a report titled *Connectivity in Rural and Remote Areas*. In this report, the Auditor General looked at whether ISED and the CRTC had improved the accessibility, affordability, and quality of high-speed Internet connectivity. She found that, while connectivity improved in urban areas, the Federal Government's 2019 *Connectivity Strategy* has yet to deliver comparable results for many rural and remote areas, as well as Indigenous communities.

The Auditor General made a number of recommendations, all of which were accepted by ISED and the CRTC. One recommendation – which the GNWT welcomes – was to improve the collection of data in rural, remote, and Indigenous communities to measure progress against the *Connectivity Strategy's* affordability objective. The GNWT's Bureau of Statistics collects some of these telecommunications and related data not generally collected by federal entities. We therefore encourage the CRTC, ISED and Statistics Canada to increase their collaboration and coordination with our Bureau of Statistics.

These types of specialized units matter, which is why the GNWT supports the call made by many Indigenous organizations to establish a dedicated Indigenous unit within the CRTC. Such a unit could lead and consult on Indigenous matters and data collection and could help to support the recently proposed Indigenous set-aside for Broadband Fund projects. The Far North likewise has unique telecommunications challenges that deserve the attention of a dedicated team that fully understands them. Accordingly, we have also proposed that the CRTC establish a Far North unit that could coordinate data collection and offer leadership on Northern policy matters. For reasons of efficiency, we propose that these two functions could be combined into one “Indigenous and Far North” unit.

Our second theme today is Affordability and Subsidies

Broadband prices are much higher in the Northwest Territories than in the South. We are only now getting a full picture of the magnitude of this difference. Until this year, the annual ISED-commissioned *Price Comparison Study* included data for six Southern cities and seven other countries. So, we could compare prices in Montreal to those in Sydney, Australia or Berlin, Germany. But we could not compare prices in Yellowknife or Inuvik to those in Montreal or

Toronto. To close this gap, we collected pricing data for the Northwest Territories that were directly comparable to the ISED *2021 Study*.

The results were illuminating. We found that residential broadband prices were 37% higher in Yellowknife than in the South, a difference that has increased to 48% in ISED's latest *2022 Price Comparison Study* (which included the territorial capitals for the first time). But that *Study* only covered residential services. Our analysis also looked at small business Internet packages and found them to be priced 130% higher in Yellowknife than in the South. More than double.

Some of our residents and small businesses have the means to pay such high prices, but in a country that aspires to equity, they should not have to. For many Northerners – including many Indigenous peoples – these higher prices constitute an economic hardship. Far too many go without, resulting in Internet take-up rates much lower than in the South.

The Auditor General's *Connectivity* report noted that, although ISED had recognized affordability as the number one challenge in rural and remote areas, its *Connectivity Strategy* did not include any national indicators or targets to evaluate whether its affordability outcomes were being achieved. Consequently, she recommended that ISED and the CRTC collect and analyse data – including on household income – to measure progress against this affordability objective. The GNWT wholeheartedly agrees, which is why we provided a number of metrics in our submission that could form the basis for an affordability standard, including household income, expenditures, and general cost of living.

We think that these metrics provide evidence of two distinct affordability challenges in the Northwest Territories that merit attention from the CRTC. Such an intervention would be consistent with the recently issued *Policy Direction to the CRTC* that required the Commission to promote affordable access “*in all regions of Canada, including rural areas, remote areas and Indigenous communities*”.

The first challenge arises because Internet prices are much higher in the North than in the South. While it is true that residents of the Northwest Territories have higher average incomes, we also pay more for food, shelter, and other essentials. Compared to the South, this means we spend a greater part of our remaining income on broadband. That is not equitable. It is why we are proposing the Commission establish a portable, universal Internet subsidy in the Far North, financed by the National Contribution Fund.

The second affordability challenge is faced specifically by low-income households, for which the burden of higher Internet prices is often simply too overwhelming. A recent Digital NWT survey showed that price, rather than a lack of interest or availability, is the main reason why households in smaller communities in the Northwest Territories do not have Internet service. This especially applies in the case of Indigenous households, that have low Internet take-up rates of only 63%. Our preferred option is for this low-income challenge to be addressed by operators themselves. In the South, eligible households have access to discounted Internet service rates via the *Connecting Families* program. To date, however, Northwestel has indicated that it would not voluntarily join this program or implement a similar program.

We do not find it acceptable that, while Southern low-income households have access to such a program, low-income households in the Far North do not – even though many are Indigenous and face unique challenges because of remoteness and environmental conditions. It is for this reason that, in the absence of Northwestel committing to participate in *Connecting Families*, we are proposing that the Commission establish a portable, low-income Internet subsidy financed by the National Contribution Fund to cover the Far North. This program would be additional to, and separate from, the universal Internet subsidy we discussed earlier.

Our third theme today is Quality and Reliability

Because telecommunications are integral to the lives of Northerners, being cut off from the outside world due to system outages can be dire. In fact, some residents from remote communities have noted that outages can be potentially life-threatening. Improving service reliability is one of the reasons why the GNWT built the Mackenzie Valley Fibre Link.

But no one party can do it all, which is why we have made a number of proposals to improve reliability. This includes measures that improve responses to network outages and supporting investments in redundancy to reduce service disruptions.

The GNWT calls on the Commission to consider the implementation of a more comprehensive approach to addressing network outages. For example, this could require network operators to maintain monitoring systems that automatically register outages; initiate specific processes for alerting users; and help to remediate root causes. Because many NWT residents and Indigenous organizations have voiced concerns about transparency, such a framework should also prioritize communications about the restoration of services, as well as help customers to better understand the steps that were taken to identify and resolve root causes.

In addition, the GNWT supports the Great Slave Lake Fibre redundancy project that is critical to maintaining resilient connectivity for 75% of the population of the Northwest Territories, including Yellowknife. We also support the exploration of other initiatives that would improve redundancy in the Northwest Territories and the Far North.

Our fourth, and final theme is Competition and Wholesale Services

We welcome the Commission's objective of exploring ways to enhance competition in the Far North. We think that increased competitive choice is not only needed, but also demanded by Northerners.

Geographic, economic, and environmental conditions in the Far North limit the potential for competitive new entry. While we welcome the promise of Low Earth Orbit satellite services, we believe there must be greater competitive choice in the provision of terrestrial – especially fibre-based – services that offer faster speeds, higher capacity, and greater reliability. In our view, the only practical and feasible means of achieving this objective in the Far North is by introducing a comprehensive wholesale regime, comparable to that in the South.

The 2023 Federal Government's *Policy Direction* requires the Commission to foster fixed broadband competition and, more specifically, to maintain a wholesale broadband services regime for this purpose. In response, the Commission has launched a proceeding to review and improve the wholesale broadband services regime in the South, which includes the objectives of better fostering wholesale-based competition not only in urban areas, but also rural, remote, and Indigenous communities. We support the objectives of this proceeding and believe a similar wholesale regime – covering both high-speed access and transport services – should apply to the Far North.

We believe that wholesale services competition will provide not only greater choice in the Far North, but also lower prices, better quality, greater innovation and investment, and new opportunities for local and Indigenous entrepreneurs.

To conclude,

We thank you for your attention and are now available to respond to any questions you might have for us.

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